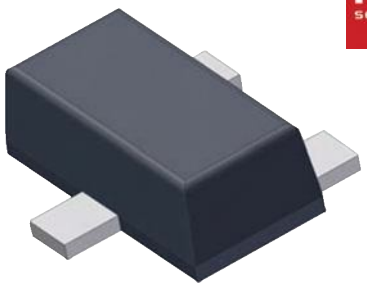
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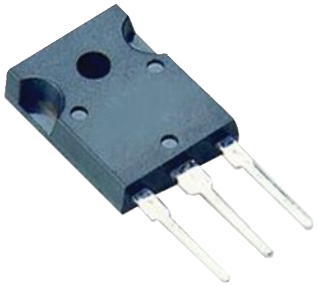
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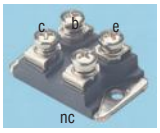
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Supplier Abbreviations

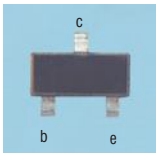
Code	Supplier	Code	Supplier
AV	Avago Technologies	REN	Renesas
APT	Advanced Power Technology	RHM	Rohm
BNS	Bourns (formerly Power Innovations)	SEM	Semelab
FCH	Fairchild Semiconductor	SLX	Vishay - Siliconix
FE	Fuji Electric Device Technology	SKN	Semikron
GS	Vishay - General Semiconductor	SNK	Sanken
INF	Infineon	SNX	Sanrex
IR	International Rectifier	ST	STMicroelectronics
IXYS	IXYS Semiconductor	SY	Sanyo
MC	SPC-Multicomp	TFK	Vishay - Telefunken
MS	Microsemi	TOSH	Toshiba
NXP	NXP (formally Philips Semiconductors)	WCD	Westcode Semiconductors
ON	ON Semiconductor	ZET	Zetex

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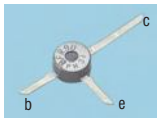
Transistor Packages and Pin-Outs



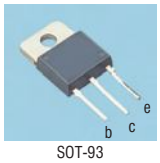
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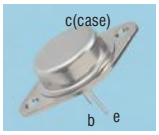
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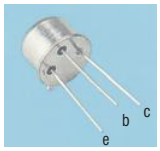
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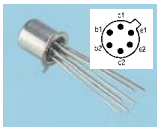
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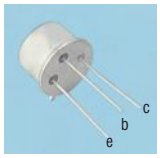
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TO-66



TO-72



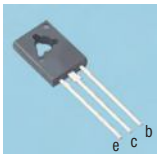
TO-92 (Straight)



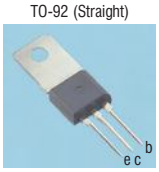
TO-92 (Preformed)



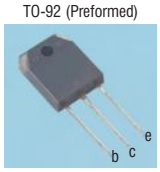
E-Line TO-92(e)



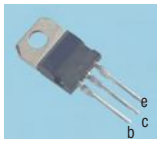
TO-126



TO-202



TO-3P



TO-220

211176

Pin-Out Key

	Pin Out						
Package	**1**	**2**	**3**	**4**	**5**	**6**	**7**
TO-18(a)	C	B	E				
TO-18(b)	G	D	S				
TO-71(a)	E1	E2	C2	B2	B1	C1	
TO-71(b)	S1	D1	G1	S2	D2	G2	
TO-72(a)	B	E	C	Scrn			
TO-72(b)	E	B	C	Scrn			
TO-72(c)	D	G	B+case	S			
TO-72(d)	D	G2	G1	S+case			
TO-72(e)	S	D	G	case			
TO-78(a)	S1	G1	D1	C	D2	G2	S2
TO-78(b)	S1	D1	G1	C	S2	D2	G2
TO-92, Straight Leads:							
TO-92(a)	B	C	E				
TO-92(b)	C	B	E				
TO-92(c)	B	E	C				
TO-92(d)	E	B	C				
TO-92(j)	C	E	B				
TO-92(k)	S	G	D				
TO-92(m)	G	S	D				
TO-92(n)	G	D	S				
TO-92(p)	D	G	S				

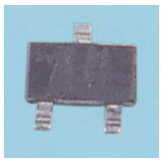
	Pin Out						
Package	**1**	**2**	**3**	**4**	**5**	**6**	**7**
TO-92, Preformed Leads:							
TO-92(f)	E	B	C				
TO-92(g)	B	E	C				
TO-92(h)	B	C	E				
TO-92(r)	D	S	G				

Low Power Bipolar Transistors - SMD (P_{tot} to 1.0W)

General Purpose Transistors



SOT-666


SOT-323



SOT-23


SOT-23

V_{CEO} max. V	I_C max. mA	h_{FE} min.	@	I_C mA	P_{tot} mW	Mftr.	Package	NPN	PNP
15	0.5A	200		10	300	NXP	SOT-666	Dual PNP/NPN	PBSS3515VS
15	1.5A	200		0.5A	0.5W	ST	SOT-23	—	2STR1215
15	1.5A	200		500	0.5W	ST	SOT-23	—	2STR2215
15	1.5A	200		500	0.5W	ST	SOT-23	—	2STR2215
15	1.5A	560		0.5A	0.5W	ST	SOT-23	2STR1215	—
20	25	40		7	250	NXP	SOT-23	BFS20	—
30	100	200		2	250	NXP	SOT-23	BC850B	—
30	0.1A	200		2	300	ON	SOT-23	BC849BLT1G	—
30	100	420		2	250	NXP	SOT-23	BC849C	BC859C
30	100	420		2	250	FCH	SOT-23	BC848C	———
30	100	420		2	350	MC	SOT-23	—	BC858C
30	1200	20000		100	350	FCH	SOT-23	BCV27	BCV26
30	3A	90		3A	1.6W	ST	SOT-223	—	STN790A
30	5A	70		5A	—	ST	SOT-223	—	STN888
32	100	180		—	250	NXP	SOT-23	BCW60B	—
32	100	200		0.01	250	NXP	SOT-23	BCW32	—
32	100	380		—	250	NXP	SOT-23	BCW60D	—
32	100	420		2	250	NXP	SOT-23	BCW33	—
32	100	215		10	250	NXP	SOT-23	—	BCW30
40	0.2A	100		10	330	INF	SOT-23	SMBT3904	—
40	0.2A	100		10	330	INF	SOT-23	—	SMBT3906
40	600	100		150	250	NXP	SOT-23	—	PMBT4403
40	1A	300		500	350	NXP	SOT-323	PBSS4140U	PBSS5140U
40	2A	300		100	300	NXP	SOT-666	———	PBSS5240V
40	25	67		1	250	NXP	SOT-23	BF840	—
40	200	80		1	250	NXP	SOT-23	—	PMBT3906
40	200	100		10	350	FCH	SOT-23	MMBT3904	—
40	200	100		10	350	FCH	SOT-23	—	MMBT3906
40	0.2A	100		10	330	INF	SOT-23	—	SMBT3906
40	600	100		150	250	NXP	SOT-23	PMBT4401	—
40	0.6A	100		150	330	INF	SOT-23	SMBT2222A	—
40	1A	300		100	300	NXP	SOT-666	———	PBSS5140V
40	1000	100		150	350	FCH	SOT-23	MMBT2222A	—
45	100	420		2	250	NXP	SOT-23	BC847C	BC857
45	100	110		2	250	NXP	SOT-23	BC847A	BC857A
45	100	110		2	250	NXP	SOT-23	BCW71	—
45	100	125		2	250	NXP	SOT-23	BC847	—
45	100	180		2	250	NXP	SOT-23	BCX70H	BCX71H
45	100	200		2	250	NXP	SOT-23	BCW72	—
45	100	215		2	250	NXP	SOT-23	—	BCW70
45	100	200		2	200	NXP	SOT-23	BC847B	BC857B
45	100	420		2	250	NXP	SOT-23	BC847C	BC857C
45	100	420		2	250	NXP	SOT-23	BC850C	BC860C
45	100	200		2	200	MC	SOT-23	BC847B	—
45	100	420		2	250	MC	SOT-23	BC847C	—
45	0.1A	200		2	250	INF	SOT-323	BC847BW	—
45	0.1A	420		2	200	NXP	SOT-323	BC847CW	—
45	500	100		100	250	NXP	SOT-23	BC817	BC807
45	500	100		100	250	NXP	SOT-23	BC817-16	BC807-16
45	500	100		100	200	NXP	SOT-23	BCX19	—
45	500	160		100	250	NXP	SOT-23	BC817-25	BC807-25
45	500	250		100	250	NXP	SOT-23	BC817-40	—
45	500	250		100	250	NXP	SOT-23	—	BC807-40
45	1.5A	400		100	0.35W	FCH	SOT-23	BC817-25	—
60	0.6A	100		150	330	INF	SOT-23	—	SMBT2907A
60	800	100		150	350	FCH	SOT-23	—	MMBT2907A
60	3A	160		1A	1.6W	ST	SOT-223	2STN1360	—
60	600	100		1	250	NXP	SOT-23	—	PMBT2907A
65	100	200		2	250	INF/NXP	SOT-23/ NXP	BC846B	BC856B
65	100	110		2	250	NXP	SOT-23	BC846A	—
65	100	125		2	250	NXP	SOT-23	BC846	BC856
65	0.1A	200		2	250	INF	SOT-323	BC846BW	BC856BW

RL Re-reeling available

Farnell

V_{CEO} max.	I_C max.	h_{FE}	I_C	P_{tot}				
80	100	100	0.1	330	ZET	SOT-23	FMMTA06	—
80	500	100	10	250	NXP	SOT-23	PMBTA06	—
160	300	80	10	250	NXP	SOT-23	BSR19A	—
300	100	40	10	250	NXP	SOT-23	PMBTA42	—

Note: SOT-23 and SOT-323 device markings carry a suffix or prefix to denote the country of manufacture: t (Malaysia), p (Hong Kong) or w (China).

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
2STR1215	ST	SMD 129-7994● RL	0.164	0.121	0.092	0.080
BC807	NXP	SMD 108-1219●	0.070	0.032	0.024	0.016
BC807-16	NXP	SMD 108-1220●	0.062	0.028	0.021	0.015
BC807-25	NXP	SMD 108-1221●	0.063	0.040	0.034	0.027
BC807-40	NXP	SMD 108-1222●	0.033	0.022	0.018	0.014
BC817	NXP	SMD 108-1223●	0.033	0.022	0.018	0.014
BC817-16	NXP	SMD 873-4739● RL	0.054	0.028	0.021	0.012
BC817-25	FCH	SMD 122-8216●	0.054	0.038	0.031	0.025
BC817-40	NXP	SMD 108-1225●	0.079	0.036	0.023	0.015
BC846	NXP	SMD 108-1227●	0.032	0.020	0.015	0.013
BC846A	NXP	SMD 108-1228●	0.075	0.033	0.020	0.010
BC846B	NXP	SMD 108-1229●	0.069	0.031	0.018	0.010
BC846B	INF	SMD 105-6509● RL	0.107	0.055	0.038	0.022
BC846BW	INF	SMD 105-6510●	0.083	0.061	0.046	0.021
BC847BW	INF	SMD 105-6511●	0.103	0.066	0.065	0.029
BC847	NXP	SMD 108-1230●	0.069	0.031	0.018	0.010
BC847A	NXP	SMD 108-1231●	0.075	0.033	0.020	0.010
BC847B	NXP	SMD 108-1232●	0.070	0.030	0.018	0.010
BC847C	NXP	SMD 108-1235●	0.024	0.014	0.011	0.010
BC847CW	NXP	SMD 108-1236● RL	0.093	0.040	0.026	0.014
BC849C	NXP	SMD 108-1237●	0.060	0.031	0.028	0.015
BC850B	NXP	SMD 108-1239●	0.069	0.038	0.022	0.020
BC850C	NXP	SMD 108-1241●	0.040	0.028	0.022	0.020
BC856	NXP	SMD 108-1242●	0.075	0.033	0.020	0.010
BC856BW	INF	SMD 105-6513●	0.071	0.055	0.044	0.014
BC857	NXP	SMD 108-1244●	0.032	0.020	0.015	0.013
BC857A	NXP	SMD 108-1245● RL	0.082	0.035	0.024	0.010
BC857B	NXP	SMD 108-1246●	0.070	0.030	0.018	0.010
BC857C	NXP	SMD 873-4771●	0.048	0.026	0.018	0.010
BC859C	NXP	SMD 108-1248●	0.060	0.031	0.028	0.015
BC860C	NXP	SMD 108-1249●	0.066	0.035	0.022	0.016
BCW30	NXP	SMD 108-1262●	0.101	0.048	0.030	0.022
BCW32	NXP	SMD 108-1264● RL	0.133	0.063	0.043	0.021
BCW33	NXP	SMD 108-1265● RL	0.133	0.063	0.043	0.021
BCW60B	NXP	SMD 108-1266●	0.063	0.035	0.020	0.019
BC860C	NXP	SMD 108-1249●	0.066	0.035	0.022	0.016
BCW60D	NXP	SMD 108-1267● RL	0.066	0.037	0.023	0.019
BCW70	NXP	SMD 108-1268●	0.059	0.040	0.032	0.029
BCW71	NXP	SMD 108-1269●	0.129	0.056	0.036	0.022
BCW72	NXP	SMD 108-1270●	0.120	0.053	0.034	0.024
BCX17	NXP	SMD 108-1271●	0.220	0.096	0.073	0.041
BCX70H	NXP	SMD 108-1282●	0.058	0.039	0.031	0.028
BCX71H	NXP	SMD 108-1283●	0.062	0.042	0.033	0.030
PMBT4401	NXP	SMD 108-1477● RL	0.094	0.043	0.036	0.022
PMBT4403	NXP	SMD 108-1478●	0.117	0.053	0.045	0.029
SMBT2222A	INF	SMD 105-6537● RL	0.124	0.044	0.028	0.013
SMBT2907A	INF	SMD 105-6538● RL	0.114	0.070	0.060	0.035
SMBT3904	INF	SMD 105-6539● RL	0.096	0.055	0.042	0.031
SMBT3906	INF	SMD 105-6540● RL	0.084	0.050	0.038	0.029
			5+	**25+**	**100+**	**1K+**
BF840	NXP	SMD 873-4992● RL	0.210	0.112	0.081	0.054
BFS20	NXP	SMD 873-5000● RL	0.220	0.118	0.085	0.059
BSR19A	NXP	SMD 873-5018● RL	0.320	0.170	0.124	0.081
PBSS3515VS	NXP	SMD 873-6146● RL	0.280	0.200	0.165	0.133
PBSS4140U	NXP	SMD 873-6197● RL	0.290	0.152	0.111	0.072
PBSS5140U	NXP	SMD 873-6421● RL	0.260	0.135	0.099	0.064
			10+	**100+**	**1K+**	**3K+**
BC817-25LT1G	ON	SMD 955-8608● RL	0.128	0.062	0.039	0.026
BC818-40	FCH	SMD 984-6662● RL	0.200	0.132	0.081	0.038
BC848C	FCH	SMD 984-6670● RL	0.079	0.052	0.035	0.024
BC849BLT1G	ON	SMD 955-8616● RL	0.045	0.027	0.018	0.016
BCV27	FCH	SMD 984-6689● RL	0.059	0.034	0.024	0.019
FMMTA06	ZET	SMD 952-6056● RL	0.220	0.122	0.100	0.083
MMBT3904	FCH	SMD 984-6727● RL	0.071	0.045	0.031	0.013
MMBT2222A	FCH	SMD 984-6700● RL	0.071	0.050	0.034	0.014
BC847B	MC	NEW SMD 157-4343●	0.091	0.036	0.025	0.012
BC847C	MC	NEW SMD 157-4344●	0.070	0.037	0.025	0.012
BC856B	INF	SMD 105-6512● RL	0.037	0.028	0.027	0.018
BCV26	FCH	SMD 984-6816● RL	0.075	0.052	0.040	0.019
BC858C	MC	NEW SMD 157-4345●	0.074	0.048	0.033	0.029
MMBT2907A	FCH	SMD 984-6824● RL	0.071	0.051	0.035	0.014
MMBT3906	FCH	SMD 984-6832● RL	0.071	0.045	0.031	0.013
SMBT2907A	INF	SMD 105-6538● RL	0.114	0.070	0.060	0.035
SMBT3906	INF	SMD 105-6540● RL	0.084	0.050	0.038	0.029
			10+	**50+**	**100+**	**250+**
PMBT2907A	NXP	NEW SMD 162-6500●	0.041	0.035	0.026	0.016
PMBT3906	NXP	NEW SMD 162-6501●	0.041	0.035	0.026	0.016
PMBTA06	NXP	NEW SMD 162-6502●	0.071	0.050	0.036	0.023
PMBTA42	NXP	NEW SMD 162-6503●	0.092	0.070	0.051	0.033
			1+	**25+**	**100+**	**250+**
2STN1360	ST	NEW SMD 129-7993● RL	0.440	0.350	0.260	0.210
2STR1215	ST	NEW SMD 129-7994● RL	0.164	0.121	0.092	0.080
2STR2215	ST	NEW SMD 129-8001● RL	0.164	0.121	0.092	0.080
2STR2215	ST	NEW SMD 129-8001● RL	0.164	0.121	0.092	0.080
STN790A	ST	NEW SMD 129-7999● RL	0.550	0.370	0.250	0.200
STN888	ST	NEW SMD 129-8000● RL	0.240	0.174	0.132	0.119

449320

Reels of 3000

Mftrs. List No.	Order Code	Price Per Reel 1+	3+
BC817-40.215	NEW SMD 156-2445●	32.68	29.42
BC846B.215	NEW SMD 156-2446●	29.55	26.60
BC847.215	NEW SMD 156-2448●	29.55	26.60
BC847B.215	NEW SMD 156-2449●	29.55	26.60
MMBT2222A	NEW SMD 156-2458●	47.95	43.16
MMBT3904	NEW SMD 156-2461●	41.95	37.75

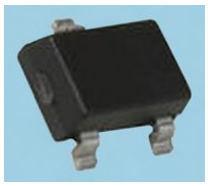
Transistors, Rohm

NPN

New

ROHM SEMICONDUCTOR

SMD



Voltage, Vceo V	ft, Typ MHz	Current, Ic cont max mA	Hfe min	Mftrs. List No.
SOT-346				
40	300	150	100	MMST2222AT146
80	100	100	100	MMSTA06T146
80	200	100	10000	MMSTA28T146
SOT-23				
40	300	150	100	SST2222AT116
40	250	150	100	SST4401T116
40	180	50	200	SST6838T216
40	140	100	100	SST6839T216
80	100	100	100	SSTA06T116
80	200	100	10000	SSTA28T116

528223

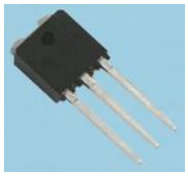
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
SOT-346						
MMST2222AT146	SMD 168-0355●	0.440	0.220	0.140	0.069	0.058
MMSTA06T146	SMD 168-0357●	0.350	0.186	0.128	0.105	0.082
MMSTA28T146	SMD 168-0358●	0.350	0.186	0.128	0.105	0.082
SOT-23						
SST2222AT116	SMD 168-0374●	0.220	0.105	0.069	0.035	0.024
SST4401T116	SMD 168-0375●	0.380	0.186	0.128	0.058	0.047
SST6838T216	SMD 168-0376●	0.400	0.198	0.128	0.069	0.047
SST6839T216	SMD 168-0378●	0.400	0.198	0.128	0.069	0.047
SSTA06T116	SMD 168-0379●	0.480	0.240	0.164	0.082	0.058
SSTA28T116	SMD 168-0380●	0.330	0.210	0.140	0.082	0.069

Transistor, PNP

SMD

ROHM SEMICONDUCTOR

New



ATV



SOT-428

Voltage, Vceo V	ft, Typ MHz	Current, Ic cont max A	Hfe min	Case Style	Mftrs. List No.
80	—	1	—	SOT-428	2SB1181TLQ
32	—	2	—	SOT-428	2SB1182TLQ
32	100	2	180	ATV	2SB1240TV2R
50	70	2	120	ATV	2SB1243TV2Q
50	70	2	180	ATV	2SB1243TV2R
20	120	4	120	SOT-89	2SB1386T100Q
20	120	4	180	SOT-89	2SB1386T100R
20	240	2	120	SOT-89	2SB1424T100Q
60	200	1	120	SOT-89	2SB1561T100Q
100	50	1	1000	SOT-89	2SB1580T100

528268

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
2SB1181TLQ	SMD 168-0115●	0.840	0.630	0.460	0.320	0.240
2SB1182TLQ	SMD 168-0116●	0.860	0.650	0.470	0.330	0.260
2SB1240TV2R	168-0117●	0.640	0.470	0.330	0.230	0.175
2SB1243TV2Q	168-0118●	0.790	0.610	0.430	0.300	0.230
2SB1243TV2R	168-0119●	0.790	0.610	0.430	0.300	0.230
2SB1386T100Q	SMD 168-0121●	0.520	0.350	0.240	0.164	0.140
2SB1386T100R	SMD 168-0123●	0.520	0.350	0.240	0.164	0.140
2SB1424T100Q	SMD 168-0124●	0.410	0.270	0.198	0.128	0.105
2SB1561T100Q	SMD 168-0125●	0.590	0.430	0.300	0.210	0.164
2SB1580T100	SMD 168-0126●	0.780	0.590	0.420	0.300	0.230

RL Re-reeling available

Low Power Bipolar Transistors - SMD (P_{tot} to 1.0W) - continued

Transistors, Cross Sectional Family

New

ROHM SEMICONDUCTOR

SMD

Voltage, Vceo V	ft, Typ MHz	Current, Ic cont max mA	Hfe min	Case Style	Mftrs. List No.
NPN					
6	800	10	270	SOT-323	2SC4774T106S
11	3.2 GHz	10	56	VMT3	2SC5662T2LP
18	1.5 GHz	20	56	SOT-346	2SC3837KT146N
18	1.5 GHz	20	56	VMT3	2SC5661T2LP
20	150	4 A	180	SOT-89	2SD2098T100R
20	350	500	820	SOT-346	2SD2114KT146V
20	35	30	820	SOT-346	2SD2704KT146
25	300	10	82	SOT-323	2SC4098T106P
30	330	1 A	270	SOT-346	2SD2657KT146
32	150	500	120	SOT-89	2SD1664T100Q
32	100	2 A	120	SOT-428	2SD1758TLQ
32	100	2 A	120	ATV	2SD1862TV2Q
45	200	10	200	SOT-23	BC847BT116
45	250	500	100	SOT-23	BCX19T116
45	125	10	250	SOT-23	BCX70JT116
50	180	50	270	SOT-416	2SC4617TLS
50	150	500	120	SOT-89	2SC5053T100Q
50	250	50	820	SOT-323	2SD2351T106W
50	90	2 A	180	SOT-428	2SD1760TLR
50	90	2 A	120	SOT-428	2SD1760TLQ
50	250	50	820	VMT3	2SD2707T2LV
60	120	4 A	120	SOT-428	2SC5103TLQ
60	200	2 A	120	SOT-89	2SC5824T100R
60	200	1 A	120	TSMT3	2SC5866TLQ
60	150	500	2000	SOT-89	2SD1834T100
60	210	1 A	120	SOT-89	2SD2391T100Q
80	120	500	120	SOT-89	2SD1767T100R
80	120	500	120	SOT-346	2SD1782KT146Q
80	120	500	180	SOT-346	2SD1782KT146R
80	100	500	120	SOT-89	2SD1898T100Q
80	100	500	180	SOT-89	2SD1898T100R
100	80	1 A	1000	SOT-428	2SD1980TLQ
100	80	1 A	1000	SOT-89	2SD2195T100
160	80	1 A	82	ATV	2SD1857ATV2Q
160	80	1 A	120	SOT-428	2SD1918TLQ
400	20	10	82	SOT-89	2SC4505T100P
PNP					
45	250	10	210	SOT-23	BC857BT116
45	200	500	100	SOT-23	BCX17T116

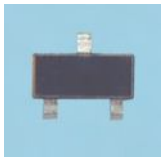
Voltage Vds Typ V	Voltage Vgs th Typ V	Current, Id Cont A	Resistance, Rds On ohm	Case Style	Mftrs. List No.
N Channel					
30	2.5	2.5	70 mohm	TSMT3	RSR025N03TL
30	1.5	2.5	92 mohm	TSMT3	RTR025N03TL
30	1.5	10 mA	8	SOT-323	2SK3018T106
30	1.5	10 mA	8	VMT3	2SK3541T2L
30	1.5	300 mA	1.1	UMT3	RJU003N03T106
60	2.5	2.5	135 mohm	SOT-428	2SK2503TL
60	2.5	200 mA	2.4	UMT3	RHU002N06T106
60	2.5	4	150 mohm	CPT3	RK3055ETL
60	1.85	500 mA	7.5	SOT-23	RK7002T116
100	2.5	2.5	220 mohm	SOT-428	2SK2504TL
P Channel					
20	2	200 mA	1.5	EMT3	RTE002P02TL
20	2	1.5	135 mohm	TUMT3	RTF015P02TL
20	2	2	85 mohm	TUMT3	RTF020P02TL
20	2	2	135 mohm	TSMT3	RTR020P02TL
30	2.5	200 mA	1.4	EMT3	RSE002P03TL
30	2.5	1.5	235 mohm	TSMT3	RSR015P03TL
Dual N Channel					
30	1.5	10 mA	8	EMT6	EM6K1T2R
30	1.5	10 mA	8	UMT5	UM5K1NTR
30	1.5	10 mA	8	UMT6	UM6K1NTN
60	—	4.5	—	SOIC	SP8K32TB1
Dual NP Channel					
30	1.5	1.5	240 mohm	TUMT6	US6M2TR

528271

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
2SC3837KT146N	SMD 168-0127●	0.370	0.210	0.140	0.105	0.082
2SC4098T106P	SMD 168-0128●	0.350	0.230	0.164	0.093	0.069
2SC4505T100P	SMD 168-0129●	0.820	0.620	0.440	0.320	0.230
2SC4617TLS	SMD 168-0130●	0.380	0.260	0.175	0.093	0.082
2SC4774T106S	SMD 168-0131●	0.350	0.230	0.164	0.093	0.069
2SC5053T100Q	SMD 168-0132●	0.360	0.210	0.140	0.105	0.082
2SC5103TLQ	SMD 168-0133●	0.930	0.640	0.490	0.410	0.300
2SC5661T2LP	SMD 168-0135●	0.420	0.280	0.198	0.140	0.116
2SC5662T2LP	SMD 168-0136●	0.370	0.210	0.151	0.116	0.093
2SC5824T100R	SMD 168-0137●	0.690	0.520	0.370	0.260	0.198
2SC5866TLQ	SMD 168-0138●	0.510	0.340	0.240	0.164	0.140
2SD1664T100Q	SMD 168-0139●	0.340	0.186	0.128	0.093	0.069
2SD1758TLQ	SMD 168-0140●	0.650	0.470	0.340	0.230	0.175
2SD1760TLQ	SMD 168-0141●	0.690	0.520	0.370	0.260	0.198
2SD1760TLR	SMD 168-0142●	0.690	0.520	0.370	0.260	0.198
2SD1767T100R	SMD 168-0143●	0.610	0.430	0.300	0.230	0.175
2SD1782KT146Q	SMD 168-0144●	0.380	0.260	0.175	0.093	0.082
2SD1782KT146R	SMD 168-0145●	0.380	0.260	0.175	0.093	0.082
2SD1834T100	SMD 168-0147●	0.610	0.430	0.300	0.230	0.175
2SD1857ATV2Q	168-0148●	0.470	0.320	0.220	0.151	0.128
2SD1862TV2Q	SMD 168-0149●	0.620	0.440	0.330	0.220	0.164
2SD1898T100Q	SMD 168-0150●	0.410	0.270	0.198	0.128	0.105
2SD1898T100R	SMD 168-0151●	0.410	0.270	0.198	0.128	0.105
2SD1918TLQ	SMD 168-0152●	0.910	0.650	0.500	0.410	0.330
2SD1980TL	SMD 168-0153●	0.590	0.430	0.300	0.210	0.164
2SD2098T100R	SMD 168-0155●	0.680	0.490	0.350	0.240	0.186
2SD2114KT146V	SMD 168-0156●	0.280	0.186	0.128	0.069	0.058
2SD2195T100	SMD 168-0157●	0.860	0.650	0.470	0.330	0.260
2SD2212T100	SMD 168-0159●	0.620	0.440	0.330	0.220	0.164
2SD2351T106W	SMD 168-0161●	0.380	0.260	0.175	0.093	0.082
2SD2391T100Q	SMD 168-0162●	0.650	0.470	0.340	0.230	0.175
2SD2657KT146	SMD 168-0163●	0.360	0.210	0.140	0.105	0.082
2SD2704KT146	SMD 168-0164●	0.290	0.198	0.128	0.069	0.058
2SD2707T2LV	SMD 168-0165●	0.350	0.186	0.128	0.093	0.082
2SK2503TL	SMD 168-0167●	0.930	0.710	0.510	0.350	0.280
2SK2504TL	SMD 168-0168●	0.930	0.710	0.510	0.350	0.280
2SK3018T106	SMD 168-0169●	0.260	0.175	0.116	0.069	0.047
2SK3541T2L	SMD 168-0170●	0.330	0.220	0.151	0.082	0.069
BC847BT116	SMD 168-0172●	0.230	0.116	0.082	0.035	0.024
BC857BT116	SMD 168-0174●	0.230	0.116	0.082	0.035	0.024
BCX17T116	SMD 168-0175●	0.370	0.260	0.175	0.093	0.069
BCX19T116	SMD 168-0176●	0.370	0.260	0.175	0.093	0.069
BCX70JT116	SMD 168-0177●	0.280	0.186	0.128	0.069	0.058
EM6K1T2R	SMD 168-0305●	0.470	0.270	0.186	0.140	0.116
RHU002N06T106	SMD 168-0359●	0.420	0.210	0.140	0.069	0.058
RJU003N03T106	SMD 168-0360●	0.490	0.240	0.164	0.082	0.058
RK3055ETL	SMD 168-0361●	1.000	0.720	0.510	0.400	0.280
RK7002T116	SMD 168-0362●	0.290	0.140	0.093	0.047	0.035
RSE002P03TL	SMD 168-0363●	0.440	0.240	0.175	0.128	0.105
RSR015P03TL	SMD 168-0366●	0.510	0.340	0.240	0.164	0.140
RSR025N03TL	SMD 168-0367●	0.580	0.400	0.280	0.186	0.151
RTE002P02TL	SMD 168-0368●	0.430	0.240	0.175	0.128	0.105
RTF015P02TL	SMD 168-0369●	0.640	0.460	0.330	0.230	0.175
RTF020P02TL	SMD 168-0370●	0.660	0.480	0.340	0.230	0.175
RTR020P02TL	SMD 168-0371●	0.560	0.370	0.260	0.175	0.151
RTR025N03TL	SMD 168-0372●	0.460	0.300	0.210	0.140	0.116
SP8K32TB1	SMD 168-0373●	0.870	0.630	0.490	0.400	0.320
UM5K1NTR	SMD 168-0381●	0.360	0.210	0.140	0.105	0.082
UM6K1NTN	SMD 168-0382●	0.400	0.260	0.175	0.093	0.082
US6M2TR	SMD 168-0416●	0.590	0.420	0.300	0.220	0.175

High Gain, SOT-23

ZETEX SEMICONDUCTORS



- High peak current
- Low saturation voltage
- High forward blocking voltage

SMD

V_{CBO} (V)	Polarity	V_{CBE} (V)	I_C (A)	h_{FE} (@I_C) Min.	P_D Max.(W)	Order Code	List No.
20	NPN	12	2	370	0.35	147-1182	ZXTN25012EFLTA
25	PNP	25	1.5	160	0.35	147-1185	ZXTP25020DFLTA
130	NPN	130	1.5	170	0.35	147-1184	ZXTN25040DFLTA

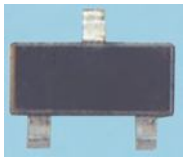
Advanced process capability has been used to achieve high current gain hold up making this device ideal for applications requiring high pulsecurrents.

498170

Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	5K+
NPN					
ZXTN25012EFLTA	SMD 147-1182●	0.310	0.210	0.179	0.173
ZXTN25040DFLTA	SMD 147-1184●	0.310	0.210	0.179	0.173
PNP					
ZXTP25020DFLTA	SMD 147-1185●	0.310	0.210	0.179	0.173

General Purpose SOT-23

ZETEX SEMICONDUCTORS



SMD

V_{CBE} (V)	V_{CBO} (V)	Polarity	I_C (A)	h_{FE} (@I_C) Min.	P_D Max.(W)	Order Code	List No.
45	—	PNP*	0.8	100	0.33	147-1190	BCW68HTA
45	75	NPN	0.8	100	0.33	147-1188	BCW66HTA
120	140	NPN	1	20	0.5	147-1187	FMMT494TA
150	160	PNP	1	50	0.5	147-1189	FMMT555TA

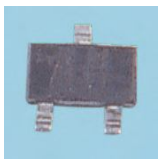
498178

Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	5K+
FMMT494TA	SMD 147-1187●	0.340	0.230	0.163	0.142
BCW66HTA	SMD 147-1188●	0.310	0.220	0.152	0.132
FMMT555TA	SMD 147-1189●	0.240	0.167	0.141	0.137
BCW68HTA	SMD 147-1190●	0.310	0.220	0.152	0.132

RL Re-reeling available

Farnell

SOT-323 High Performance Transistors



	V_{CEO} V	V_{CBO} V	$I_{C\ (av)}$ A	h_{FE} min. @	I_C mA	$V_{CE(sat)}$ max. (V) @	I_C mA	f_T min. MHz	P_{tot} W	App'n Code	Mftrs. List No.
NPN											
	50	50	1	200	500	0.2	500	215	0.5	GP	ZUMT619
PNP											
	20	20	1	200	500	0.175	500	210	0.5	GP	ZUMT718

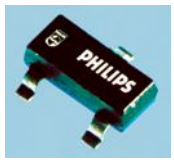
211074

Order Multiple=10 Mftrs. List No.	Order Code	10+	100+	1K+	3K+
ZUMT619	SMD 952-5122●	0.440	0.340	0.220	0.121
ZUMT718	SMD 952-5130●	0.440	0.340	0.220	0.121

Low Saturation, Small-Signal Transistors



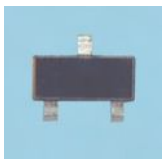
SOT-457, H=1.1, W=3.1, D=1.7



SOT-23, H=1.1, W=3.0, D=1.4



SOT-89, H=1.6, W=4.6, D=2.6



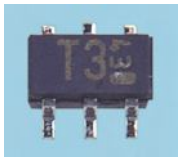
SOT-490, H= 0.8, W=1.7, D=0.95

V_{CEO} max. V	I_C max. A	h_{FE} min.	@	I_C mA	$V_{ce\ (sat)}$ max. mV	@	I_c mA	P_{tot} mW	Package	Mftrs. List No.
NPN										
20	1	200		1	110		500	480	SOT-23	PBSS4120T
20	2	150		3	70		500	1300	SOT-89	PBSS4320X
20	2	220		0.5	120		1000	480	SOT-23	PBSS4320T
30	1	300		1	120		500	480	SOT-23	PBSS4130T
30	2	180		3	60		500	1300	SOT-89	PBSS4330X
30	2	300		0.5	100		500	480	SOT-23	PBSS4230T
40	1	200		1	300		500	250	SOT-23	PMMT491A
40	1	300		0.5	200		100	480	SOT-23	PBSS4140T
40	2	300		0.5	100		500	480	SOT-23	PBSS4240T
40	5	100		5	90		500	1300	SOT-89	PBSS4540X
50	2	300		0.5	90		500	550	SOT-89	PBSS4250X
50	3	300		0.5	80		500	480	SOT-23	PBSS4350T
50	3	300		0.5	80		500	1300	SOT-89	PBSS4350X
60	1	100		1	110		500	480	SOT-23	PBSS4160T
80	4	250		4	40		0.5	1300	SOT-89	PBSS4480X
100	1	80		1	120		500	480	SOT-23	PBSS8110T
PNP										
15	0.5	200		10	150		10	250	SOT-490	PBSS3515F
20	1	200		1	125		500	480	SOT-23	PBSS5120T
20	2	220		0.5	70		500	480	SOT-23	PBSS5320T
20	5	150		5	70		500	1300	SOT-89	PBSS5520X
30	1	210		1	100		100	480	SOT-23	PBSS5130T
30	2	100		2	110		500	480	SOT-23	PBSS5230T
30	2	140		2	70		500	1300	SOT-89	PBSS5330X
40	0.5	200		10	200		10	250	SOT-490	PBSS3540F
40	1	160		1	350		500	250	SOT-23	PMMT591A
40	1	300		0.1	250		500	480	SOT-23	PBSS5140T
40	2	300		0.1	110		500	480	SOT-23	PBSS5240T
40	5	250		0.5	120		500	1300	SOT-89	PBSS5540X
50	3	200		0.5	100		50	750	SOT-457	PBSS5350D
50	3	200		0.5	90		500	480	SOT-23	PBSS5350T
50	3	200		0.5	90		500	1300	SOT-89	PBSS5350X
50	2	200		0.5	90		500	1300	SOT-89	PBSS5250X
60	1	100		1	50		500	480	SOT-23	PBSS5160T
80	4	180		1	55		500	1300	SOT-89	PBSS5480X
100	1	125		1	180		500	480	SOT-23	PBSS9110T
-100	-2	175		-500	-395		-3	1.1	SSOT-6	PBSS305PD
NPN/PNP Complement										
40	1	300		0.5	250		50	750	SOT-457	PBSS4140DPN
40	1.35	300		1	75/120		100	750	SOT-457	PBSS4240DPN

387119

Order Multiple=5 Mftrs. List No.	Order Code	5+	100+	1K+	3K+
PBSS305PD	SMD 151-0749●	0.360	0.300	0.260	0.220
PBSS3515F	SMD 873-6138●	0.280	0.147	0.108	0.070
PBSS3540F	SMD 873-6154●	0.048	0.047	0.046	0.045
PBSS4120T	SMD 873-6162● RL	0.340	0.180	0.132	0.085
PBSS4130T	SMD 873-6170● RL	0.340	0.180	0.132	0.085
PBSS4140DPN	SMD 873-9900● RL	0.280	0.200	0.165	0.133
PBSS4140T	SMD 873-6189● RL	0.340	0.180	0.132	0.085
PBSS4160T	SMD 873-6219● RL	0.340	0.180	0.132	0.085
PBSS4230T	SMD 873-6227● RL	0.189	0.138	0.106	0.083
PBSS4240DPN	SMD 873-6235● RL	0.310	0.240	0.183	0.147
PBSS4240T	SMD 873-6243● RL	0.270	0.192	0.149	0.116
PBSS4250X	SMD 873-6278● RL	0.270	0.192	0.149	0.116
PBSS4320X	SMD 873-6294● RL	0.660	0.350	0.260	0.167
PBSS4330X	SMD 873-6308● RL	0.360	0.270	0.210	0.171
PBSS4350X	SMD 873-6332● RL	0.360	0.270	0.210	0.171
PBSS4480X	SMD 873-6359● RL	0.320	0.240	0.181	0.149
PBSS4540X	SMD 873-6375● RL	0.460	0.340	0.280	0.220
PBSS5250X	SMD 873-6510● RL	0.370	0.280	0.220	0.177
PBSS5330X	SMD 873-6553● RL	0.360	0.270	0.210	0.171
PBSS5350X	SMD 873-6588● RL	0.360	0.270	0.210	0.171
PBSS5480X	SMD 873-6600● RL	0.400	0.270	0.210	0.170
PBSS5520X	SMD 873-6618● RL	0.350	0.260	0.200	0.166
PBSS5540X	SMD 873-6626● RL	0.350	0.260	0.200	0.166
PBSS4320T	SMD 873-6286● RL	0.189	0.143	0.114	0.092
PBSS4350T	SMD 873-6324●	0.260	0.190	0.152	0.121
PBSS5120T	SMD 873-6391● RL	0.270	0.144	0.105	0.067
PBSS5130T	SMD 873-6405● RL	0.340	0.180	0.132	0.085
PBSS5140T	SMD 873-6413● RL	0.340	0.180	0.132	0.085
PBSS5160T	SMD 873-6448● RL	0.340	0.180	0.132	0.085
PBSS5230T	SMD 873-6464● RL	0.198	0.144	0.112	0.087
PBSS5240T	SMD 873-6472● RL	0.270	0.192	0.149	0.116
PBSS5320T	SMD 873-6537● RL	0.280	0.200	0.165	0.133
PBSS5350D	SMD 873-6561● RL	0.280	0.200	0.165	0.133
PBSS5350T	SMD 873-6570● RL	0.280	0.200	0.165	0.133
PBSS8110T	SMD 873-6650● RL	0.310	0.162	0.120	0.079
PBSS9110T	SMD 873-6685● RL	0.390	0.210	0.154	0.101
PMMT491A	SMD 873-8157● RL	0.220	0.117	0.086	0.056
PMMT591A	SMD 873-8165● RL	0.300	0.156	0.114	0.074

SuperSOT-4 Low Saturation Switching Transistors



SOT-23-6

- Very low conduction losses
- Ideal for battery operated applications
- High current
- High gain
- High power dissipation

V_{CEO} V	V_{CBO} max. V	I_C (pk.) A	h_{FE} min.	@	I_C mA	$V_{CE(sat)}$ max. mV	@	I_C A	P_{tot} W	Device Marking	Mftrs. List No.
NPN											
50	100	5	10	300	1	12		0.1	1.1	ZXT13N50DE6	ZXT13N50DE6
PNP											
12	20	4	15	300	1	10		0.1	1.1	ZXT13P12DE6	ZXT13P12DE6

211371

Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
ZXT13N50DE6	SMD 952-5394● RL	0.77	0.45	0.38	0.26	0.23
ZXT13P12DE6	SMD 952-5408● RL	0.77	0.45	0.38	0.26	0.23

Switching Transistors



SOT-23



SOT-89

V_{CEO} max. V	I_C max. A	P_{tot} mW	h_{FE} min.	@	I_C mA	t_{on}/t_{off} max. ns	$V_{ce(sat)}$ max. V	Package	Device Marking	Mftrs. List No.
NPN										
12	0.1	225	40		10	12/18	0.4	SOT-23	B2*	BSV52
40	0.1	0.25	30		100	65/240	0.2	SOT-23	*1A	PMBT3904
40	0.6	0.25	40		500	35/250	1	SOT-23	*1P	PMBT2222A
40	0.8	250	40		500	35/285	1.0	SOT-23	U8p	BSR14

Note: Device marking tilda (~) is replaced by either t (Malaysia), p (Hong Kong) or w (China) to denote manufacturing site.

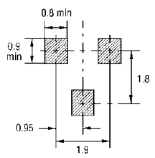
211424

Order Multiple=5 Mftrs. List No.	Order Code	5+	100+	1K+	5K+
BSR14	SMD 108-1310●	0.163	0.079	0.075	0.072
BSR16	SMD 108-1311● RL	0.260	0.117	0.086	0.053
BSV52	SMD 108-1314● RL	0.400	0.210	0.151	0.103
Order Multiple=10		**10+**	**100+**	**1K+**	**3K+**
PMBT2222A	SMD 108-1475● RL	0.149	0.071	0.057	0.030
PMBT3904	SMD 108-1476● RL	0.078	0.043	0.034	0.020

SOT-23 (TO-236AB) Switching



Supplied on 8mm tape.



ON Semiconductor

RL Re-reeling available

Low Power Bipolar Transistors - SMD (P_{tot} to 1.0W) - continued

SOT-23 (TO-236AB) Switching - continued

V_{CEO} max. V	I_C max. A	P_{tot} mW	h_{FE} min.	@ I_C mA	t_{on}/t_{off} max. ns	$V_{CE(sat)}$ max. V	Device Marking	Mftr.	Mftrs. List No.
NPN									
15	0.2	225	40	10	12/18	0.2	1S	FCH	MMBT2369A
15	3	625	300	200	120*/160*	0.15	617	ZET	FMMT617
20	2.5	625	300	200	170/400	0.2	618	ZET	FMMT618
40	0.2	300	100	10	70/250	0.2	U92	FCH	BSR17A
50	2	625	300	200	170/750	0.22	619	ZET	FMMT619
80	0.5	225	100	100	—	0.25	1GM	ON	MMBTA06LT1G
PNP									
12	2.5	625	100	100	70*/130*	0.22	717	ZET	FMMT717
15	0.2	225	50	10	15*/20*	0.18	3R	FCH	MMBT5771
20	1.5	625	300	100	40*/670*	0.22	718	ZET	FMMT718
40	1.5	625	300	100	40*/435*	0.33	720	ZET	FMMT720
80	0.5	225	100	100	—	0.25	2GM	ON	MMBTA56LT1G

*typ.

211133

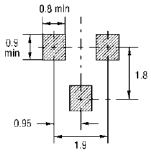
Order Multiple=5		Price Each			
Mftrs. List No.	Order Code	5+	100+	1K+	5K+
BSR17A	SMD 984-6697● RL	0.098	0.061	0.052	0.024
FMMT617	SMD 952-6420● RL	0.590	0.370	0.280	0.210
FMMT618	SMD 952-6439● RL	0.590	0.290	0.230	0.169
FMMT619	SMD 952-6447● RL	0.590	0.290	0.230	0.169
FMMT717	SMD 952-6455● RL	0.480	0.360	0.240	0.161
FMMT718	SMD 952-6463● RL	0.740	0.560	0.370	0.210
FMMT720	SMD 952-6471● RL	0.620	0.450	0.310	0.210
MMBT2369A	SMD 984-6719● RL	0.099	0.057	0.044	0.021
MMBT5771	SMD 984-6840● RL	1.040	0.870	0.740	0.470
MMBTA06LT1G	SMD 955-5897● RL	0.120	0.060	0.046	0.036
MMBTA56LT1G	SMD 955-5900● RL	0.138	0.076	0.050	0.036

Reels of 3000		Price Per Reel	
Mftrs. List No.	Order Code	1+	3+
FMMT718TA	NEW SMD 156-2456●	422.69	380.43
FMMT720TA	NEW SMD 156-2457●	422.69	380.43
FMMT619TA	NEW SMD 156-2455●	483.08	– –

SOT-23 High Voltage



Supplied on 8mm tape.



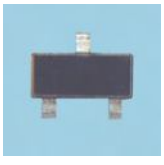
V_{CEO} max. V	I_C max. mA	h_{FE} min.	@ I_C mA	P_{tot} @ 25°C W	Device Marking	Mftr.	Mftrs. List No. NPN	PNP
300	50	50	25	0.25	1V/1W	NXP	BF820	BF821
300	200	40	10	0.35	3E/4E	ZET	FMMTA42	FMMTA92
300	200	40	30	0.35	1D/2D	FCH	MMBTA42	MMBTA92
300	500	40	30	0.35	A92	ST	—	MMBTA92
300	500	40	10	0.35	1D/2D	FCH	KST42	KST92
300	500	100	1	0.5	497/597	ZET	FMMT497	FMMT597
400	150	100	50	0.35	458/558	ZET	FMMT458	FMMT558
500	150	80	50	0.5	560	ZET	—	FMMT560

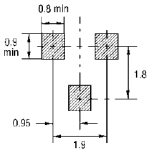
211135

Order Multiple=5		Price Each			
Mftrs. List No.	Order Code	5+	100+	1K+	5K+
BF820	SMD 108-1284● RL	0.220	0.119	0.091	0.061
BF821	SMD 108-1285● RL	0.173	0.103	0.101	0.066
KST42	SMD 109-5135● RL	0.054	0.031	0.024	0.017
KST92	SMD 109-5136● RL	0.039	0.033	0.025	0.019
FMMT458	SMD 952-6684● RL	0.390	0.290	0.184	0.110
FMMT497	SMD 952-5157● RL	0.380	0.280	0.187	0.099
FMMT558	SMD 952-6706● RL	0.440	0.330	0.220	0.123
FMMT560	SMD 952-5114● RL	0.490	0.370	0.240	0.138
FMMT597	SMD 952-5165● RL	0.410	0.320	0.210	0.113
FMMTA42	SMD 952-6277● RL	0.310	0.210	0.145	0.087
FMMTA92	SMD 952-6285● RL	0.310	0.210	0.145	0.087
MMBTA92	SMD 146-0634●	0.068	0.051	0.038	0.034
Order Multiple=10		**10+**	**100+**	**1K+**	**3K+**
MMBTA42	SMD 984-6735● RL	0.074	0.049	0.040	0.022
MMBTA92	SMD 984-6859● RL	0.139	0.097	0.066	0.036

SOT-23 High Performance

High performance complementary pairs, supplied on 8mm tape.





V_{CEO} max. V	I_C max. A	f_t min. MHz	h_{FE} min.	@ I_C mA	P_{tot} @ 25°C W	Device Marking	Mftrs. List No. NPN	PNP
15	3	120	300	200	625	617	FMMT617	—
20	2.5	140	300	200	625	618	FMMT618	—
40	1	150	300	500	0.5	41A/91A	FMMT491A	FMMT591A
60	1	150	100	500	0.5	491/591	FMMT491	FMMT591
100	0.8	—	15000	1	0.63	734	—	FMMT734
100	1	150	100	250	0.5	493/593	FMMT493	FMMT593
150	1	100	100	250	0.5	495	FMMT495	—
100	0.5	—	15000	0.1	0.5	614	FMMT614	—

Order Multiple=5		Price Each			
Mftrs. List No.	Order Code	5+	100+	1K+	5K+
FMMT491	SMD 952-6293● RL	0.330	0.230	0.162	0.115
FMMT491A	SMD 952-6692● RL	0.350	0.260	0.162	0.090
FMMT493	SMD 952-6145● RL	0.290	0.210	0.135	0.090
FMMT495	SMD 952-5173● RL	0.280	0.200	0.129	0.071
FMMT591	SMD 952-6307● RL	0.310	0.210	0.139	0.096
FMMT591A	SMD 952-6722● RL	0.350	0.260	0.168	0.096
FMMT593	SMD 952-6161● RL	0.310	0.210	0.139	0.096
FMMT614	SMD 952-6030● RL	0.320	0.173	0.163	0.139
FMMT617	SMD 952-6420● RL	0.590	0.370	0.280	0.210
FMMT618	SMD 952-6439● RL	0.590	0.290	0.230	0.169
FMMT734	SMD 952-5106● RL	0.820	0.570	0.390	0.220

211136

Reels of 3000		Price Per Reel
Mftrs. List No.	Order Code	1+
FMMT493TA	NEW SMD 156-2451●	257.65
FMMT593TA	NEW SMD 156-2452●	275.53
FMMT491TA	NEW SMD 156-2453●	315.67
FMMT591TA	NEW SMD 156-2454●	275.53

Low Power Bipolar Transistors - Leaded (P_{tot} to 1.0W)

TO-1, TO-18 General Purpose Amplifiers/Switches



TO-18

V_{CEO} V	V_{CBO} max. V	I_C A	h_{FE} @ 2mA min.	f_T min. (typ.*) MHz	P_{tot} mW	Mftrs. List No. NPN	PNP
20	30	9207023	110	150	600	BC108	—
20	30	0.1	110	150	600	BC108B	—
20	30	0.1	200	150	600	BC108C	—
45	50	0.1	120	200	600	—	BC177
45	50	0.1	180	200	600	—	BC177B
45	50	0.1	110	150	600	BC107	—
45	50	0.1	110	150	600	BC107A	—
45	50	0.1	200	150	600	BC107B	—
80	90	0.15	50	100	360	—	BC477

211410

Order Multiple=5		Price Each				
	Order Code	5+	25+	100+	1K+	3K+
BC107	920-6752●	0.67	0.44	0.31	0.25	0.22
BC107A	920-6760●	0.71	0.46	0.33	0.27	0.22
BC107B	920-6779●	0.74	0.48	0.33	0.27	0.22
BC108	920-6736●	1.00	0.65	0.38	0.30	0.25
BC108B	920-6744●	1.00	0.65	0.38	0.30	0.25
BC108C	920-6817●	1.00	0.65	0.38	0.30	0.25
BC177	920-6825●	0.82	0.51	0.39	0.31	0.25
BC177B	920-6833●	0.82	0.49	0.39	0.31	0.25
BC477	920-6841●	1.00	0.60	0.44	0.31	0.30

TO-5, TO-39 General Purpose Amplifiers/Switches



	V_{CEO} V	V_{CEO} V	V_{CBO} max. V	I_C A	h_{FE} @ min.	I_C mA	$f_{T\ min.}$ MHz	P_{tot} mW	Package	Mftr.	Mftrs. List No. NPN	PNP
NPN	30		60	1000	40	150	50	800	TO-5	ST	BFY51	—
NPN	35		80	1000	30	150	60	800	TO-5	ST	BFY50	—
PNP	40		40	1	100	100	50	800	TO-39	MC	—	BC160-16
NPN	40		80	1	100	100	50	800	TO-39	MC	BC140-16	—
PNP	60		60	1	100	100	50	800	TO-39	MC	—	BC161-16
PNP	60		65	-5	40	2	80	5	TO-39	ST	—	BSS44
PNP	80		80	1	100	100	150	800	TO-39	MC	—	2N4033
NPN	80		120	500	40	150	50		TO-39	ST	2N1893	—

211109

Order Multiple=5			Price Each		
Mftrs. List No.	Mftr.	Order Code	5+	25+	100+
BFY50	ST	980-1596●	1.64	1.23	0.92
BC141-16	MC	920-7678●	1.04	0.53	0.39
BFY50	ST	980-1596●	1.64	1.23	0.92
BFY51	ST	994-6640●	1.64	1.23	0.92
BFY52	-	120-8599●	0.64	0.46	0.36
2N1893	ST	101-5768●	0.96	0.64	0.52
2N4033	MC	920-7058●	1.38	0.86	0.66
BC160-16	MC	920-7686●	1.04	0.53	0.39
BSS44	ST	108-4556●	3.19	2.38	1.80

RL Re-reeling available

TO-92, NPN, General Purpose



V_{CEO} max. V	I_C max. mA	h_{FE} min.	@ I_C A	P_{tot} mW	Mftrs List No
50	0.2	125	2	300	BC182
40	0.2	100	10	500	2N3904

425067

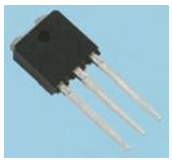
Order Multiple=5		Price Each			
Mftrs. List No.	Order Code	5+	25+	100+	1K+
BC182	**984-6760●**	0.176	0.122	0.084	0.055
2N3904	**984-6743●**	0.144	0.118	0.093	0.068

TO-92 General Purpose Amplifiers/Switches

20V to 300V NPN/PNP



TO-92 (a,b,d - straight legs)



I-Pak



TO-92 (f - preformed legs)

V_{CEO} V	V_{CBO} max. V	I_C A	h_{FE} min	@ I_C mA	f_T min (typ.*) MHz	P_{tot} mW	Pin Out	Mftr.	Polarity	Mftrs. List No.
20	30	0.1	125	2	150	300	f	MAG	NPN	BC238
25	40	0.025	38	7	550	0.5	g	MC	NPN	BF199
30	30	0.1	200	2	200	625	d	ON	NPN	BC548BZL1G
30	45	200	80	2	200	625	a	FCH	PNP	BC213L
30	45	200	125	2	150	625	f	FCH	NPN	BC183
30	45	200	140	2	200*	625	f	FCH	PNP	BC214
30	45	200	140	2	200	625	a	FCH	PNP	BC214L
30	45	200	240	2	150	625	f	FCH	NPN	BC184L
30	45	200	450	2	150	625	f	FCH	NPN	BC183C
30	45	200	450	2	150	625	a	FCH	NPN	BC183LC
30	45	200	450	2	150	625	f	FCH	NPN	BC184C
30	50	0.1	220	2	300*	625	f	FCH	PNP	BC557B
30	50	0.8	100	50	100	360	a	MAG	NPN	2N3704
30	50	0.8	100	50	100	360	a	MC	NPN	2N3704
30	50	0.8	50	50	100	625	a	MAG	NPN	2N3705
30	50	0.8	50	50	100	625	a	MC	NPN	2N3705
40	75	0.6	100	150	300	625	b	ON	NPN	MPS2222AG
40	75	0.6	40	500	300	0.25	1B,2E,3C	NXP	NPN	PMBT2222A
40	60	0.1	30	100	300	0.25	1B,2E,3C	NXP	NPN	PMBT3904
40	40	0.6	100	150	200	625	a	MC	PNP	2N4403
40	60	0.2	100	10	300	500	b	FCH	NPN	2N3904
45	50	100	125	2	100	500	d	NXP	PNP	BC557
45	50	0.1	420	2	100	500	—	NXP	NPN	BC550C
45	50	0.1	125	2	100	500	—	NXP	PNP	BC557C
45	50	1	250	100	80	625	—	NXP	PNP	BC327-40
45	50	1	100	100	80	625	d	NXP	PNP	BC327
45	50	0.5	100	100	100	625	—	NXP	NPN	BC337
45	50	500	110	2	100	500	d	NXP	NPN	BC547
45	50	0.1	120	2	75	625	d	ON	PNP	BC557AZL1G
45	50	0.1	180	2	75	625	d	ON	PNP	BC557BZL1G
45	50	0.5	100	100	100*	800	f	FCH	PNP	BC327
45	50	0.8	160	100	—	625	d	ON	PNP	BC327-25ZL1G
45	45	1.5	40	150	50*	1000	f	FCH	PNP	BC636
45	50	0.1	200	2	200	350	d	ON	NPN	BC237BG
45	50	0.5	100	100	—	800	f	FCH	NPN	BC337
45	50	1	100	100	—	625	b	FCH	NPN	BC33716
45	50	0.8	160	100	60	625	d	ON	NPN	BC337-25ZL1G
45	50	0.8	250	100	100	625	d	ON	NPN	BC337-40ZL1G
45	50	0.1	200	2	—	500	f	FCH	NPN	BC547B
45	50	0.1	200	2	200	625	d	ON	NPN	BC547BZL1G
45	50	0.1	420	2	200	625	d	ON	NPN	BC547CZL1G
45	50	0.5	160	100	80	625	—	NXP	PNP	BC327-25
45	50	0.5	100	0.1	80	625	—	NXP	NPN	BC337-16
45	50	500	160	100	80	625	—	NXP	NPN	BC337-25
45	50	0.1	200	2	200	350	d	MC	NPN	BC237B
45	50	0.8	160	100	60	625	d	MC	PNP	BC327.25
45	50	0.5	100	100	60	800	f	MC	NPN	BC337
45	50	0.8	160	100	60	625	d	MC	NPN	BC337.25
45	50	0.1	200	2	200	625	d	MC	NPN	BC547B
45	50	0.1	180	2	75	625	d	MC	PNP	BC557B
45	50	100	220	2	100	500	—	NXP	PNP	BC557B
50	60	0.2	60	2	200	625	a	FCH	PNP	BC212L
50	60	0.15	70	2	80	400	a	TOSH	NPN	2SC1815-Y
50	60	0.2	125	2	150	300	f	FCH	NPN	BC182
50	60	0.2	240	2	150	625	f	FCH	NPN	BC182B
50	60	0.1	120	2	120	350	—	ON	NPN	BC182BRL1G
50	60	0.1	120	2	150	350	d	ON	NPN	BC182G
50	60	200	125	2	150	625	f	FCH	NPN	BC182L
50	60	200	240	2	150	625	a	FCH	NPN	BC182LB
50	60	0.1	140	2	200	350	d	ON	PNP	BC212BRL1G
50	60	200	60	2	200	625	f	FCH	PNP	BC212
50	60	200	200	2	200	625	a	FCH	PNP	BC212LB
50	60	200	200	2	200	625	f	FCH	PNP	BC212B
50	60	0.1	120	2	120	350	d	MC	NPN	BC182B
50	60	0.2	125	2	150	625	a	MC	NPN	BC182L
60	150	5	200	100	—	15	I-PAK	ST	NPN	STD1805-1
65	80	0.2	125	2	100	500	—	NXP	PNP	BC556
65	80	100	75	2	200*	500	f	FCH	PNP	BC556
65	80	0.1	180	2	150	625	d	ON	PNP	BC556BZL1G
65	80	100	110	2	—	500	f	FCH	NPN	BC546
65	80	0.1	200	2	150	625	d	ON	NPN	BC546BZL1G
65	50	100	200	2	80	500	—	NXP	NPN	BC546B
65	50	100	420	2	100	500	—	NXP	NPN	BC547C
65	80	100	200	2	100	500	—	NXP	PNP	BC556B
80	100	1.5	40	150	130	625	a	FCH	PNP	BC640
80	100	1.5	40	150	—	625	a	MC	PNP	BC640
80	80	0.5	50	100	100	625	b	MC	NPN	MPSA06
100	100	2	20	1000	—	800	a	BNS	NPN	TIPP31C
100	100	2	500	2	—	1.2	—	ST	NPN	STX117-AP

211145

Order Multiple=5			Price Each				
Mftrs. List No.	Mftr.	Order Code	5+	25+	100+	1K+	3K+
NPN							
2N3704	MAG	**120-8605●**	0.175	0.120	0.098	0.082	0.072
2N3705	MAG	**120-8606●**	0.230	0.161	0.118	0.076	0.070
2N3904	FCH	**984-6743●**	0.144	0.118	0.093	0.068	0.042
2SC1815-Y	TOSH	**121-3347●**	0.220	0.131	0.124	0.112	0.101
BC182	FCH	**984-6760●**	0.176	0.122	0.084	0.055	0.036
BC182B	FCH	**101-7649●**	0.143	0.108	0.084	0.055	0.036
BC182BRL1G	ON	**955-8454●**	0.075	0.039	0.029	0.021	0.020
BC182G	ON	**955-8462●**	0.075	0.039	0.029	0.021	0.020
BC182L	FCH	**101-7650●**	0.125	0.078	0.052	0.041	0.032
BC182LB	FCH	**101-7651●**	0.109	0.088	0.066	0.045	0.023
BC183	FCH	**101-7653●**	0.044	0.035	0.030	0.025	0.023
BC183C	FCH	**101-7655●**	0.125	0.102	0.076	0.052	0.026
BC183LC	FCH	**101-7656●**	0.116	0.065	0.051	0.028	0.024
BC184C	FCH	**101-7657●**	0.153	0.122	0.084	0.055	0.032
BC184L	FCH	**101-7658●**	0.189	0.122	0.084	0.045	0.038
BC237BG	ON	**955-6389●**	0.068	0.035	0.027	0.021	0.020
BC238	MAG	**120-8595●**	0.210	0.146	0.104	0.060	0.049
BC212L	FCH	**101-7661●**	0.105	0.065	0.046	0.036	0.032
BC327-25	NXP	**873-4640●**	0.090	0.046	0.035	0.022	0.020
BC337-16	NXP	**873-4658●**	0.090	0.046	0.035	0.022	0.020
BC337-25	NXP	**873-4666●**	0.084	0.043	0.033	0.021	0.019
BC557B	FCH	**101-7678●**	0.098	0.060	0.048	0.033	0.028
BC640	FCH	**101-7681●**	0.220	0.126	0.085	0.068	0.049
PMBT2222A	NXP	SMD **108-1475●** RL	0.149	0.071	0.057	0.030	– –
PMBT3904	NXP	SMD **108-1476●** RL	0.078	0.043	0.034	0.020	– –
STX117-AP	ST	**108-4548●**	0.500	0.380	0.290	0.220	0.196
BC337	NXP	**109-7286●**	0.088	0.045	0.039	0.035	0.031
BC337	FCH	**101-7668●**	0.186	0.140	0.109	0.078	0.056
BC33716	FCH	**101-7669●**	0.184	0.096	0.083	0.044	0.034
BC337-25ZL1G	ON	**955-8497●**	0.068	0.043	0.032	0.025	0.022
BC337-40ZL1G	ON	**955-8675●**	0.107	0.064	0.049	0.038	0.027
BC546	FCH	**101-7672●**	0.220	0.144	0.088	0.042	0.040
BC546BZL1G	ON	**955-8551●**	0.058	0.035	0.026	0.022	0.020
BC547	NXP	**109-7287●**	0.104	0.049	0.042	0.032	0.024
BC547B	FCH	**101-7673●**	0.189	0.101	0.084	0.038	0.036
BC547B	NXP	**109-7288●**	0.111	0.055	0.046	0.034	0.024
BC547C	NXP	**873-4704●**	0.069	0.037	0.027	0.016	0.014
BC547BZL1G	ON	**955-8560●**	0.057	0.035	0.026	0.022	0.021
BC547CZL1G	ON	**955-8578●**	0.050	0.035	0.027	0.021	0.019
BC548BZL1G	ON	**955-8586●**	0.060	0.038	0.028	0.022	0.021
BC550C	NXP	**109-7289●**	0.102	0.047	0.043	0.033	0.028
BC556B	NXP	**873-4712●**	0.069	0.037	0.027	0.016	0.014
BC557B	NXP	**873-4720●**	0.069	0.037	0.027	0.016	0.014
MPS2222AG	ON	**955-6842●**	0.124	0.074	0.059	0.049	0.035
STD1805-1	ST	**129-7987●**	0.530	0.460	0.350	0.290	0.197
TIPP31C	BNS	**121-6269●**	0.610	0.460	0.410	0.340	0.250
2N3705	MC	NEW **157-4369●**	0.081	0.070	0.046	0.036	0.035
MPSA06	MC	NEW **157-4388●**	0.350	0.270	0.181	0.111	0.086
2N3704	MC	NEW **157-4393●**	0.185	0.094	0.071	0.062	0.058
BC337	MC	NEW **157-4379●**	0.081	0.070	0.046	0.024	0.022
BC337.25	MC	NEW **157-4380●**	0.137	0.070	0.053	0.046	0.043
BC547B	MC	NEW **157-4381●**	0.105	0.053	0.040	0.038	0.036
BC182B	MC	NEW **157-4375●**	0.137	0.070	0.053	0.046	0.043
BC182L	MC	NEW **157-4376●**	0.093	0.074	0.038	0.030	0.029
BC237B	MC	NEW **157-4377●**	0.117	0.093	0.058	0.036	0.035
BF199	MC	NEW **157-4387●**	0.171	0.088	0.054	0.034	0.033
PNP							
BC212	FCH	**101-7659●**	0.120	0.077	0.061	0.042	0.032
BC327-40	NXP	**108-1218●**	0.079	0.043	0.032	0.018	0.017
BC212BRL1G	ON	**955-8470●**	0.072	0.038	0.028	0.021	0.020
BC327	FCH	**984-6875●**	0.240	0.157	0.109	0.069	0.053
BC327	NXP	**109-7285●**	0.072	0.043	0.042	0.028	0.027
BC327-25ZL1G	ON	**955-8489●**	0.075	0.043	0.031	0.021	0.019
BC546B	NXP	**873-4690●**	0.068	0.035	0.024	0.016	0.014
BC556BZL1G	ON	**955-8500●**	0.066	0.056	0.045	0.035	0.025
BC556	NXP	**109-7290●**	0.100	0.045	0.044	0.030	0.029
BC557AZL1G	ON	**955-8519●**	0.049	0.032	0.026	0.021	0.018
BC557	NXP	**109-7291●**	0.111	0.053	0.045	0.035	0.026
BC557C	NXP	**109-7292●**	0.093	0.045	0.039	0.028	0.020
BC557BZL1G	ON	**955-8527●**	0.051	0.035	0.028	0.021	0.020
BC636	FCH	**101-7680●**	0.182	0.078	0.060	0.042	0.036
BC556	FCH	**101-7677●**	0.097	0.057	0.042	0.034	0.025
BC212LB	FCH	**101-7662●**	0.080	0.052	0.040	0.029	0.023
BC213L	FCH	**101-7663●**	0.075	0.047	0.033	0.026	0.023
BC214	FCH	**101-7665●**	0.092	0.059	0.047	0.032	0.025
BC214L	FCH	**101-7666●**	0.088	0.053	0.041	0.030	0.025
BC212B	FCH	**101-7660●**	0.086	0.055	0.042	0.030	0.023
2N4403	MC	NEW **157-4374●**	0.117	0.093	0.058	0.036	0.035
BC327.25	MC	NEW **157-4378●**	0.137	0.070	0.053	0.046	0.043
BC557B	MC	NEW **157-4384●**	0.105	0.053	0.040	0.036	0.034
BC640	MC	NEW **157-4386●**	0.220	0.114	0.086	0.075	0.071

RL Re-reeling available

Low Power Bipolar Transistors - Leaded (P_{tot} to 1.0W) - continued

TO-39, TO-92, E-Line High Voltage


TO-39


TO-92 (h)


TO-92 (b)


E-Line

Devices with breakdown voltages of 160V minimum, for applications requiring relatively low collector current, such as lamp drivers and neon tubes.

V_{CEO} max. V	I_C max. A	h_{FE} @ min	I_C mA	$V_{CE(sat)}$ max. V	@ I_c @ VCE ($_{SAT}$) max. mA	P_{tot} @ 25°C mW	Package	Mftr.	Mftrs. List No. NPN	PNP
250	100	50	25	0.6	30	830	TO-92	NXP	BF422	BF423
250	0.1	50	25	0.5	20	830	TO-92	ON	—	BF423ZL1G
300	0.1	25	30	1	30	500	TO-39	ST	BF259	—
300	0.1	25	30	1	30	500	TO-39	MC	BF259	—
300	0.5	40	30	0.5	20	625	TO-92	ON	MPSA42RLRPG	—
300	0.5	40	30	0.5	20	625	TO-92	ON	—	MPSA92RLRPG
300	0.1	40	10	500	20	500	SOT-54	NXP	MPSA42	—
300	500	40	10	0.5	20	625	TO-92	FCH	MPSA42	MPSA92
300	0.5	40	10	0.5	20	625	TO-92	MC	MPSA42	—
300	0.5	40	10	0.5	20	625	TO-92	MC	—	MPSA92
400	300	40	100	0.75	50	625	TO-92	ON	MPSA44G	—
400	0.3	50	10	500	10	625	SOT-54	NXP	MPSA44	—
400	0.3	40	1	0.75	50	625	TO-92	FCH	KSP44	—
400	1	5	800	0.5	0.5	1	TO-92	ST	STBV42	—
400	1.5	8	1	3	—	1.5	TO-92	TS	TS13003CT	—
400	0.3	40	100	0.75	50	625	TO-92	MC	MPSA44	—

452219

Order Multiple=5 Mftrs. List No.	Mftr.	Order Code	Price Each 5+	25+	100+	1K+
BF259	ST	980-1588	1.450	1.070	0.820	0.670
BF259	MC	920-7112	0.540	0.470	0.430	0.390
BF422	NXP	873-4968	0.220	0.118	0.085	0.059
BF423ZL1G	ON	955-6419	0.079	0.047	0.035	0.028
BF422	NXP	873-4968	0.220	0.118	0.085	0.059
KSP44	FCH	109-5133	0.095	0.055	0.042	0.031
MPSA42RLRPG	ON	955-8535	0.103	0.059	0.047	0.030
MPSA42	NXP	873-5883	0.158	0.086	0.058	0.040
MPSA42	FCH	101-7719	0.210	0.166	0.114	0.075
MPSA44G	ON	955-6850	0.370	0.280	0.220	0.176
MPSA44	NXP	873-5891	0.310	0.159	0.114	0.076
MPSA92	FCH	101-7722	0.250	0.099	0.062	0.045
MPSA92RLRPG	ON	955-8543	0.150	0.126	0.105	0.091
TS13003CT	TS	129-9318	0.119	0.085	0.054	0.046
STBV42	ST	108-4481	0.510	0.380	0.300	0.220
MPSA42	MC	NEW 157-4390	0.180	0.090	0.067	0.059
MPSA44	MC	NEW 157-4391	0.147	0.067	0.061	0.047
MPSA92	MC	NEW 157-4392	0.091	0.045	0.034	0.030

High Speed Switching


TO-5


TO-39


E-Line


TO-92


TO-18

Fast switching devices exhibiting short turn-off and low saturation voltage characteristics.

V_{CEO} max. V	I_C max. A	$V_{CE(sat)}$ max. V	@ I_C mA	t_{off} max. ns	@ I_C mA	h_{FE} min.	@ I_C mA	P_{tot} @ 25°C mW	Package and Pin Out	Mftr.	Mftrs. List No.
NPN											
15	0.2	0.2	10	18	10	40	10	360	TO-18	MC	2N2369A
15	0.5	0.6	100	21	100	40	10	360	TO-18	MC	BSX20MC
15	0.5	0.6	100	21	100	40	10	360	TO-18	MC	BSX20
15	0.2	0.25	10	18	10	40	10	360	TO-18	MC	2N2369MC
15	0.2	0.25	10	18	10	40	10	360	TO-18	MC	2N2369
15	0.2	0.2	10	18	10	40	10	360	TO-18	MC	2N2369AMC
15	0.2	0.2	10	18	10	40	10	360	TO-18	MC	2N2369A
30	0.8	0.4	150	—	—	100	150	500	TO-18	MC	2N2222
NPN											
40	0.8	0.3	150	60	150	100	150	800	TO-5	ST	2N2219A
40	0.8	0.3	150	60	150	100	150	500	TO-18	ST	2N2222A
40	0.8	0.3	150	60	150	100	150	400	TO-18	MC	2N2222A (MC)
40	0.8	0.3	150	60	150	100	150	400	TO-18	MC	2N2222A
40	0.2	0.2	10	250	10	100	10	500	TO-92	FCH	2N3904
40	0.2	0.2	10	250	10	100	10	500	TO-92	FCH	2N3904
40	0.2	0.2	10	250	10	100	10	500	TO-92	ON	2N3904ZL1G
40	600	0.4	150	255	150	40	1	625	TO-92	ON	2N4401G
40	0.2	0.2	10	250	10	100	10	500	TO-92	MC	2N3904
40	0.6	0.4	150	255	150	40	1	625	TO-92	MC	2N4401
60	5	1	5000	1200	5000	40	2000	870	TO-39	MAG	BSV64
45	1	0.7	500	100	500	25	500	800	TO-39	MAG	BSX61
60	4.5	0.21	5000	760	100	55	5	710	E-Line	ZET	ZX5T851A
120	2	—	—	900	500	40	100	800	TO-39	MAG	BSW67A
PNP											
15	50	0.18	10	20	10	50	10	625	TO-92	FCH	2N5771
40	0.6	0.4	150	30	150	100	150	600	TO-39	MC	2N2905
40	0.6	0.4	150	100	—	100	150	600	TO-18	MC	2N2907
40	0.2	0.25	10	75	10	100	1	250	TO-92	ON	2N3906ZL1G
40	0.2	0.25	10	75	10	100	1	250	TO-92	MC	2N3906
60	3.5	0.21	4000	370	100	65	4000	710	E-Line	ZET	ZX5T951A
60	0.6	0.4	150	30	150	100	150	600	TO-39	MC	2N2905AMC
60	0.6	0.4	150	30	150	100	150	600	TO-39	MC	2N2905A
60	0.6	0.4	150	30	150	100	150	600	TO-39	ST	2N2905A
60	0.6	0.4	150	50	—	40	500	400	TO-18	MC	2N2906A
60	0.6	0.4	150	100	—	100	150	400	TO-18	MC	2N2907A
60	0.6	0.4	150	30	150	100	150	400	TO-18	ST	2N2907A

211209

Order Multiple=1 Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
BSV64	MAG	120-8601	5.730	4.130	3.280	1.900
BSW67A	MAG	120-8602	5.680	4.120	3.220	1.970
BSX20	MC	920-6876	0.930	0.600	0.470	0.340
ZX5T851A	ZET	756-5046	1.050	0.880	0.610	0.520
Order Multiple=5			**5+**	**25+**	**100+**	**1K+**
2N2219A	ST	980-1260	0.970	0.700	0.500	0.490
2N2222	MC	920-6884	0.710	0.390	0.370	0.350
2N2222A	ST	980-1278	0.530	0.460	0.420	0.410
2N2222A	MC	920-7120	0.460	0.400	0.380	0.360
2N2369	MC	920-6850	0.940	0.600	0.360	0.270
2N2369A	MC	920-6868	0.970	0.610	0.370	0.270
2N2905	MC	920-7023	1.040	0.530	0.390	0.350
2N2905A	MC	920-7031	1.040	0.530	0.390	0.350
2N2905A	ST	980-1286	1.260	0.950	0.790	0.640
2N2906A	MC	920-6906	0.570	0.450	0.390	0.360
2N2907	MC	920-6892	0.570	0.450	0.390	0.360
2N2907A	MC	920-6914	0.570	0.450	0.390	0.360
2N2907A	ST	980-1294	0.970	0.730	0.440	0.410
2N3904	FCH	984-6743	0.144	0.118	0.093	0.068
2N3904ZL1G	ON	955-8420	0.093	0.078	0.066	0.056
2N3906ZL1G	ON	955-8411	0.104	0.059	0.046	0.034
2N4401G	ON	955-6427	0.210	0.117	0.073	0.050
2N3904	MC	NEW 157-4370	0.117	0.084	0.058	0.036
2N3906	MC	NEW 157-4372	0.117	0.084	0.058	0.036
2N4401	MC	NEW 157-4373	0.117	0.084	0.058	0.036
Order Multiple=1			**1+**	**25+**	**100+**	**1K+**
2N5771	FCH	101-7646	1.240	0.890	0.730	0.500

TO-18, TO-77, TO-92 Low Noise



TO-18a



TO-92 (f)


TO-77

Suitable for applications requiring low noise and good h_{FE} linearity, eg. audio pre-amplifiers, and instrumentation. The BFY81 is a dual NPN matched differential amplifier, with excellent thermal matching over a wide temperature and current range.

V_{CEO} max. V	I_C max. A	h_{FE} min.	@ I_C mA	F max. (*typ.) dB	f_T min. (*typ.) MHz	P_{tot} @ 25°C mW	Package	Pin Out	Mftr.	Mftrs. List No. NPN	PNP
20	0.1	240	2	4	100	300	TO-18	a	SEM	—	BC179
20	0.1	420	2	4	150	600	TO-18	a	MC	BC109C	—
20	0.1	200	2	4	150*	600	TO-18	a	MC	BC109B	BC109
25	0.1	125	2	10	100*	300	TO-18	a	SEM	—	BC178
30	100	420	2	1.4*	300*	500	TO-92	f	FCH	BC549C	—
30	0.1	420	2	4*	100*	500	TO-92	f	NXP	BC549C	—
30	0.1	420	2	1.4	300	500	TO-92	f	MC		BC549C
45	100	110	2	3	300*	625	TO-92	f	FCH	—	BC560
45	100	110	2	3	300*	625	TO-92	f	FCH	BC550	—
Matched Differential Amplifier (Dual NPN)											
45	0.1	10	3	4	—	500	TO-77	—	SEM	BFY81	—

211210

RL Re-reeling available

Order Multiple=5			Price Each			
Mftrs. List No.	Mftr.	Order Code	5+	25+	100+	1K+
BC109	MC	920-6787●	0.540	0.370	0.280	0.220
BC109B	MC	920-6795●	0.540	0.370	0.280	0.220
BC109C	MC	920-6809●	0.580	0.380	0.300	0.250
BC178	SEM	120-8593●	0.450	0.380	0.270	0.178
BC179	SEM	120-8594●	0.490	0.380	0.250	0.185
BFY81	SEM	120-8600●	21.430	16.390	13.310	8.840
BC549C	FCH	101-7674●	0.161	0.099	0.096	0.049
BC549C	NXP	109-7182●	0.144	0.058	0.042	0.028
BC550	FCH	101-7675●	0.169	0.104	0.078	0.055
BC560	FCH	101-7679●	0.150	0.095	0.072	0.049
BC549C	MC	NEW 157-4382●	0.114	0.057	0.043	0.038

Low Power Transistor Arrays

Transistor, Dual

SMD New ROHM SEMICONDUCTOR

Voltage, Vceo V	ft, Typ MHz	Current, Ic cont max mA	Hfe min	Case Style	Mftrs. List No.
NPN / PNP					
50	180	50	120	EMT6	EMZ1T2R
50	180	50	120	SC-74A	FMY1AT148
50	250	10	100	SOT-457	IMD10AT108
50	150	1	100	SOT-457	IMD16AT108
50	250	100	30	SOT-457	IMD3AT108
50	250	5	100	SOT-457	IMD6AT108
50	250	100	68	SOT-457	IMD9AT108
50	180	50	120	SOT-457	IMZ1AT108
Dual PNP					
50	250	100	30	SOT-457	IMB11AT110
50	250	5	100	SOT-457	IMB3AT110
50	250	10	100	SC-74A	FMA4AT148
50	250	100	80	SC-74A	FMA5AT148
50	200	500	120	SOT-457	IMT17T110
50	140	50	120	SOT-457	IMT1AT110
50	140	50	120	SOT-457	IMT2AT108
50	140	50	120	SOT-457	IMT3AT108
120	140	10	180	SOT-457	IMT4T108
Dual NPN					
20	1500	20	56	SOT-457	IMX4T108
32	250	500	120	SOT-457	IMZ4T108
50	250	100	30	SOT-457	IMH11AT110
50	250	10	100	SOT-457	IMH15AT110
50	250	100	56	SOT-457	IMH1AT110
50	250	100	68	SOT-457	IMH2AT110
50	250	5	100	SOT-457	IMH3AT110
50	250	10	100	SOT-457	IMH4AT110
50	250	100	56	SOT-457	IMH5AT108
50	250	100	68	SOT-457	IMH9AT110
50	180	50	120	SOT-457	IMX17T110
50	180	50	120	SOT-457	IMX3T108
50	180	50	120	EMT6	EMX2T2R
50	250	100	68	SC-74A	FMG2AT148
50	250	10	100	SC-74A	FMG4AT148
50	250	100	30	SC-74A	FMG9AT148
120	140	10	180	SOT-457	IMX8T108

528185

Order Multiple = 10			Price Each			
Mftrs. List No.	Order Code	10+	100+	250+	1K+	3K+
EMT6						
EMX2T2R	SMD 168-0315●	0.400	0.260	0.175	0.093	0.082
EMZ1T2R	SMD 168-0317●	0.400	0.260	0.175	0.093	0.082
SC-74A						
FMA4AT148	SMD 168-0318●	0.400	0.220	0.151	0.116	0.093
FMA5AT148	SMD 168-0319●	0.400	0.220	0.151	0.116	0.093
FMG2AT148	SMD 168-0320●	0.360	0.210	0.140	0.105	0.082
FMG4AT148	SMD 168-0321●	0.400	0.220	0.151	0.116	0.093
FMG9AT148	SMD 168-0322●	0.400	0.220	0.151	0.116	0.093
FMY1AT148	SMD 168-0323●	0.380	0.210	0.151	0.116	0.093
SOT-457						
IMB11AT110	SMD 168-0324●	0.490	0.240	0.164	0.082	0.058
IMB3AT110	SMD 168-0325●	0.380	0.210	0.140	0.105	0.082
IMD10AT108	SMD 168-0326●	0.350	0.230	0.164	0.093	0.069
IMD16AT108	SMD 168-0327●	0.400	0.220	0.151	0.116	0.093
IMD3AT108	SMD 168-0331●	0.370	0.260	0.175	0.093	0.069
IMD6AT108	SMD 168-0332●	0.370	0.260	0.175	0.093	0.069
IMD9AT108	SMD 168-0333●	0.370	0.260	0.175	0.093	0.069
IMH11AT110	SMD 168-0334●	0.420	0.210	0.140	0.069	0.058
IMH15AT110	SMD 168-0335●	0.400	0.260	0.175	0.093	0.082
IMH1AT110	SMD 168-0336●	0.380	0.210	0.140	0.105	0.082
IMH2AT110	SMD 168-0337●	0.420	0.210	0.140	0.069	0.058
IMH3AT110	SMD 168-0338●	0.400	0.260	0.175	0.093	0.082
IMH4AT110	SMD 168-0339●	0.400	0.260	0.175	0.093	0.082
IMH5AT108	SMD 168-0340●	0.470	0.270	0.186	0.140	0.116
IMH9AT110	SMD 168-0342●	0.400	0.260	0.175	0.093	0.082
IMT17T110	SMD 168-0343●	0.400	0.260	0.175	0.093	0.082
IMT1AT110	SMD 168-0344●	0.330	0.210	0.140	0.082	0.069
IMT2AT108	SMD 168-0345●	0.410	0.270	0.198	0.128	0.105
IMT3AT108	SMD 168-0346●	0.400	0.260	0.175	0.093	0.082
IMT4T108	SMD 168-0347●	0.360	0.240	0.164	0.093	0.069
IMX17T110	SMD 168-0348●	0.400	0.260	0.175	0.093	0.082
IMX3T108	SMD 168-0349●	0.400	0.220	0.151	0.116	0.093
IMX4T108	SMD 168-0350●	0.500	0.330	0.230	0.164	0.128
IMX8T108	SMD 168-0351●	0.360	0.240	0.164	0.093	0.069
IMZ1AT108	SMD 168-0352●	0.360	0.240	0.164	0.093	0.069
IMZ4T108	SMD 168-0354●	0.400	0.260	0.175	0.093	0.082

General Purpose Dual Transistors

ZETEX SEMICONDUCTORS NXP founded by Philips



SOT-363



SOT-666

- Low collector capacitance
- Low $V_{ce(sat)}$
- Matched current gain
- Reduced component count
- No mutual interference between transistors

SMD

V_{CEO} max. V	V_{CBO} max. V	$I_{C(pk)}$ max. mA	f_T min. MHz	h_{FE} min.	@ I_C mA	P_{tot} mW	P_{tot} per device mW	Device Marking	Device Marking	Mftrs. List No.
Dual NPN										
45	50	200	100	200	2	200	300	SC-88	1Ft	BC847BS
Dual PNP										
45	50	100	100	200	2	200	300	SC-88	3Ft	BC857BS
NPN										
15	15	0.5	420	200	10	300	200	SOT-666	N9	PBSS2515VS
40	50	0.1	100	120	1	300	200	SOT-666	ZZ	PEMX1
45	50	100	100	200	2	300	200	SOT-666	1F	BC847BV
50	60	3	100	300	0.5	750	750	SOT-457	43	PBSS4350D
PNP										
15	15	0.5	280	200	10	300	200	SOT-666	35	PBSS3515VS
40	50	0.1	100	120	1	300	200	SOT-666	FF	PEMT1
45	50	100	100	200	2	300	200	SOT-666	3F	BC857BV
45	50	100	250	200	2	200	300	SOT-363	A9*	BCM857BS
NPN/PNP										
15	15	0.5	420	200	10	300	200	SOT-666	N8	PBSS2515VPN
15	15	0.5	420	200	10	430	200	SOT-363	N8	PBSS2515YPN
40	40	1	150	300	0.5	750	750	SOT-457	M2	PBSS4140DPN
40	40	1.35	150	300	1	750	750	SOT-457	M3	PBSS4240DPN
40	40	0.1	100	120	1	300	200	SOT-666	FZ	PEMZ1
45	50	100	100	200	2	200	300	SC-88	13t	BC847BPN
45	50	100	100	200	2	300	200	SOT-666	13	BC847BVN
50	50	0.15	190	120	1	300	200	SOT-363	GZ	PUMZ2

425200

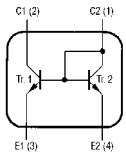
Order Multiple=5			Price Each			
Mftrs. List No.	Mftr.	Order Code	5+	100+	1K+	4K+
BC847BPN	NXP	SMD 108-1233● RL	0.057	0.041	0.033	0.030
BC847BS	NXP	SMD 108-1234● RL	0.053	0.038	0.031	0.028
BC847BV	NXP	SMD 873-4747● RL	0.400	0.200	0.153	0.101
BC847BVN	NXP	SMD 873-4755● RL	0.400	0.200	0.153	0.101
BC857BS	NXP	SMD 108-1247● RL	0.161	0.093	0.057	0.034
BC857BV	NXP	SMD 873-4763● RL	0.400	0.200	0.153	0.101
BCM857BS	NXP	SMD 873-4780● RL	0.460	0.250	0.171	0.115
PBSS2515VPN	NXP	SMD 873-6090● RL	0.200	0.154	0.124	0.100
PBSS2515VS	NXP	SMD 873-6103● RL	0.270	0.200	0.160	0.129
PBSS3515VS	NXP	SMD 873-6146● RL	0.280	0.200	0.165	0.133
PBSS4350D	NXP	SMD 873-6316● RL	0.182	0.135	0.108	0.087
PBSS4140DPN	NXP	SMD 873-9900● RL	0.280	0.200	0.165	0.133
PBSS4240DPN	NXP	SMD 873-6235● RL	0.310	0.240	0.183	0.147
PEMT1	NXP	SMD 873-7320● RL	0.152	0.081	0.059	0.040
PEMX1	NXP	SMD 873-7339● RL	0.220	0.119	0.088	0.058
PEMZ1	NXP	SMD 873-7347● RL	0.240	0.123	0.091	0.060
PBSS2515YPN	NXP	SMD 873-6111● RL	0.280	0.200	0.165	0.133
PUMZ2	NXP	SMD 873-8602● RL	0.108	0.059	0.041	0.028
ZXTC2045E6	ZET	SMD 125-1230● RL	0.600	0.430	0.310	0.260

SOT-143 Current Mirror, Dual Transistors

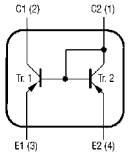
NXP founded by Philips Infineon technologies SMD



H = 1.0, W = 2.9, D = 2.6



Config. (a)



Config. (b)

V_{CEO} max. V	NPN/ PNP	I_C max. mA	f_T MHz	h_{FE} min.	@ I_C mA	$V_{CE(sat)}$ V	@ I_C mA	P_{tot} mW	Pin Config.	Mftr.	Mftrs. List No.
30	NPN	100	250	110	2	0.6	100	300	a	INF	BCV61C
30	Dual NPN	100	100	100	0.1	0.6	100	250	a	NXP	BCV61C
30	NPN	100	100	100	2	0.65	100	250	b	NXP	BCV62B
30	Dual PNP	100	250	125	2	0.65	100	300	b	NXP	BCV62C
30	PNP	100	250	125	2	0.65	100	300	b	INF	BCV62C

211062

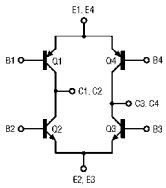
Order Multiple=5		Price Each			
Mftrs. List No.	Order Code	5+	100+	1K+	3K+
BCV61C (INF)	SMD 105-6514● RL	0.240	0.071	0.062	– –
BCV61C (PS)	SMD 873-4917● RL	0.270	0.140	0.104	0.067
BCV62B	SMD 108-1261● RL	0.380	0.137	0.112	0.086
BCV62C (PS)	SMD 873-4925● RL	0.270	0.140	0.104	0.067
BCV62C (INF)	SMD 105-6515● RL	0.370	0.280	0.210	0.102

RL Re-reeling available

Low Power Transistor Arrays - continued

SM-8 Quad Transistors





- H-Bridge configured, complimentary npn/pnp devices
- 8 Lead SOT-223
- Low on-state losses
- Low drive requirements

V_{CEO}	V_{CBO}	$I_{C(pk)}$	I_C	h_{FE} (min)		@ I_C	$V_{CE(sat)}$ max. (mV)		@ I_C	Mftrs.
V	V	A	A	npn	pnp	mA	npn	pnp	A	List No.
20	20	6	2.5	300	300	100	150	200	1	ZHB6718
40	50	6	2	500	300	100	500	450	1	ZHB6790

211301

Mftrs List No.	Order Code		Price Each 1+	25+	100+	1K+
ZHB6718	SMD	952-6811●	2.91	2.13	1.43	0.81
ZHB6790	SMD	118-2364●	2.90	2.17	1.45	0.91

Low Power Digital Transistors

Transistor, Digital

PNP

Voltage, Vceo V	ft, Typ MHz	Current, Ic cont max mA	Hfe min	Case Style	Mftrs. List No.
50	250	100	33	SOT-323	DTA113ZUAT106
50	250	100	30	SOT-346	DTA114EKAT146
50	250	100	30	SC-59	DTA114EKAT246
50	250	100	30	SC-72	DTA114ESATP
50	250	100	30	SC-70	DTA114EUAT106
50	250	10	30	SOT-346	DTA114GKAT146
50	250	10	100	SOT-346	DTA114TKAT146
50	250	100	68	SOT-346	DTA114YKAT146
50	250	100	68	SOT-323	DTA114YUAT106
50	250	100	82	SOT-346	DTA115EKAT146
50	250	100	82	SOT-323	DTA115EUAT106
50	250	100	20	SOT-346	DTA123EKAT146
50	250	100	20	SC-72	DTA123ESATP
50	250	100	20	SOT-323	DTA123EUAT106
50	250	100	80	SOT-416	DTA123JETL
50	250	100	80	SOT-346	DTA123JKAT146
50	250	100	80	SOT-323	DTA123JUAT106
50	250	100	33	SOT-346	DTA123YKAT146
50	250	100	33	SOT-323	DTA123YUAT106
50	250	100	56	SOT-416	DTA124EETL
50	250	100	56	SOT-346	DTA124EKAT146
50	250	100	56	SOT-323	DTA124EUAT106
50	250	100	30	SOT-346	DTA143EKAT146
50	250	100	30	SOT-323	DTA143EUAT106
50	250	100	30	SOT-416	DTA143XETL
50	250	100	30	SOT-346	DTA143XKAT146
50	250	100	30	SOT-323	DTA143XUAT106
50	250	100	80	SOT-416	DTA143ZETL
50	250	100	80	SOT-346	DTA143ZKAT146
50	250	100	80	SOT-323	DTA143ZUAT106
50	250	100	68	SOT-346	DTA144EKAT146
50	250	100	68	SOT-323	DTA144EUAT106
50	250	100	56	SOT-346	DTA144WKAT146
50	200	500	33	SOT-346	DTB113EKT146
50	200	500	56	SOT-346	DTB113ZKT146
50	200	500	56	SOT-346	DTB114EKT146
50	200	500	39	SOT-346	DTB123EKT146
40	200	50	100	SOT-346	DTB123TKT146
50	200	500	56	SOT-346	DTB123YKT146
50	200	500	47	SC-59	DTB143ECT216
50	200	500	47	SOT-346	DTB143EKT146
50	200	500	47	SC-72	DTB143ESTP

528153

Order Multiple = 10 Mftrs. List No.	Order Code		10+	100+	Price Each 250+	1K+	3K+
DTA113ZUAT106	SMD	168-0178●	0.420	0.210	0.140	0.069	0.058
DTA114EKAT146	SMD	168-0179●	0.240	0.128	0.082	0.047	0.035
DTA114EKAT246	SMD	168-0180●	0.240	0.128	0.082	0.047	0.035
DTA114ESATP		168-0181●	0.280	0.186	0.128	0.069	0.058
DTA114EUAT106	SMD	168-0182●	0.300	0.151	0.105	0.047	0.035
DTA114GKAT146	SMD	168-0184●	0.280	0.186	0.128	0.069	0.058
DTA114TKAT146	SMD	168-0185●	0.300	0.151	0.105	0.047	0.035
DTA114YKAT146	SMD	168-0186●	0.300	0.151	0.105	0.047	0.035
DTA114YUAT106	SMD	168-0187●	0.330	0.164	0.105	0.058	0.035
DTA115EKAT146	SMD	168-0188●	0.260	0.175	0.116	0.058	0.047
DTA115EUAT106	SMD	168-0189●	0.280	0.186	0.128	0.069	0.058
DTA123EKAT146	SMD	168-0190●	0.300	0.151	0.105	0.047	0.035
DTA123ESATP		168-0191●	0.290	0.140	0.093	0.047	0.035
DTA123EUAT106	SMD	168-0192●	0.360	0.186	0.116	0.058	0.047
DTA123JETL	SMD	168-0193●	0.360	0.186	0.116	0.058	0.047
DTA123JKAT146	SMD	168-0194●	0.300	0.151	0.105	0.047	0.035
DTA123JUAT106	SMD	168-0196●	0.360	0.186	0.116	0.058	0.047
DTA123YKAT146	SMD	168-0197●	0.300	0.151	0.105	0.047	0.035
DTA123YUAT106	SMD	168-0198●	0.360	0.186	0.116	0.058	0.047
DTA124EETL	SMD	168-0200●	0.360	0.186	0.116	0.058	0.047

Order Multiple = 10 Mftrs. List No.	Order Code		10+	100+	Price Each 250+	1K+	3K+
DTA124EKAT146	SMD	168-0202●	0.300	0.151	0.105	0.047	0.035
DTA124EUAT106	SMD	168-0203●	0.360	0.186	0.116	0.058	0.047
DTA143EKAT146	SMD	168-0204●	0.290	0.140	0.093	0.047	0.035
DTA143EUAT106	SMD	168-0205●	0.360	0.186	0.116	0.058	0.047
DTA143XETL	SMD	168-0206●	0.360	0.186	0.116	0.058	0.047
DTA143XKAT146	SMD	168-0207●	0.300	0.151	0.105	0.047	0.035
DTA143XUAT106	SMD	168-0208●	0.360	0.186	0.116	0.058	0.047
DTA143ZETL	SMD	168-0209●	0.360	0.186	0.116	0.058	0.047
DTA143ZKAT146	SMD	168-0210●	0.270	0.128	0.093	0.047	0.035
DTA143ZUAT106	SMD	168-0211●	0.360	0.186	0.116	0.058	0.047
DTA144EKAT146	SMD	168-0212●	0.300	0.151	0.105	0.047	0.035
DTA144EUAT106	SMD	168-0214●	0.360	0.186	0.116	0.058	0.047
DTA144WKAT146	SMD	168-0215●	0.260	0.175	0.116	0.058	0.047
DTB113EKT146	SMD	168-0217●	0.360	0.230	0.164	0.093	0.069
DTB113ZKT146	SMD	168-0218●	0.360	0.230	0.164	0.093	0.069
DTB114EKT146	SMD	168-0219●	0.370	0.198	0.140	0.105	0.082
DTB123EKT146	SMD	168-0220●	0.370	0.198	0.140	0.105	0.082
DTB123TKT146	SMD	168-0221●	0.350	0.230	0.164	0.093	0.069
DTB123YKT146	SMD	168-0223●	0.370	0.198	0.140	0.105	0.082
DTB143ECT216	SMD	168-0224●	0.370	0.260	0.175	0.093	0.069
DTB143EKT146	SMD	168-0226●	0.370	0.260	0.175	0.093	0.069
DTB143ESTP		168-0227●	0.350	0.186	0.128	0.105	0.082

Transistor, Digital

NPN

Voltage, Vceo V	ft, Typ MHz	Current, Ic cont max mA	Hfe min	Case Style	Mftrs. List No.
50	250	100	33	SOT-346	DTC113ZKAT146
50	250	100	33	SOT-323	DTC113ZUAT106
50	250	100	30	SOT-346	DTC114EKAT146
50	250	100	30	SC-72	DTC114ESATP
50	250	100	30	SOT-323	DTC114EUAT106
50	250	10	30	SOT-346	DTC114GKAT146
50	250	10	30	SOT-323	DTC114GUAT106
50	250	10	100	SOT-416	DTC114TETL
50	250	10	100	SOT-346	DTC114TKAT146
50	250	10	100	VMT3	DTC114TMT2L
50	250	10	100	SC-72	DTC114TSATP
50	250	10	100	SOT-323	DTC114TUAT106
50	250	100	68	SOT-416	DTC114YETL
50	250	100	68	SOT-346	DTC114YKAT146
50	250	100	68	SOT-323	DTC114YUAT106
50	250	100	82	SOT-416	DTC115EETL
50	250	100	82	SOT-346	DTC115EKAT146
50	250	1	100	SOT-346	DTC115TKAT146
50	250	100	20	SOT-323	DTC123EUAT106
50	250	100	80	SOT-416	DTC123JETL
50	250	100	80	SOT-346	DTC123JKAT146
50	250	100	80	SC-72	DTC123JSATP
50	250	100	80	SOT-323	DTC123JUAT106
50	250	100	33	SOT-346	DTC123YKAT146
50	250	100	33	SOT-323	DTC123YUAT106
50	250	100	56	SOT-416	DTC124EETL
50	250	100	56	SOT-346	DTC124EKAT146
50	250	100	56	SOT-346	DTC124EKAT246
50	250	100	56	SOT-323	DTC124EUAT106
50	250	5	100	SOT-346	DTC124TKAT146
50	250	100	68	SOT-416	DTC124XETL
50	250	100	68	SOT-346	DTC124XKAT146
50	250	100	68	SOT-323	DTC124XUAT106
50	250	100	30	SOT-416	DTC143EETL
50	250	100	30	SOT-346	DTC143EKAT146
50	250	100	30	SC-72	DTC143ESATP
50	250	100	30	SOT-323	DTC143EUAT106
50	250	5	100	SOT-416	DTC143TETL
50	250	5	100	SOT-346	DTC143TKAT146
50	250	5	100	VMT3	DTC143TMT2L
50	250	5	100	SOT-323	DTC143TUAT106
50	250	100	30	SOT-416	DTC143XETL
50	250	100	30	SOT-346	DTC143XKAT146
50	250	100	30	SOT-323	DTC143XUAT106
50	250	100	80	SOT-416	DTC143ZETL
50	250	100	80	SOT-346	DTC143ZKAT146
50	250	100	80	SOT-346	DTC143ZKAT246
50	250	100	80	VMT3	DTC143ZMT2L
50	250	100	80	SOT-323	DTC143ZUAT106
50	250	100	68	SOT-346	DTC144EKAT146
50	250	100	68	SOT-323	DTC144EUAT106
50	250	5	100	SOT-346	DTC144TKAT146
50	250	5	100	SOT-323	DTC144TUAT106
50	250	100	33	SOT-346	DTC144VKAT146
50	250	100	56	SOT-416	DTC144WETL
50	250	100	56	SOT-346	DTC144WKAT146
50	200	500	33	SOT-346	DTD113EKT146
50	200	500	82	SOT-346	DTD113ZKT146
50	200	500	56	SOT-346	DTD114EKT146
50	200	500	39	SOT-346	DTD123EKT146
40	200	50	100	SOT-346	DTD123TKT146
50	200	500	56	SOT-346	DTD123YKT146
50	200	500	47	SST3	DTD143ECT216
50	200	500	47	SOT-346	DTD143EKT146
50	80	500	300	SOT-89	DTDG14GPT100

528165

Order Multiple = 10 Mftrs. List No.	Order Code		10+	100+	Price Each 250+	1K+	3K+
DTC113ZKAT146	SMD	168-0228●	0.300	0.151	0.105	0.047	0.035
DTC113ZUAT106	SMD	168-0229●	0.420	0.210	0.140	0.069	0.058
DTC114EKAT146	SMD	168-0230●	0.290	0.140	0.093	0.047	0.035
DTC114ESATP		168-0231●	0.480	0.240	0.164	0.082	0.058

RL Re-reeling available

Order Multiple = 10				Price Each		
Mftrs. List No.	Order Code	10+	100+	250+	1K+	3K+
DTC114EUAT106	SMD 168-0232●	0.360	0.186	0.116	0.058	0.047
DTC114GKAT146	SMD 168-0233●	0.460	0.220	0.151	0.069	0.058
DTC114GUAT106	SMD 168-0234●	0.460	0.220	0.151	0.069	0.058
DTC114TETL	SMD 168-0235●	0.330	0.164	0.105	0.058	0.035
DTC114TKAT146	SMD 168-0236●	0.260	0.128	0.093	0.047	0.035
DTC114TMT2L	SMD 168-0238●	0.500	0.240	0.164	0.082	0.058
DTC114TSATP	168-0239●	0.280	0.186	0.128	0.069	0.058
DTC114TUAT106	SMD 168-0240●	0.300	0.151	0.105	0.047	0.035
DTC114YETL	SMD 168-0241●	0.360	0.186	0.116	0.058	0.047
DTC114YKAT146	SMD 168-0242●	0.300	0.151	0.105	0.047	0.035
DTC114YUAT106	SMD 168-0243●	0.360	0.186	0.116	0.058	0.047
DTC115EETL	SMD 168-0244●	0.360	0.186	0.116	0.058	0.047
DTC115EKAT146	SMD 168-0245●	0.300	0.151	0.105	0.047	0.035
DTC115TKAT146	SMD 168-0246●	0.260	0.175	0.116	0.058	0.047
DTC123EUAT106	SMD 168-0247●	0.280	0.186	0.128	0.069	0.058
DTC123JETL	SMD 168-0248●	0.360	0.186	0.116	0.058	0.047
DTC123JKAT146	SMD 168-0251●	0.290	0.140	0.093	0.047	0.035
DTC123JSATP	168-0252●	0.280	0.186	0.128	0.069	0.058
DTC123JUAT106	SMD 168-0253●	0.360	0.186	0.116	0.058	0.047
DTC123YKAT146	SMD 168-0254●	0.300	0.151	0.105	0.047	0.035
DTC123YUAT106	SMD 168-0255●	0.280	0.186	0.128	0.069	0.058
DTC124EETL	SMD 168-0256●	0.360	0.186	0.116	0.058	0.047
DTC124EKAT146	SMD 168-0257●	0.300	0.151	0.105	0.047	0.035
DTC124EKAT246	SMD 168-0258●	0.300	0.151	0.105	0.047	0.035
DTC124EUAT106	SMD 168-0259●	0.360	0.186	0.116	0.058	0.047
DTC124TKAT146	SMD 168-0260●	0.300	0.151	0.105	0.047	0.035
DTC124XETL	SMD 168-0261●	0.360	0.186	0.116	0.058	0.047
DTC124XKAT146	SMD 168-0263●	0.300	0.151	0.105	0.047	0.035
DTC124XUAT106	SMD 168-0264●	0.280	0.186	0.128	0.069	0.058
DTC143EETL	SMD 168-0265●	0.360	0.186	0.116	0.058	0.047
DTC143EKAT146	SMD 168-0266●	0.290	0.140	0.093	0.047	0.035
DTC143ESATP	168-0267●	0.280	0.186	0.128	0.069	0.058
DTC143EUAT106	SMD 168-0268●	0.330	0.164	0.105	0.058	0.035
DTC143TETL	SMD 168-0269●	0.360	0.186	0.116	0.058	0.047
DTC143TKAT146	SMD 168-0270●	0.290	0.140	0.093	0.047	0.035
DTC143TMT2L	SMD 168-0272●	0.490	0.240	0.164	0.082	0.058
DTC143TUAT106	SMD 168-0273●	0.360	0.186	0.116	0.058	0.047
DTC143XETL	SMD 168-0275●	0.360	0.186	0.116	0.058	0.047
DTC143XKAT146	SMD 168-0276●	0.300	0.151	0.105	0.047	0.035
DTC143XUAT106	SMD 168-0277●	0.360	0.186	0.116	0.058	0.047
DTC143ZETL	SMD 168-0278●	0.360	0.186	0.116	0.058	0.047
DTC143ZKAT146	SMD 168-0279●	0.300	0.151	0.105	0.047	0.035
DTC143ZKAT246	SMD 168-0280●	0.300	0.151	0.105	0.047	0.035
DTC143ZMT2L	SMD 168-0281●	0.360	0.186	0.116	0.058	0.047
DTC143ZUAT106	SMD 168-0282●	0.360	0.186	0.116	0.058	0.047
DTC144EKAT146	SMD 168-0283●	0.300	0.151	0.105	0.047	0.035
DTC144EUAT106	SMD 168-0284●	0.360	0.186	0.116	0.058	0.047
DTC144TKAT146	SMD 168-0285●	0.300	0.151	0.105	0.047	0.035
DTC144TUAT106	SMD 168-0289●	0.280	0.186	0.128	0.069	0.058
DTC144VKAT146	SMD 168-0290●	0.260	0.175	0.116	0.058	0.047
DTC144WETL	SMD 168-0291●	0.320	0.210	0.140	0.082	0.058
DTC144WKAT146	SMD 168-0292●	0.260	0.175	0.116	0.058	0.047
DTD113EKT146	SMD 168-0294●	0.360	0.230	0.164	0.093	0.069
DTD113ZKT146	SMD 168-0295●	0.300	0.210	0.140	0.082	0.058
DTD114EKT146	SMD 168-0296●	0.370	0.198	0.140	0.105	0.082
DTD123EKT146	SMD 168-0297●	0.370	0.198	0.140	0.105	0.082
DTD123TKT146	SMD 168-0299●	0.430	0.240	0.175	0.128	0.105
DTD123YKT146	SMD 168-0300●	0.370	0.198	0.140	0.105	0.082
DTD143ECT216	SMD 168-0301●	0.280	0.186	0.128	0.069	0.058
DTD143EKT146	SMD 168-0302●	0.430	0.240	0.175	0.128	0.105
DTDG14GPT100	SMD 168-0303●	0.410	0.230	0.164	0.116	0.093

Transistor, Digital

SOT-523F



New

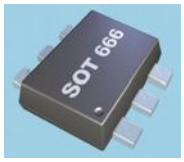
Current, Ic continuous max. 100mA
Power Dissipation 200mW
Voltage, $V_{CE(sat)}$ max 0.3V

	ft typ. MHz	hfe min. A	Vcbo V	Vceo V	$V_{I(ON)}$ V	Mftrs List No.
NPN Channel						
	250	22	50	50	3	FJY3001R
	250	30	50	50	3	FJY3002R
	250	30	50	50	2.5	FJY3005R
	250	33	50	50	3	FJY3015R
	250	56	50	50	4	FJY3008R
	250	56	50	50	3	FJY3004R
	250	56	50	50	3	FJY3003R
	250	56	50	50	1.1	FJY3013R
	250	68	50	50	2.5	FJY3007R
	250	68	50	50	1.4	FJY3006R
	250	68	50	50	1.3	FJY3014R
	250	100	40	40	—	FJY3010R
	250	100	40	40	—	FJY3009R
	250	100	40	40	—	FJY3011R
	250	100	40	40	—	FJY3012R
PNP Channel						
	200	20	50	50	3	FJY4001R
	200	30	50	50	3	FJY4002R
	200	30	50	50	3	FJY4003R
	200	30	50	50	2.5	FJY4004R
	200	30	50	50	2.5	FJY4005R
	200	68	50	50	1.4	FJY4006R
	200	68	50	50	2.5	FJY4007R
	200	68	50	50	1.1	FJY4013R
	200	68	50	50	1.3	FJY4014R
	200	100	40	40	—	FJY4009R
	200	100	40	40	—	FJY4010R
	200	100	40	40	—	FJY4011R
	200	100	40	40	—	FJY4012R

506970

Order Multiple=5			Price Each			
Mftrs. List No.	Order Code	5+	25+	100+	250+	500+
FJY3001R	SMD 157-1070●	0.115	0.087	0.062	0.040	0.030
FJY3002R	SMD 157-1069●	0.115	0.087	0.062	0.040	0.030
FJY3005R	SMD 157-1081●	0.115	0.087	0.062	0.040	0.030
FJY3015R	SMD 157-1083●	0.115	0.087	0.062	0.040	0.030
FJY3008R	SMD 157-1076●	0.115	0.087	0.062	0.040	0.030
FJY3004R	SMD 157-1082●	0.115	0.087	0.062	0.040	0.030
FJY3003R	SMD 157-1085●	0.115	0.087	0.062	0.040	0.030
FJY3013R	SMD 157-1071●	0.115	0.087	0.062	0.040	0.030
FJY3007R	SMD 157-1073●	0.115	0.087	0.062	0.040	0.030
FJY3006R	SMD 157-1074●	0.115	0.087	0.062	0.040	0.030
FJY3014R	SMD 157-1075●	0.115	0.087	0.062	0.040	0.030
FJY3010R	SMD 157-1077●	0.115	0.087	0.062	0.040	0.030
FJY3009R	SMD 157-1078●	0.115	0.087	0.062	0.040	0.030
FJY3011R	SMD 157-1079●	0.115	0.087	0.062	0.040	0.030
FJY3012R	SMD 157-1080●	0.115	0.087	0.062	0.040	0.030
FJY4001R	SMD 157-1086●	0.115	0.087	0.062	0.040	0.030
FJY4002R	SMD 157-1087●	0.115	0.087	0.062	0.040	0.030
FJY4003R	SMD 157-1088●	0.115	0.087	0.062	0.040	0.030
FJY4004R	SMD 157-1089●	0.115	0.087	0.062	0.040	0.030
FJY4005R	SMD 157-1090●	0.115	0.087	0.062	0.040	0.030
FJY4006R	SMD 157-1091●	0.115	0.087	0.062	0.040	0.030
FJY4007R	SMD 157-1092●	0.115	0.087	0.062	0.040	0.030
FJY4008R	SMD 157-1093●	0.115	0.087	0.062	0.040	0.030
FJY4013R	SMD 157-1099●	0.115	0.087	0.062	0.040	0.030
FJY4014R	SMD 157-1100●	0.115	0.087	0.062	0.040	0.030
FJY4009R	SMD 157-1094●	0.115	0.087	0.062	0.040	0.030
FJY4010R	SMD 157-1095●	0.115	0.087	0.062	0.040	0.030
FJY4011R	SMD 157-1097●	0.115	0.087	0.062	0.040	0.030
FJY4012R	SMD 157-1098●	0.115	0.087	0.062	0.040	0.030

Resistor-Equipped Transistors (RET's)





SOT-363



SOT-23/SC-59



SOT-223

- Small signal devices integrating up to two bias resistors with a transistor on a single die
- Cost effective solution for next-generation consumer products
- Avaiable in SOT-23 (Ptot 250 mW), SOT-323 (Ptot 200 mW), SOT-363 and SOT-666 packages

V_{CEO} = 50V, I_O = 100mA

		SOT-23		SOT-323	
	Ptot	250 mW		200 mW	
R1: Series Base Resistor, R2: Parallel Base Emitter Resistor					
R1 (kΩ)	**R2 (kΩ)**	**NPN**	**PNP**	**NPN**	**PNP**
1	10	BCR523	—	—	—
2.2	2.2	PDTC123ET	PDTA123ET	PDTC123EU	———
2.2	47	PDTC123JT	PDTA123JT	PDTC143EU	—
4.7	4.7	—	PDTA143ET	—	—
4.7	10	PDTC143XT	PDTA143XT	PDTC143XU	—
4.7	47	PDTC143ZT	PDTA143ZT	PDTC143ZU	—
4.7	47	—	—	—	PDTA143ZU
10	10	—	—	PDTC114EU	PDTA114EU
10	47	PDTC114YT	PDTA114YT	PDTC114YU	—
22	22	PDTC124ET	PDTA124ET	PDTC124EU	PDTA124EU
22	47	PDTC124XT	PDTA124XT	PDTC124XU	—
47	22	—	PDTA144WT	PDTC144WU	—
47	47	MMUN2213LT1G	PDTA144ET	—	—
100	100	PDTC115ET	PDTA115ET	———	———
Series Base Resistor Only					
R1 (kΩ)		**NPN**	**PNP**	**NPN**	**PNP**
4.7	—	PDTC143TT	PDTA143TT	—	—
10	—	—	PDTA114TT	PDTC114TU	
22	—	PDTC124TT	———	—	—
	Ptot	Dual Transistors 300 mW			
Integrated Resistors, R1/R2				**SOT-666**	**SOT-363**
R1 (kΩ)	**R2 (kΩ)**	**V_{ceo}**	**I_c, mA**	**Mftrs. List No.**	**Mftrs. List No.**
22	22	15	500	—	PBLS1504Y
22	22	50	100	—	PUMD2
47	47	50	100	PUMB2	PUMD3
4.7	—	50	100	PUMB3	PUMD4
10	—	50	100	—	PUMD6
10	47	50	100	—	PUMD9
2.7	47	50	100	PUMB10	PUMD10
10	10	50	100	PUMB11	PUMD12
4.7	47	50	100	—	PUMD13
4.7	4.7	50	100	—	PUMD15

RL Re-reeling available

Low Power Digital Transistors - continued

Resistor-Equipped Transistors (RET's) - continued

V_{CEO} = 50V, I_O = 100mA - continued

Integrated Resistors, R1/R2				Ptot	Dual Transistors 300 mW	
				SOT-666	SOT-363	
R1 (kΩ)	R2 (kΩ)	V_{ceo}	I_c, mA	Mftrs. List No.	Mftrs. List No.	
22	47	50	100	——	PUMD16	
47	47	50	100	—	PUMD48	
22	22	50	100	—	PUMH1	
47	47	50	100	—	PUMH2	
10	—	50	100	—	PUMH4	
4.7	—	50	100	—	PUMH7	
2.2	47	50	100	—	PUMH10	
10	10	50	100	—	PUMH11	
4.7	47	50	100	—	PUMH13	
22	47	50	100	—	PUMH16	

V_{CEO} = 50V, I_O = 500mA

R1: Series Base Resistor, R2: Parallel Base Emitter Resistor				Ptot	SOT-23 250 mW
R1 (kΩ)	R2 (kΩ)	NPN	PNP		
1	10	—	PDTB113ZT		
2.2	2.2	—	PDTB123ET		
2.2	10	PDTD123YT	PDTB123YT		
Series Base Resistor Only					
R1 (kΩ)		NPN	PNP		
2.2		PDTD123TT	—		

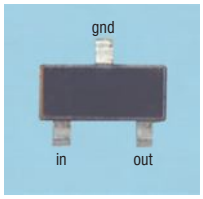
V_{CEO} = 40V, I_O = 80mA

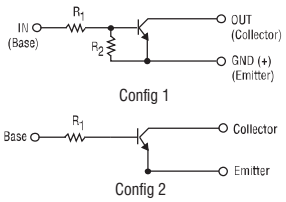
211343

Mftrs List No.	Order Code	10+	100+	Price Each 250+	1K+	3K+
SOT-23, NPN						
PDTC114YT	SMD 873-7061● RL	0.057	0.024	0.016	0.013	0.011
PDTC115ET	SMD 873-7088● RL	0.055	0.023	0.016	0.013	0.011
PDTC123ET	SMD 873-7126● RL	0.057	0.024	0.016	0.013	0.011
PDTC123JT	SMD 873-7142● RL	0.057	0.024	0.016	0.013	0.012
PDTC124ET	SMD 873-7169● RL	0.057	0.024	0.016	0.013	0.011
PDTC124TT	SMD 873-7185● RL	0.057	0.024	0.016	0.013	0.011
PDTC124XT	SMD 873-7207● RL	0.055	0.023	0.016	0.013	0.011
PDTC143TT	SMD 873-7231● RL	0.055	0.023	0.016	0.013	0.011
PDTC143XT	SMD 873-7258● RL	0.057	0.024	0.016	0.013	0.011
PDTC143ZT	SMD 873-7274● RL	0.057	0.024	0.016	0.013	0.011
PDTD123YT	SMD 151-0760●	0.066	0.054	0.046	0.041	0.037
PDTD123TT	SMD 151-0759●	0.066	0.054	0.046	0.041	0.037
BCR523	SMD 115-6452● RL	0.161	0.116	0.090	0.050	0.049
MMUN2213LT1G	SMD 955-6664● RL	0.072	0.041	0.034	0.017	– –
SOT-23, PNP						
PDTA114TT	SMD 873-6723● RL	0.055	0.023	0.016	0.013	0.011
PDTA114YT	SMD 873-6740● RL	0.055	0.023	0.016	0.013	0.011
PDTA115ET	SMD 873-6774● RL	0.048	0.020	0.016	0.012	0.010
PDTA123ET	SMD 873-6812● RL	0.055	0.023	0.016	0.013	0.011
PDTA123JT	SMD 873-6839● RL	0.057	0.024	0.016	0.013	0.011
PDTA124ET	SMD 873-6855● RL	0.057	0.024	0.016	0.013	0.011
PDTA124XT	SMD 873-6898● RL	0.057	0.024	0.016	0.013	0.011
PDTA143ET	SMD 873-6910● RL	0.057	0.024	0.016	0.013	0.011
PDTA143TT	SMD 873-6928● RL	0.055	0.023	0.016	0.013	0.011
PDTA143XT	SMD 873-6944● RL	0.055	0.023	0.016	0.013	0.011
PDTA143ZT	SMD 873-6960● RL	0.057	0.024	0.016	0.013	0.011
PDTA144ET	SMD 873-6987● RL	0.050	0.021	0.016	0.012	0.010
PDTA144WT	SMD 873-7029● RL	0.055	0.023	0.016	0.013	0.011
PDTB113ZT	SMD 151-0751●	0.066	0.054	0.046	0.041	0.037
PDTB123ET	SMD 151-0752●	0.066	0.054	0.046	0.041	0.037
PDTB123YT	SMD 151-0754●	0.066	0.054	0.046	0.041	0.037
SOT-323, NPN						
PDTC114EU	SMD 873-7045● RL	0.059	0.026	0.018	0.014	0.012
PDTC114TU	SMD 873-7053● RL	0.059	0.026	0.018	0.014	0.012
PDTC123EU	SMD 873-7134● RL	0.044	0.018	0.013	0.010	0.009
PDTC124EU	SMD 873-7177● RL	0.055	0.023	0.016	0.013	0.011
PDTC143EU	SMD 873-7223● RL	0.059	0.026	0.018	0.014	0.012
PDTC144WU	SMD 873-7304● RL	0.059	0.026	0.018	0.014	0.012
PDTC143XU	SMD 873-7266● RL	0.055	0.023	0.016	0.013	0.011
PDTC143ZU	SMD 873-7282● RL	0.055	0.023	0.016	0.013	0.011
PDTC114YU	SMD 873-7070● RL	0.055	0.023	0.016	0.013	0.011
PDTC124XU	SMD 873-7215● RL	0.047	0.019	0.015	0.011	0.010
SOT-323, PNP						
PDTA114EU	SMD 873-6715● RL	0.055	0.023	0.016	0.013	0.011
PDTA124EU	SMD 873-6863● RL	0.055	0.023	0.016	0.013	0.011
PDTA143ZU	SMD 873-6979● RL	0.055	0.023	0.016	0.013	0.011
SOT-363						
PBLS1504Y	SMD 873-5972● RL	0.280	0.143	0.103	0.069	– –
PUMB2	SMD 873-8254● RL	0.102	0.045	0.035	0.029	0.024
PUMB3	SMD 873-8270● RL	0.082	0.036	0.028	0.022	0.019
PUMB10	SMD 873-8181● RL	0.102	0.045	0.035	0.029	0.024
PUMB11	SMD 873-8190● RL	0.099	0.044	0.034	0.028	0.023
PUMD2	SMD 873-8360● RL	0.102	0.045	0.035	0.029	0.024
PUMD3	SMD 873-8378● RL	0.102	0.045	0.035	0.029	0.024
PUMD4	SMD 873-8386● RL	0.102	0.045	0.035	0.029	0.024
PUMD6	SMD 873-8408● RL	0.076	0.034	0.027	0.021	0.018
PUMD9	SMD 873-8416● RL	0.102	0.045	0.035	0.029	0.024
PUMD10	SMD 873-8300● RL	0.102	0.045	0.035	0.029	0.024
PUMD12	SMD 873-8319● RL	0.099	0.044	0.034	0.028	0.023
PUMD13	SMD 873-8327● RL	0.102	0.045	0.035	0.029	0.024
PUMD15	SMD 873-8335● RL	0.102	0.045	0.035	0.029	0.024
PUMD16	SMD 873-8343● RL	0.102	0.045	0.035	0.029	0.024
PUMD48	SMD 873-8394● RL	0.102	0.045	0.035	0.029	0.024
PUMH1	SMD 873-8440● RL	0.102	0.045	0.035	0.029	0.024
PUMH2	SMD 873-8548● RL	0.099	0.044	0.034	0.028	0.023
PUMH4	SMD 873-8572● RL	0.102	0.045	0.035	0.029	0.024
PUMH7	SMD 873-8580● RL	0.102	0.045	0.035	0.029	0.024
PUMH10	SMD 873-8459● RL	0.102	0.045	0.035	0.029	0.024
PUMH11	SMD 873-8467● RL	0.102	0.045	0.035	0.029	0.024
PUMH13	SMD 873-8475● RL	0.092	0.041	0.032	0.026	0.022
PUMH16	SMD 873-8505● RL	0.102	0.045	0.035	0.029	0.024

SOT-23 Digital Transistors

ON Semiconductor





V_{CEO} min. V	I_C max. mA	h_{FE} min.	@ I_C mA	Config.	R1 kΩ	R2 kΩ	Mftrs. List No. NPN	PNP
50	100	35	5	1	10	10	MMUN2211LT1G	MMUN2111LT1G
50	100	60	5	1	22	22	MMUN2212LT1G	—
50	100	80	5	1	47	47	MMUN2213LT1G	—
50	100	80	5	1	10	47	MMUN2214LT1G	—
50	100	160	5	2	10	—	MMUN2215LT1G	MMUN2115LT1G
50	100	160	5	2	4.7	—	MMUN2216LT1G	—

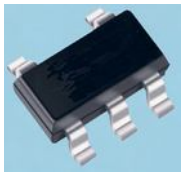
222099

Order Multiple=10 Mftrs. List No.	I.D.	Order Code	10+	Price Each 100+	1K+	3K+
MMUN2211LT1G	A8A	SMD 955-6648● RL	0.086	0.050	0.039	0.020
MMUN2212LT1G	A8B	SMD 955-6656● RL	0.072	0.041	0.034	0.017
MMUN2213LT1G	A8C	SMD 955-6664● RL	0.072	0.041	0.034	0.017
MMUN2214LT1G	A8D	SMD 955-6672● RL	0.068	0.040	0.031	0.017
MMUN2215LT1G	A8E	SMD 955-6680● RL	0.068	0.040	0.031	0.017
MMUN2216LT1G	A8F	SMD 955-6699● RL	0.050	0.029	0.023	0.011
MMUN2111LT1G	A6A	SMD 955-6702● RL	0.086	0.050	0.039	0.020
MMUN2115LT1G	A6E	SMD 955-6710● RL	0.043	0.022	0.016	0.012

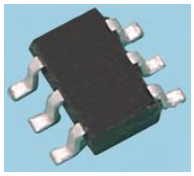
Transistor, Dual

SMD ROHM SEMICONDUCTOR

New



SOT-353



SOT-363

Voltage, Vceo V	ft, Typ MHz	Current, Ic cont max mA	Hfe min	Case Style	Mftrs. List No.
NPN / PNP					
50	250	100	68	SOT-363	UMD12NTR
50	250	100	30	SOT-363	UMD3NTR
50	250	5	100	SOT-363	UMD6NTR
50	250	100	68	SOT-363	UMD9NTR
50	180	50	120	SOT-353	UMY1NTR
50	180	50	120	SOT-363	UMZ1NTR
Dual PNP					
50	250	10	100	SOT-353	UMA4NTR
50	250	100	80	SOT-353	UMA5NTR
50	250	100	30	SOT-353	UMA9NTR
50	250	100	80	SOT-363	UMB10NTN
50	250	100	30	SOT-363	UMB11NTN
50	250	100	68	SOT-363	UMB2NTN
50	250	5	100	SOT-363	UMB3NTN
50	140	50	120	SOT-363	UMT2NTR
Dual NPN					
50	250	100	68	SOT-353	UMG2NTR
50	250	100	30	SOT-353	UMG9NTR
50	250	100	30	SOT-363	UMH11NTN
50	250	100	56	SOT-363	UMH1NTN
50	250	100	68	SOT-363	UMH2NTN
50	250	5	100	SOT-363	UMH3NTN
50	250	10	100	SOT-363	UMH4NTN
50	250	100	68	SOT-363	UMH6NTR
50	250	100	68	SOT-363	UMH9NTN
50	180	50	120	SOT-363	UMX1NTN
50	180	50	120	SOT-363	UMX2NTR
50	180	50	120	SOT-363	UMX3NTR
11	3.2	10	56	SOT-363	UMX5NTR

528231

Order Multiple = 10 Mftrs. List No.	Order Code	10+	100+	Price Each 250+	1K+	3K+
NPN / PNP						
UMD12NTR	SMC 168-0393●	0.330	0.220	0.151	0.082	0.069
UMD3NTR	SMC 168-0395●	0.280	0.186	0.128	0.069	0.058
UMD6NTR	SMC 168-0396●	0.330	0.220	0.151	0.082	0.069
UMD9NTR	SMC 168-0397●	0.330	0.220	0.151	0.082	0.069
UMY1NTR	SMC 168-0414●	0.490	0.240	0.164	0.082	0.058

RL Re-reeling available

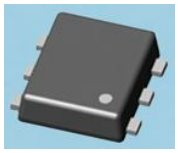
Farnell

Order Multiple = 10				Price Each		
Mftrs. List No.	Order Code	10+	100+	250+	1K+	3K+
UMZ1NTR	SMD 168-0415●	0.490	0.240	0.164	0.082	0.058
Dual PNP						
UMA5NTR	SMD 168-0384●	0.330	0.220	0.151	0.082	0.069
UMA9NTR	SMD 168-0385●	0.330	0.220	0.151	0.082	0.069
UMB10NTN	SMD 168-0386●	0.330	0.220	0.151	0.082	0.069
UMB11NTN	SMD 168-0387●	0.330	0.220	0.151	0.082	0.069
UMB2NTN	SMD 168-0391●	0.330	0.220	0.151	0.082	0.069
UMB3NTN	SMD 168-0392●	0.330	0.220	0.151	0.082	0.069
UMT2NTR	SMD 168-0409●	0.280	0.186	0.128	0.069	0.058
Dual NPN						
EMX2T2R	SMD 168-0315●	0.400	0.260	0.175	0.093	0.082
UMG2NTR	SMD 168-0398●	0.330	0.220	0.151	0.082	0.069
UMG9NTR	SMD 168-0400●	0.330	0.220	0.151	0.082	0.069
UMH11NTN	SMD 168-0401●	0.330	0.220	0.151	0.082	0.069
UMH1NTN	SMD 168-0402●	0.330	0.220	0.151	0.082	0.069
UMH2NTN	SMD 168-0403●	0.330	0.220	0.151	0.082	0.069
UMH3NTN	SMD 168-0404●	0.330	0.220	0.151	0.082	0.069
UMH4NTN	SMD 168-0405●	0.330	0.220	0.151	0.082	0.069
UMH6NTR	SMD 168-0406●	0.330	0.220	0.151	0.082	0.069
UMH9NTR	SMD 168-0408●	0.330	0.220	0.151	0.082	0.069
UMX1NTN	SMD 168-0410●	0.280	0.186	0.128	0.069	0.058
UMX2NTR	SMD 168-0411●	0.280	0.186	0.128	0.069	0.058
UMX3NTR	SMD 168-0412●	0.420	0.210	0.140	0.069	0.058
UMX5NTR	SMD 168-0413●	0.370	0.210	0.151	0.116	0.093

Transistor, Dual Digital

EMT6

SMD New ROHM



Voltage, Vceo V	ft, Typ MHz	Current, Ic cont max mA	Hfe min	Mftrs. List No.
NPN / PNP				
50	250	100	68	EMD12T2R
50	250	100	80	EMD22T2R
50	250	100	30	EMD3T2R
50	250	100	68	EMD9T2R
Dual PNP				
50	140	50	120	EMT1T2R
50	140	50	120	EMT2T2R
Dual NPN				
50	180	50	120	EMX1T2R
50	250	100	68	EMH2T2R

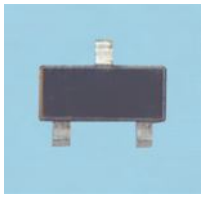
528174

Order Multiple = 10				Price Each		
Mftrs. List No.	Order Code	10+	100+	250+	1K+	3K+
EMD12T2R	SMD 168-0306●	0.400	0.260	0.175	0.093	0.082
EMD22T2R	SMD 168-0307●	0.360	0.198	0.140	0.105	0.082
EMD3T2R	SMD 168-0309●	0.400	0.260	0.175	0.093	0.082
EMD9T2R	SMD 168-0310●	0.400	0.260	0.175	0.093	0.082
EMH2T2R	SMD 168-0311●	0.400	0.260	0.175	0.093	0.082
EMT1T2R	SMD 168-0312●	0.400	0.260	0.175	0.093	0.082
EMT2T2R	SMD 168-0313●	0.400	0.260	0.175	0.093	0.082
EMX1T2R	SMD 168-0314●	0.400	0.260	0.175	0.093	0.082

Medium Power Bipolar Transistors (P_{tot} 1W to 3W)

SOT-23

ZETEX SEMICONDUCTORS SMD



Advanced process capability and package design have been used to maximize the power handling of this small outline transistor.

H=1.12, W=3.05, D=2.5

V_{CEO} V	I_C A	h_{FE} min.	@	I_C A	P_D* W	NPN	PNP
6	5	200		500	1.25	ZXTN23015CFH	ZXTP23015CFH
20	4.5	300		10	1.25	ZXTN25020DFH	—
40	3	300		10	1.25	—	ZXTP25040DFH
40	1	300		100	0.35	—	ZXTP2041F
50	5	190		10	1	ZXTN2031FTA	—
50	4	300		10	1.25	ZXTN25050DFH	—
60	5	100		10	1	ZXTN2018FTA	—
60	3.5	100		10	1.25	ZXTN25060BFH	ZXTP25060BFH
60	1	100		500	350	ZXTN2038F	—
60	1	100		500	0.35	—	ZXTP2039F
100	4	100		10	1.2	ZXTN2020FTA	—
100	3	100		10	1	—	ZXTP2029FTA
100	3	300		1	1.25	ZXTN2040F	—
100	2	100		10	1.25	ZXTN25100BFH	ZXTP25100BFH
140	2.5	100		1000	1.25	—	ZXTP23140BFH
140	1	100		10	1.25	—	ZXTP25140BFH

* NOTE: P_D value is obtained when mounted on 18 mm x 18 mm x 1.6 mm FR4 PCB with a very high coverage of 2 oz weight copper in still air conditions

Order Multiple=5				Price Each		
Mftrs. List No.	Order Code	5+	25+	100+	500+	1K+
ZXTN2018FTA	SMD 108-4419● RL	0.550	0.490	0.450	0.370	0.290
ZXTN2020FTA	SMD 108-4420● RL	0.440	0.380	0.350	0.280	0.240
ZXTP2029FTA	SMD 108-4425● RL	0.480	0.410	0.380	0.310	0.260
ZXTN2031FTA	SMD 108-4421● RL	0.550	0.490	0.450	0.370	0.290
Order Multiple=1		1+	25+	100+	500+	1K+
ZXTN2038F	SMD 125-1226● RL	0.240	0.178	0.117	0.101	0.078
ZXTN2040F	SMD 125-1227● RL	0.270	0.195	0.127	0.111	0.085
ZXTN23015CFH	SMD 125-1215● RL	0.630	0.480	0.320	0.280	0.220
ZXTN25020DFH	SMD 125-1214● RL	0.570	0.410	0.280	0.240	0.183
ZXTN25050DFH	SMD 125-1220● RL	0.460	0.330	0.220	0.191	0.146
ZXTN25060BFH	SMD 125-1219● RL	0.560	0.410	0.280	0.240	0.183
ZXTN25100BFH	SMD 125-1218● RL	0.460	0.340	0.230	0.199	0.150
ZXTP2039F	SMD 125-1228● RL	0.240	0.176	0.117	0.101	0.078
ZXTP2041F	SMD 125-1229● RL	0.182	0.134	0.088	0.077	0.059
ZXTP23015CFH	SMD 125-1217● RL	0.590	0.450	0.290	0.260	0.199
ZXTP23140BFH	SMD 125-1221● RL	0.630	0.480	0.320	0.280	0.220
ZXTP25040DFH	SMD 125-1216● RL	0.630	0.460	0.320	0.280	0.200
ZXTP25060BFH	SMD 125-1225● RL	0.570	0.410	0.280	0.240	0.183
ZXTP25100BFH	SMD 125-1224● RL	0.440	0.320	0.210	0.179	0.138
ZXTP25140BFH	SMD 125-1222● RL	0.460	0.340	0.230	0.199	0.150

419450

Reel of 3000		Price Per Reel
Mftrs. List No.	Order Code	1+
ZXTN2018FTA	NEW SMD 156-2450●	745.81

SOT-89

ZETEX SEMICONDUCTORS ST NXP SMD



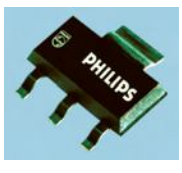
V_{CEO} V	I_C mA	h_{FE} @ min.	I_C mA	P_{tot} mW	f_T typ. MHz	Mftrs. List No.	V_{CEO} V	I_C mA	h_{FE} @ min.	I_C mA	P_{tot} mW	f_T typ. MHz	Mftrs. List No.
NPN							**PNP**						
20	1A	160	0.5	1W	100*	BCX6825TA	20	1000	50	5	500	—	BC869
30	3000	30	3000	1400	50	STF724	20	1A	160	500	1W	—	BCX6925TA
40	1A	200	1	1W	—	FCX491ATA							
45	1000	63	150	500	180	BCX54	30	3A	80	1A	1.4W	—	STF826
							30	3A	80	1000	1.4W	—	STN826
60	1000	63	150	500	180	BCX55							
60	1000	100	150	500	180	BCX55-16	45	1000	40	500	0.5	50	BCX51
60	3A	160	1A	1.4W	—	2STF1360	-45	-1000	100	150	1300	50	BCX51-16
75	3000	300	500	2000	140	FCX1053A	60	1000	100	150	1350	50	BCX52-16
80	1A	100	0.15	1W	—	BCX5616TA	80	1.5	140	1A	1.4W	—	STF817A
80	1A	50	0.5	1W	—	BSR43TA	80	1000	63	150	1350	50	BCX53-10
80	1000	63	150	500	180	BCX56	80	1000	100	150	1300	50	BCX53-16
80	1000	100	150	500	180	BCX56-16	80	1A	100	150	1W	—	BCX5316TA
							80	1A	50	500	1W	—	BSR33TA
350	0.5A	40	20	1W	—	BST39TA							

211409

Order Multiple=10				Price Each			
List No.	Mftr	Order Code	10+	100+	1K+	3K+
BC869	NXP	SMD 108-1250● RL	0.540	0.270	0.200	0.133
Order Multiple=5			5+	25+	100+	250+
BCX51	NXP	SMD 108-1273● RL	0.440	0.200	0.152	0.103
BCX51-16	NXP	SMD 108-1274● RL	0.125	0.098	0.082	0.074
BCX52-16	NXP	SMD 873-4933● RL	0.330	0.171	0.125	0.082
BCX53-10	NXP	SMD 873-4941● RL	0.320	0.166	0.121	0.080
BCX53-16	NXP	SMD 108-1276● RL	0.360	0.200	0.152	0.111
BCX54	NXP	SMD 108-1277● RL	0.440	0.220	0.168	0.103
BCX55	NXP	SMD 108-1278● RL	0.410	0.200	0.155	0.096
BCX55-16	NXP	SMD 108-1279● RL	0.125	0.098	0.082	0.074
BCX56	NXP	SMD 108-1280● RL	0.410	0.200	0.155	0.096
BCX56-16	NXP	SMD 108-1281● RL	0.410	0.200	0.155	0.096
FCX1053A	ZET	SMD 952-6013● RL	0.550	0.430	0.320	0.240
BCX6925TA	ZET	SMD 147-1212●	0.240	0.167	0.141	0.137
BST39TA	ZET	SMD 147-1213●	0.350	0.250	0.157	0.122
BCX5316TA	ZET	SMD 147-1214●	0.210	0.145	0.123	0.119
BSR33TA	ZET	SMD 147-1215●	0.350	0.250	0.174	0.151
BCX6825TA	ZET	SMD 147-1207●	0.340	0.230	0.163	0.136
FCX491ATA	ZET	SMD 147-1208●	0.460	0.320	0.210	0.160
BCX5616TA	ZET	SMD 147-1209●	0.280	0.200	0.127	0.099
BSR43TA	ZET	SMD 147-1210●	0.350	0.250	0.174	0.151
Order Multiple=1			1+	25+	100+	250+
2STF1360	ST	SMD 129-7996● RL	0.380	0.260	0.180	0.132
STF724	ST	SMD 108-4467● RL	0.260	0.186	0.140	0.116
STF817A	ST	SMD 108-4559● RL	0.420	0.350	0.240	0.184

SOT-223

NXP SMD



SOT-223

RL Re-reeling available

Medium Power Bipolar Transistors (P_{tot} 1W to 3W) - continued

SOT-223 - continued

V_{CEO} V	V_{CBO} V	$I_{C\ av.}$ A	h_{FE} min.	@ I_C A	P_{tot} W	Package	Mftrs. List No. NPN	PNP
20	32	1	85	0.5	1.37	SOT-223	BCP68	BCP69
20	32	1	100	0.5	1.37	SOT-223	—	BCP69-16
20	32	1	160	0.5	1.37	SOT-223	BCP68-25	BCP69-25
40	40	5	250	0.5	2	SOT-223	PBSS4540Z	PBSS5540Z
45	45	1	63	150	1.2	SOT-223	BCP54	BCP51
45	45	1	100	0.015	1.37	SOT-223	BCP54-10	—
80	45	1	63	150	1.3	SOT-223	BCP54-16	BCP51-16
50	60	—	200	0.5	2	SOT-223	PBSS4350Z	PBSS5350Z
60	60	1	63	0.015	1.37	SOT-223	BCP55-10	—
60	60	1	100	0.015	1.37	SOT-223	BCP55-16	BCP52-16
80	100	1	63	150	0.65	SOT-223	BCP56	BCP53
80	100	1	63	0.015	1.37	SOT-223	BCP56-10	BCP53-10
80	100	1	63	150	0.65	SOT-223	BCP56-16	BCP53-16
100	120	—	80	1	2	SOT-223	PBSS8110Z	—
100	120	—	125	1	2	SOT-223	—	PBSS9110Z
300	300	—	40	0.01	1.2	SOT-223	PZTA42	PZTA92
300	300	1	50	0.25	1.2	SOT-223	BF720	—

211418

Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	Price Each 100+	250+	1K+
BCP51	SMD 108-1252● RL	0.550	0.250	0.177	0.113	0.086
BCP51-16	SMD 108-1253● RL	0.270	0.146	0.109	0.081	0.061
BCP52-16	SMD 873-4801● RL	0.320	0.166	0.120	0.079	0.074
BCP53	SMD 108-1254● RL	0.480	0.240	0.165	0.113	0.086
BCP53-10	SMD 873-4810● RL	0.320	0.166	0.120	0.079	0.074
BCP53-16	SMD 108-1255● RL	0.500	0.220	0.164	0.105	0.079
BCP54	SMD 108-1256● RL	0.530	0.250	0.159	0.101	0.064
BCP54-10	SMD 873-4826● RL	0.320	0.166	0.120	0.079	0.074
BCP54-16	SMD 873-4836● RL	0.300	0.153	0.111	0.072	0.068
BCP55-10	SMD 873-4844● RL	0.320	0.166	0.120	0.079	0.074
BCP55-16	SMD 873-4852● RL	0.320	0.166	0.120	0.079	0.074
BCP56	SMD 108-1257● RL	0.550	0.250	0.177	0.113	0.086
BCP56-10	SMD 873-4860● RL	0.320	0.166	0.120	0.079	0.074
BCP56-16	SMD 108-1258● RL	0.500	0.220	0.164	0.105	0.079
BCP68	SMD 873-4879● RL	0.350	0.185	0.135	0.089	0.083
BCP68-25	SMD 873-4887● RL	0.350	0.185	0.135	0.089	0.083
BCP69	SMD 108-1259● RL	0.330	0.177	0.139	0.087	0.085
BCP69-16	SMD 873-4895● RL	0.340	0.180	0.133	0.086	0.080
BCP69-25	SMD 873-4909● RL	0.350	0.185	0.135	0.089	0.083
BF720	SMD 873-4984● RL	0.720	0.380	0.280	0.182	0.170
PBSS4350Z	SMD 873-6340● RL	0.350	0.260	0.200	0.166	0.134
PBSS4540Z	SMD 873-6383● RL	0.490	0.370	0.300	0.240	0.187
PBSS5350Z	SMD 873-6596● RL	0.290	0.210	0.171	0.137	0.110
PBSS5540Z	SMD 873-6634● RL	0.350	0.260	0.200	0.166	0.132
PBSS8110Z	SMD 873-6677● RL	0.290	0.210	0.169	0.136	0.108
PBSS9110Z	SMD 873-6707● RL	0.250	0.188	0.146	0.117	0.093
PZTA42	SMD 873-8637● RL	0.400	0.210	0.156	0.102	0.097
PZTA92	SMD 873-8645● RL	0.380	0.200	0.153	0.100	0.094

SOT-223 General Purpose

FAIRCHILD SEMICONDUCTOR · ST · SMD



V_{CEO} max. V	I_C max. mA	h_{FE} min.	@ I_C A	P_{tot} mW	Device Marking	Transistor Polarity	Mftrs List No
30	3	100	0.01	1.6	N690A	NPN	STN690A
40	1	100	0.15	1	—	NPN	PZT2222A
60	1.5	40	0.15	1	BCP55	NPN	BCP55
60	0.8	100	0.15	1	PZT2907A	PNP	PZT2907A
80	1.2	40	0.15	1	BCP56	NPN	BCP56
80	1.2	40	0.15	1.5	BCP53	PNP	BCP53
300	0.1	40	0.01	1	PZTA92	PNP	PZTA92
300	0.2	40	0.03	1	PZTA42	NPN	PZTA42

425089

Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	Price Each 100+	250+
BCP53	SMD 984-6778● RL	0.370	0.240	0.178	0.092
BCP55	SMD 984-6620● RL	0.310	0.230	0.150	0.071
BCP56	SMD 984-6638● RL	0.370	0.240	0.178	0.092
PZTA42	SMD 984-6654● RL	0.290	0.168	0.140	0.083
PZTA92	SMD 984-6794● RL	0.220	0.129	0.108	0.063
PZT2222A	SMD 984-6646● RL	0.260	0.185	0.124	0.052
PZT2907A	SMD 984-6786● RL	0.420	0.260	0.200	0.113
STN690A	SMD 146-0629●	0.240	0.182	0.137	0.119

General Purpose TO-92, TO-39, TO-5

ZETEX SEMICONDUCTORS · multicomp



TO-39



E-Line



TO-92

High performance, low frequency devices typically with current ratings 1A to 2A. Up to 1W power dissipation.

V_{CEO} max. V	I_C max. A	h_{FE} min.	@ I_C mA	$V_{CE(sat)}$ max. V	@ I_C mA	Package	Pin Out	Mftr.	Mftrs. List No. NPN	PNP
25	2	100	1000	0.5	2000	E-Line	e	ZET	ZTX649	ZTX749
45	1	100	150	0.25	150	E-Line	e	ZET	ZTX450	ZTX550
60	1	50	150	0.35	150	E-Line	e	ZET	ZTX451	ZTX551
60	2	40	500	1	1000	TO-39	—	MAG/	BC441	BC461
60	2	100	500	0.5	2000	E-Line	e	ZET	ZTX651	—
65	1	40	150	0.65	150	TO-39	—	MAG	—	2N4036
75	2	30	500	0.5	500	TO-39	—	MC	2N5320	2N5322
80	1.5	40	500	500	500	TO-92	a	NXP	BC639	BC640
100	1	40	150	0.7	150	E-Line	e	ZET	ZTX453	ZTX553
100	2	100	500	0.5	2000	E-Line	e	ZET	ZTX653	ZTX753
45	1	40	150	0.5	500	TO-92	h	MC	BC635	—
60	2	100	500	0.5	2000	E-Line	e	ZET	—	ZTX751
60	2	40	500	1	1000	TO-39	—	MC	—	BC461

211206

Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	Price Each 100+	1K+
BC441	120-8596●	0.880	0.750	0.530	0.440
BC461	120-8598●	0.930	0.710	0.500	0.410
BC461	920-7104●	0.430	0.420	0.370	0.350
BC639	109-7178●	0.240	0.154	0.102	0.069
BC640	109-7181●	0.220	0.139	0.108	0.076
ZTX450	952-5513●	0.350	0.270	0.210	0.170
ZTX451	952-5521●	0.450	0.310	0.240	0.184
ZTX453	952-5530●	0.540	0.420	0.300	0.210
ZTX550	952-5548●	0.540	0.390	0.300	0.220
ZTX551	952-5556●	0.440	0.340	0.230	0.167
ZTX553	952-5939●	0.430	0.330	0.230	0.162
ZTX649	952-5564●	1.230	0.790	0.500	0.370
ZTX651	952-5572●	1.190	0.790	0.500	0.430
ZTX653	952-5580●	0.660	0.420	0.320	0.250
ZTX749	952-5980●	0.790	0.610	0.400	0.280
ZTX751	952-5629●	0.700	0.480	0.380	0.290
ZTX753	952-5637●	0.650	0.450	0.340	0.260
2N4036	120-8609●	1.380	0.940	0.740	0.480
BC635	NEW 157-4385●	0.105	0.053	0.039	0.036
		5+	25+	100+	1K+
2N5320(MC)	920-7074●	2.380	1.490	1.130	0.570
2N5322(MC)	920-7082●	2.680	1.660	1.290	0.740

* Preformed leads, 2.54mm (0.1") spacing. TO-220 compatible.

E-Line High Current, 3.5A to 5A

ZETEX SEMICONDUCTORS



High performance transistors with optimised chip technology to give exceptionally high current capability coupled with very low saturation voltages. TO-92 compatible package.

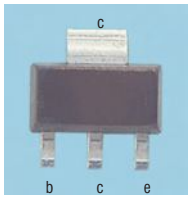
	V_{CEO} V	I_C max. A	I_C Pulsed A	$V_{CE(sat)}$ V	@ I_C A	h_{FE} min.	@ I_C A	f_T typ. MHz	P_{tot} @ 25°C W	Mftrs. List No.
NPN	25	5	20	0.22	5	300	1	100	1.2	ZTX869
	30	5	20	0.22	5	100	1	100	1.2	ZTX849
	60	5	20	0.25	5	100	2	130	1.2	ZTX851
	100	4	10	0.2	4	100	2	130	1.2	ZTX853
PNP	60	4	15	0.3	4	100	1	120	1.2	ZTX951
	100	5	10	0.33	4	100	1	120	3	ZTX953

211072

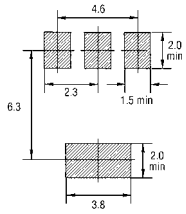
Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	Price Each 100+	1K+
ZTX849	952-4860●	1.03	0.68	0.39	0.31
ZTX851	952-4886●	1.53	1.06	0.61	0.47
ZTX853	952-4894●	1.53	1.06	0.61	0.47
ZTX869	952-4878●	1.70	1.13	0.63	0.50
ZTX951	952-4975●	1.40	1.06	0.61	0.47
ZTX953	952-4983●	1.58	1.17	0.65	0.51

SOT-223, High Current

Infineon · ZETEX SEMICONDUCTORS · SMD



H = 1.7, W = 6.7, D = 7.3



Footprint

Complimentary high current devices, supplied on 12mm tape.

V_{CEO} max V	V_{CBO} max V	I_C max A	$I_{C\ Pulsed}$ max A	h_{FE} min	@ I_C A	P_{tot} W	Mftr.	Mftrs. List No. NPN	PNP
25	35	3	8	100	1	2	ZET	FZT649	FZT749
30	80	7	20	100	7	3	ZET	FZT849	FZT949
60	80	3	6	100	0.5	2	ZET	FZT651	FZT751
60	60	3	5	40	0.5	1.5	INF	BDP949	—
60	150	6	20	100	2	3	ZET	FZT851	FZT951
100	120	2	6	100	0.5	2	ZET	FZT653	FZT753
100	200	6	10	100	2	3	ZET	FZT853	FZT953
300	350	3.5	5	—	—	3	ZET	FZT857	—
400	400	0.5	1	50	0.1	2	ZET	FZT658	FZT758

211139

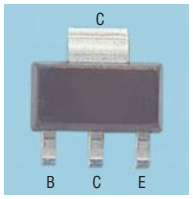
RL Re-reeling available

Farnell

Order Multiple=5			Price Each			
Mftrs. List No.	Order Code		5+	100+	1K+	3K+
BDP949	SMD 121-4295● RL		0.620	0.430	0.320	0.186
Order Multiple=1			**1+**	**25+**	**100+**	**250+**	**1K+**
FZT649	SMD 952-6560● RL		1.040	0.780	0.500	0.330	0.320
FZT651	SMD 952-5009● RL		0.940	0.630	0.600	0.500	0.460
FZT653	SMD 952-5017● RL		1.000	0.960	0.680	0.510	0.490
FZT658	SMD 952-5246● RL		0.880	0.660	0.440	0.290	0.280
FZT749	SMD 952-6579● RL		0.870	0.660	0.430	0.280	0.260
FZT751	SMD 952-5025● RL		0.890	0.630	0.490	0.390	0.310
FZT753	SMD 952-5033● RL		0.890	0.860	0.600	0.470	0.440
FZT758	SMD 952-5254● RL		0.880	0.660	0.440	0.290	0.280
FZT849	SMD 952-6587● RL		1.590	1.170	0.930	0.760	0.590
FZT851	SMD 952-6323● RL		1.560	1.160	0.910	0.740	0.570
FZT853	SMD 952-6331● RL		1.290	0.950	0.760	0.610	0.480
FZT857	SMD 952-5262● RL		1.070	0.790	0.540	0.330	0.320
FZT949	SMD 952-6595● RL		1.570	1.520	1.300	0.790	0.760
FZT951	SMD 952-6340● RL		1.450	1.210	0.950	0.760	– –
FZT953	SMD 952-6358● RL		1.310	0.970	0.770	0.610	0.480

Reels of 1000		Price Per Reel	
Mftrs. List No.	Order Code	1+	3+
FZT651TA	NEW SMD 156-2431●	253.25	227.93
FZT653TA	NEW SMD 156-2432●	253.25	227.93
FZT751TA	NEW SMD 156-2433●	271.09	243.98
FZT857TA	NEW SMD 156-2438●	282.50	– –
FZT851TA	NEW SMD 156-2439●	394.15	354.74
FZT853TA	NEW SMD 156-2440●	394.15	354.74
FZT951TA	NEW SMD 156-2441●	422.69	380.43
FZT953TA	NEW SMD 156-2442●	422.69	380.43
FZT849TA	NEW SMD 156-2443●	394.15	354.74

SOT-223, Low Saturation



- Fifth generation low saturation transistors
- Low equivalent on-resistance R_{SAT}
- Excellent gain characteristics

Supplied on 12mm tape.

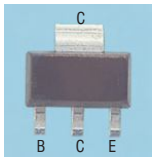
H = 1.7, W = 6.7, D = 7.3

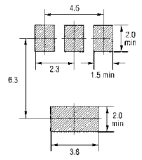
	V_{CEO} V	V_{CBO} max. V	I_C max. A	I_C pulsed A	h_{FE} min.	@ I_C A	$V_{CE\ (sat)}$ max. mV	@ I_C A	P_{tot} W	Device Marking	Mftrs. List No.
NPN											
	30	80	7	20	100	7	35	6.5	3	X5T849	ZX5T849G
	60	150	6	20	55	5	210	6	3	X5T851	ZX5T851G
	100	200	6	10	30	5	220	4	3	X5T853	ZX5T853G
PNP											
	30	50	5.5	20	40	5	170	5.5	3	X5T949	ZX5T949G
	100	140	5	10	15	4	240	4	3	X5T953	ZX5T953G

367194

Mftrs. List No.	Order Code		Price Each 1+	25+	100+	250+	1K+
ZX5T849G	SMD 756-5038● RL		1.10	0.94	0.63	0.55	0.45
ZX5T851G	SMD 756-5054● RL		0.89	0.77	0.51	0.45	0.37
ZX5T853G	SMD 756-5062● RL		1.04	0.89	0.60	0.52	0.43
ZX5T949G	SMD 756-5070● RL		0.71	0.61	0.41	0.36	0.30
ZX5T953G	SMD 756-5100● RL		1.10	0.94	0.63	0.55	0.45

SOT-223, High Gain at High Current, h_{FE} ≥200





Supplied on 12mm tape.
H = 1.7, W = 6.7, D = 7.3

	V_{CEO} V	I_C max. A	I_C Pulsed A	$V_{CE(sat)}$ V	@ I_C A	h_{FE} min.	@ I_C A	f_T min. (*typ.) MHz	P_{tot} @ 25°C W	Mftrs. List No.
NPN	15	4	10	0.45	3	400	3	150	2	FZT688B
	20	3	8	0.35	3	400	2	150	2	FZT689B
	30	5	20	0.25	5	300	1	180	2.5	FZT1049A
	45	3	6	0.5	1	400	1	150	2	FZT690B
	70	2	5	0.5	2	400	0.5	150	2	FZT692B
	75	4.5	10	0.35	4.5	300	1	140	2.5	FZT1053A
PNP	15	3	8	0.45	2	300	2	100	2	FZT788B
	25	3	6	0.45	2	200	2	100	2	FZT789A
	25	4	10	0.35	4	250	0.5	135	2.5	FZT1149A
	40	3	6	0.75	2	250	0.5	100	2	FZT790A
	40	3	5	0.26	1.8	250	0.5	145	2.5	FZT1151A
	70	2	5	0.5	2	250	0.5	100	2	FZT792A

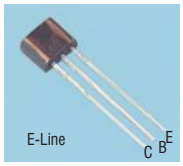
211235

Order Multiple=5			Price Each				
Mftrs. List No.	Order Code		5+	100+	200+	500+	1K+
FZT688B	SMD 952-6609● RL		0.77	0.57	0.38	0.26	0.23
FZT689B	SMD 952-6617● RL		0.96	0.73	0.56	0.45	0.35
FZT690B	SMD 952-5203● RL		0.96	0.72	0.48	0.32	0.26
FZT692B	SMD 952-5211● RL		0.94	0.70	0.46	0.31	0.24
FZT788B	SMD 952-6625● RL		1.91	1.37	0.94	0.54	0.44
FZT789A	SMD 952-6633● RL		0.96	0.72	0.48	0.31	0.24
FZT790A	SMD 952-5220● RL		0.96	0.72	0.48	0.31	0.24

Order Multiple=5			Price Each				
Mftrs. List No.	Order Code		5+	100+	200+	500+	1K+
FZT792A	SMD 952-5238● RL		0.96	0.72	0.48	0.31	0.24
FZT1049A	SMD 952-5181● RL		0.95	0.71	0.46	0.31	0.24
FZT1053A	SMD 952-5190● RL		0.95	0.71	0.46	0.31	0.28
FZT1149A	SMD 952-6790● RL		0.96	0.73	0.48	0.32	0.29
FZT1151A	SMD 952-6803● RL		0.96	0.73	0.48	0.32	0.29

Reels of 1000		Price Per Reel
Mftrs. List No.	Order Code	1+
FZT1049ATA	NEW SMD 156-2434●	216.96
FZT1053ATA	NEW SMD 156-2436●	248.60
FZT692BTA	NEW SMD 156-2437●	220.36
FZT1151ATA	NEW SMD 156-2444●	259.90

E-Line, High Gain at High Current, h_{FE} ≥200



High performance transistors featuring high gain and low saturation voltages at high currents. TO-92 compatible E-line package.

	V_{CEO} V	I_C max. A	I_C Pulsed A	$V_{CE(Sat)}$ V	@ I_C A	h_{FE} min.	@ I_C A	f_T min. (*typ) MHz	P_{tot} @ 25°C W	Mftrs. List No.
NPN										
	12	3	10	0.35	3	400	3	150	1	ZTX688B
	17.5	4	20	0.245	4	300	1	150	1	ZTX1048A
	20	3	8	0.5	2	400	2	150	1	ZTX689B
	20	3.5	10	0.255	3.5	300	0.2	100	1	ZTX618
	40	4	10	0.21	4	300	1	155	1	ZTX1051A
	45	2	6	0.5	1	400	1	150	1	ZTX690B
	75	3	10	0.25	3	300	1	140	1	ZTX1053A
	120	0.5	1	0.5	0.4	400	0.2	130	1	ZTX694B
	120	3	6	0.31	3	300	1	130	1	ZTX1055A
	160	3	6	0.3	3	300	0.5	120	1	ZTX1056A
PNP										
	20	2.5	6	0.26	2.5	300	0.1	150	1	ZTX718
	25	3	8	0.45	2	200	2	100	1	ZTX789A
	25	3	10	0.2	3	250	0.5	135	1	ZTX1149A
	50	3	6	0.75	2	200	1	100	1	ZTX790A
	75	2	4	0.5	1	250	0.5	100	1	ZTX792A

211060

Order Multiple=5			Price Each				
Mftrs. List No.	Order Code		5+	25+	100+	1K+	5K+
ZTX618	952-6528●		0.79	0.48	0.34	0.27	0.22
ZTX688B	952-4940●		0.88	0.63	0.40	0.26	0.21
ZTX689B	952-5602●		1.05	0.81	0.62	0.42	0.34
ZTX690B	952-5947●		0.97	0.66	0.51	0.39	0.31
ZTX694B	952-5610●		1.30	0.92	0.59	0.41	0.32
ZTX718	952-6536●		1.01	0.66	0.39	0.31	0.23
ZTX789A	952-6170●		1.11	0.85	0.57	0.42	0.35
ZTX790A	952-6188●		1.11	0.85	0.57	0.42	0.35
ZTX792A	952-6137●		1.24	0.92	0.62	0.42	0.35
ZTX1048A	952-6544●		0.87	0.66	0.43	0.32	0.27
ZTX1051A	952-6552●		1.20	0.91	0.59	0.43	0.37
ZTX1053A	952-6390●		1.07	0.80	0.55	0.38	0.32
ZTX1055A	952-6404●		1.45	1.10	0.78	0.43	0.37
ZTX1056A	952-6412●		1.45	0.96	0.55	0.43	0.33
ZTX1149A	952-6781●		1.32	0.99	0.63	0.39	0.34

E-Line, TO-92 High Voltage, V_{CEO} ≥300V

V_{CEO} max. V	I_C max. A	h_{FE} @ I_C min.	mA	$V_{CE(sat)}$ @ I_C V	mA	P_{tot} @ 25°C W	Package	Pin Out	Mftrs. List No. Mftr.	NPN	PNP
300	0.5	50	100	0.5	100	1	E-Line	—	ZET	ZTX657	ZTX757
300	3	100	1000	0.25	3000	1.2	E-Line	—	ZET	ZTX857	—
400	0.2	100	50	0.5	50	1	E-Line	—	ZET	—	ZTX558
400	0.3	100	50	0.5	50	1	E-Line	—	ZET	ZTX458	—
400	0.5	40	200	0.5	100	1	E-Line	—	ZET	ZTX658	ZTX758
400	1	5	800	———	———	1	TO-92	———	ST	STBV42	———
400	1	4	1000	———	———	1.5	TO-92	———	ST	STX83003	———
400	3	8	2	5	3	2.8	TO-92	—	ST	STX13005	—

211207

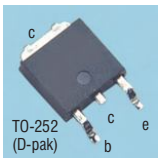
Order Multiple=5			Price Each			
Mftrs. List No.	Order Code	5+	25+	100+	1K+
ZTX458	952-6668●	0.590	0.460	0.310	0.210
ZTX558	952-6676●	0.740	0.530	0.340	0.220
STBV42	108-4481●	0.510	0.380	0.300	0.220
STX13005	108-4489●	0.290	0.240	0.161	0.119
STX83003	108-4472●	0.240	0.186	0.140	0.104
ZTX657	952-5599●	1.170	0.860	0.550	0.370
ZTX658	952-4932●	0.890	0.680	0.450	0.280
ZTX757	952-5645●	0.990	0.650	0.420	0.350
ZTX758	952-4959●	0.920	0.720	0.470	0.320
ZTX857	952-4967●	1.490	1.130	0.780	0.450

RL Re-reeling available

High Power Bipolar Transistors - P_{tot} 5W to 250W

D-Pak (TO-252), General Purpose

ON Semiconductor



TO-252 (D-pak)

H = 2.38, W = 6.73, D = 10.28

I_C max. A	V_{CEO} max. V	h_{FE} min.	@ I_C A	f_T min MHz	P_{tot} @ 25°C W	Mftrs. List No. NPN	PNP
0.5	300	30	50	—	15	MJD340	MJD350
1	400	25	0.2	10	15	MJD50G	—
3	100	10	1	3	15	MJD31CG	MJD32CG
3	80	200	3000 mA		20	MJD44H11TM	—
3	60	90	3	100	15	—	STD790AT4
3	60	200	100 mA	—	15	STD1802T4	—
3	60	80	1000 mA	—	15	STD724T4	—
3	60	100	100 mA	—	15	—	STD826T4
5	60	200	100 mA	—	15	STD1805T4	—
5	30	75	5	—	15	—	STD888T4
8	100	100	8	—	20	KSH122	KSH127
8	80	40	4	50	20	MJD44H11G	MJD45H11G

450632

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+
KSH122	FCH	SMD 109-5131 RL	0.440	0.250	0.189
KSH127	FCH	SMD 109-5132 RL	0.290	0.220	0.181
MJD31CG	ON	SMD 955-7113	0.530	0.360	0.260
MJD32CG	ON	SMD 955-7121	0.650	0.350	0.300
MJD44H11G	ON	SMD 955-7806	0.760	0.520	0.430
MJD44H11TM	FCH	SMD 122-8219	0.390	0.320	0.230
MJD45H11G	ON	SMD 955-7814	0.650	0.440	0.310
MJD50G	ON	SMD 955-5870	0.760	0.410	0.350
MJD340	ST	SMD 993-5274 RL	1.000	0.740	0.600
MJD350	ST	SMD 993-5282 RL	1.020	0.750	0.620
STD724T4	ST	SMD 129-7986 RL	0.270	0.194	0.145
STD790AT4	ST	SMD 108-4553 RL	0.530	0.410	0.310
STD826T4	ST	SMD 129-7998 RL	0.240	0.190	0.157
STD888T4	ST	SMD 108-4555 RL	0.630	0.490	0.360
STD1802T4	ST	SMD 129-7984 RL	0.580	0.430	0.330
STD1805T4	ST	SMD 129-7985 RL	0.770	0.630	0.460

TO-126, General Purpose

multicomp



TO-126

$I_{C\ (av)}$ max. A	V_{CEO} max. V	h_{FE} min.	@ I_C A	P_{tot} @ 25°C W	Mftrs. List No. NPN	PNP
0.5	300	30	0.05	20	MJE340	MJE350
1	45	40	0.15	12.5	BD135	BD136
1	60	40	0.15	12.5		BD138
1.5	80	40	0.15	12.5	BD139	BD140
2	80	25	1	26	BD237	BD238
3	80	40	0.15	30	BD179	BD180
4	45	40	2	36	BD437	BD438

333502

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	500+	1K+
BD135	NEW 157-4347	0.300	0.250	0.184	0.151	0.144
BD136	NEW 157-4348	0.300	0.250	0.184	0.151	0.144
BD138	NEW 157-4349	1.070	0.490	0.380	0.290	0.280
BD139	NEW 157-4350	0.300	0.250	0.184	0.151	0.144
BD140	NEW 157-4351	0.300	0.250	0.184	0.151	0.144
BD179	NEW 157-4352	0.490	0.290	0.250	0.182	0.172
BD180	NEW 157-4353	0.470	0.290	0.220	0.195	0.182
BD237	NEW 157-4354	0.470	0.290	0.220	0.195	0.182
BD238	NEW 157-4355	0.470	0.290	0.220	0.195	0.182
BD437	NEW 157-4356	0.300	0.250	0.184	0.151	0.144
BD438	NEW 157-4357	0.340	0.290	0.210	0.174	0.166
MJE340	NEW 157-4367	0.340	0.290	0.250	0.182	0.174
MJE350	NEW 157-4368	0.340	0.290	0.250	0.182	0.174

TO-220 (SOT-78B), General Purpose

ON Semiconductor

multicomp



$I_{C\ (av)}$ max. A	V_{CEO} max. V	h_{FE}	@ I_C A	P_{tot} @ 25°C W	Mftr.	Mftrs. List No. NPN	PNP
1	100	20 min	0.2	30	MC/ST	TIP29C	TIP30C
1	100	40 min	0.2	30	ST\MC	TIP29C	TIP30C
1	60	40 min	0.2	30	MC/MC	TIP29A	TIP30A
1	60	40 min	0.2	30	ST	TIP29A	—
2	100	20 min	200	30	ST	BD239C	—
3	100	10 min	3	40	ST	—	TIP32C
3	100	25 min	1	40	ST/ST	TIP31A	TIP32A
3	60	25 min	1	40	MC/MC	TIP31A	TIP32A
3	40	20 min	0.5	40	ON/ON	TIP31CG	TIP32CG
3	100	25 min	1	40	MC/ON	TIP31C	BD242CG
3	100	25 min	1	40	ST/MC	TIP31C	TIP32C
5	45	40 min	2	40	SEM	—	BD948
5	100	25 min	1	40	ST	BD241C	—
5	120	40 min	0.5	40	SEM/SEM	BD955	BD956
5	450	6 min	2	75	ON	MJE18004G	—
6	40	20 min	0.5	65	ON/ON	TIP41CG	TIP42CG
6	60	30 min	0.3	65	ST/MC	TIP41A	TIP42A
6	60	30 min	0.3	65	MC	—	TIP42A
6	100	30 min	0.3	65	ON/ST	BD243CG	BD244C
6	100	30 min	0.3	65	MC/MC	BD243C	BD244C
6	100	30 min	0.3	65	MC/MC	TIP41C	TIP42C
6	100	30 min	0.3	65	ON/ST	BD244CG	TIP42C
6	100	15 min	3	65	ST	TIP41C	—
6	100	30 min	0.3	65	ST	—	BD243C
7	50	30 min	2.5	40	MC/SEM	2N6290	2N6109
7	40	30 min	3	40	ST	—	2N6111
7	50	30 min	2.5	40	MC	2N6109	—
8	45	25 min	2	50	ST	—	BD534
8	60	30 min	3	60	SEM	BD203	—
8	60	25 min	2	50	ST	—	BD536
8	80	15 min	2	50	ST	BD537	—
8	80	30 min	2	60	SEM/SEM	BDX77	BDX78
8	120	40 min	3	50	ON/ON	MJE15028G	MJE15029G
8	150	40 min	3	50	ON/ON	MJF15030G*	MJF15031G*
8	150	40 min	3	50	ON	MJE15030G*	—
8	150	20 min	4	50	MC/MC	MJE15030	MJE15031
8	450	35 min	0.25	70	ST	BUL1102E	—
8	150	20 min	4	50	ON	—	MJE15031G
8	400	5 min	5	80	ON	—	MJE13007G
10	45	60 min	2	50	ST	—	D45H5
10	60	20 min	4	75	ST/ST	MJE3055T	MJE2955T
10	60	20 min	4	75	MC	—	MJE2955T
10	60	—	—	75	SEM	2N6099	—
10	60	60 min	2	50	ON/ON	D44H8G	D45H8G
10	80	60 min	2	50	ON/ON	D44H11G	D45H11G
10	80	60 min	2	50	MC/MC	D44H11	D45H11
10	100	20 min	4	90	SEM	BDT95	—
10	60	20 min	4	75	MC	MJE3055T	—
12	60	5 min	10	75	ST	—	BD708
12	100	120 typ	0.5	75	ST	BD711	—
12	120	—	—	85	ST	BUV27	—
14	90	—	—	85	ST	BUV26	—
15	80	40 min	0.5	90	ST	—	BD910
15	100	40 min	0.5	90	ST/ST	BD911	BD912

* Isolated TO-220

460640

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	500+	1K+
NPN							
2N6099	SEM	120-8628	1.470	0.990	0.830	0.660	0.600
2N6290	MC	929-4015	0.750	0.540	0.440	0.390	0.370
BD203	SEM	120-8622	2.000	1.380	0.900	0.550	0.510
BD239C	ST	980-1545	1.110	0.590	0.430	0.270	0.230
BD241C	ST	980-1553	1.650	0.870	0.670	0.430	0.350
BD243C	ST	995-6280	0.580	0.430	0.350	0.290	0.270
BD243CG	ON	955-7598	1.790	1.470	1.140	0.790	0.470
BD537	ST	108-4538	0.550	0.420	0.310	0.280	0.230
BD711	ST	108-4516	0.750	0.480	0.340	0.270	– –
BD911	ST	108-4518	0.840	0.590	0.440	0.380	– –
BD955	SEM	120-8588	2.410	1.620	1.070	0.670	0.610
BDT81	SEM	119-2114	3.030	2.080	1.370	0.840	0.760
BDT95	SEM	120-8578	2.760	1.880	1.230	0.760	0.680
BDX77	SEM	120-8590	2.200	1.510	0.970	0.600	0.550
BUL1102E	ST	108-4539	0.920	0.710	0.520	0.420	0.370
BUV26	ST	108-4492	3.940	2.920	2.220	1.820	1.610
BUV27	ST	108-4455	4.050	3.020	2.260	1.860	1.650
D44H8G	ON	955-6206	1.120	0.820	0.600	0.510	0.380
D44H11	MC	929-4163	0.940	0.670	0.560	0.480	0.450
D44H11G	ON	955-7156	0.780	0.600	0.450	0.380	0.290
MJE13007G	ON	955-7857	1.230	0.710	0.610	0.440	0.350
MJE15028G	ON	955-6281	0.810	0.560	0.430	0.350	0.290
MJE15030	MC	929-4180	1.120	0.800	0.670	0.580	0.550
MJE15030G	ON	955-7091	1.160	0.850	0.630	0.530	0.400
MJF15030G	ON	955-6303	1.810	1.130	0.870	0.690	0.620
MJE3055T	ST	980-2460	0.880	0.630	0.460	0.380	0.310
MJE3055T	MC	929-4198	0.680	0.490	0.400	0.360	0.340
MJE18004G	ON	955-6826	0.850	0.490	0.380	0.300	0.270
TIP29A	ST	980-4099	0.480	0.360	0.270	0.220	0.196
TIP29A	MC	929-4309	0.510	0.370	0.310	0.270	0.250
TIP29C	ST	980-4102	0.780	0.490	0.340	0.290	0.260
TIP29C	MC	929-4317	0.520	0.510	0.340	0.280	0.270
TIP31A	ST	980-4137	0.630	0.440	0.330	0.270	0.230
TIP31A	MC	929-4333	0.510	0.370	0.310	0.270	0.250
TIP31C	ST	980-4145	0.630	0.440	0.330	0.270	0.210
TIP31C	MC	929-4341	0.520	0.380	0.310	0.280	0.270
TIP31CG	ON	116-6985	0.620	0.420	0.300	0.240	0.182
TIP41A	MC	929-4368	0.550	0.400	0.340	0.300	0.280
TIP41C	ST	980-4170	0.860	0.600	0.410	0.370	0.290
TIP41CG	ON	116-6987	0.820	0.570	0.410	0.350	0.270
BD243C	MC	NEW 157-4333	0.940	0.480	0.370	0.350	0.340
TIP41C	MC	NEW 157-4341	1.470	0.750	0.570	0.450	0.380
PNP							
2N6109	SEM	120-8629	1.200	0.860	0.690	0.450	0.420
2N6109	MC	929-4392	0.680	0.490	0.400	0.360	0.340
2N6111	ST	108-4569	0.870	0.780	0.590	– –	– –
BD242CG	ON	955-5820	0.910	0.770	0.660	0.570	0.270

RL Re-reeling available

Farnell

Mftrs.			Price Each				
PNP							
BD244C	ST	**980-1561**	0.930	0.480	0.350	0.220	0.188
BD244CG	ON	**955-7601**	1.790	1.470	1.140	0.790	0.470
BD534	ST	**108-4571**	0.660	0.550	0.370	0.290	0.270
BD536	ST	**108-4568**	0.640	0.490	0.360	0.300	0.280
BD708	ST	**108-4573**	0.530	0.410	0.300	0.270	0.220
BD910	ST	**108-4575**	0.850	0.630	0.480	0.380	0.350
BD912	ST	**108-4576**	0.800	0.590	0.440	0.380	0.340
BD948	SEM	**120-8587**	2.440	1.670	1.080	0.670	0.610
BD956	SEM	**120-8589**	2.440	1.670	1.080	0.670	0.610
BDX78	SEM	**120-8591**	2.170	1.480	0.960	0.590	0.540
D45H5	ST	**108-4552**	1.490	0.990	0.810	0.730	0.570
D45H8G	ON	**955-6214**	1.070	0.770	0.590	0.450	0.340
D45H11	MC	**929-4481**	0.980	0.700	0.580	0.520	0.480
D45H11G	ON	**955-7164**	1.120	0.820	0.600	0.510	0.380
MJE15029G	ON	**955-6265**	1.120	0.860	0.660	0.540	0.530
MJF15031G	ON	**955-6311**	2.010	1.140	0.900	0.690	0.640
MJE15031	MC	**929-4490**	1.160	0.840	0.700	0.610	0.570
MJE15031G	ON	**955-7105**	1.160	0.850	0.630	0.530	0.400
MJE2955T	MC	**929-4503**	0.720	0.520	0.430	0.370	0.360
MJE2955T	ST	**980-2452**	0.940	0.670	0.480	0.420	0.310
TIP30A	MC	**929-4597**	0.530	0.380	0.330	0.290	0.270
TIP30C	ST	**980-4129**	0.510	0.370	0.290	0.240	0.220
TIP30C	MC	**929-4600**	0.530	0.380	0.330	0.290	0.270
TIP32A	MC	**929-4627**	0.520	0.380	0.310	0.280	0.270
TIP32A	ST	**980-4153**	0.640	0.480	0.310	0.290	0.196
TIP32C	ST	**980-4161**	0.640	0.480	0.310	0.290	0.196
TIP32C	MC	**929-4635**	0.520	0.380	0.310	0.280	0.270
TIP32CG	ON	**116-6986**	0.620	0.420	0.300	0.240	0.182
TIP42A	MC	**929-4651**	0.550	0.400	0.340	0.300	0.280
TIP42A	ST	**980-4188**	0.940	0.670	0.480	0.420	0.310
TIP42CG	ON	**116-6988**	0.780	0.540	0.380	0.330	0.250
TIP42C	ST	**980-4196**	0.790	0.550	0.410	0.340	0.230
BD244C	MC	NEW **157-4335**	0.940	0.480	0.370	0.350	0.340
TIP42C	MC	NEW **157-4342**	1.470	0.750	0.570	0.450	0.400

For **Heatsinks** see page 778
and for **Thermal Insulation Kits** see page 762

General Purpose



TO-126

$I_{C\ (av)}$ max. A	V_{CEO} max. V	h_{FE} min.	@ I_C A	P_{tot} @ 25°C W	Package	Mftr.	Mftrs. List No. NPN	PNP
0.14	160	100	0.01	1	TO-126	SY/SY	2SA1209	2SC2911
0.5	300	30	0.05	20	TO-126	ON/ON	MJE340G	MJE350G
0.5	300	30	0.05	20	TO-126	ST/ST	MJE340	MJE350
1	80	40	0.15	12.5	TO-126	ST	BD139	—
1.5	45	40	0.15	12.5	TO-126	ST/ST	BD135	BD136
1.5	45	25	0.5	12.5	SOT-32	ST	BD135-16	—
1.5	45	100	0.15	1.25	SOT-32	ST	—	BD136-16
1.5	60	40	0.15	12.5	TO-126	ST	—	BD138
1.5	80	25	0.5	12.5	SOT-32	ST	BD139-10	—
1.5	80	25	0.5	12.5	SOT-32	ST	BD139-16	—
1.5	80	40	0.15	12.5	TO-225AA	ON/ON	BD139G	BD140G
1.5	80	63	0.15	1.25	SOT-32	ST	BD140-10	—
1.5	80	100	0.15	1.25	SOT-32	ST	BD140-16	—
2	80	25	1	26	TO-126	ON	BD237G	—
2	80	25	1	26	TO-126	ST/ST	BD237	BD238
3	80	20	0.5	30	TO-126	ON/ON	2N4923G	2N4920G
3	80	40	0.15	30	TO-126	ON/ON	BD179G	BD180G
4	22	50	1	36	TO-126	ST/ON	———	BD434
4	32	50	2	36	TO-126	ST/ST	BD435	BD436
4	45	40	2	36	TO-126	ON/ON	BD437G	BD438G
4	60	25	2	36	SOT-32	ST	BD439	—
4	80	15	2	36	SOT-32	ST	BD441	—
4	80	20	1.5	40	TO-126	ST/ST	2N5192	2N5195G
4	45	40	2	36	TO-126	ST	—	BD438
5	60	40	2	5	TO-39	ST	BFX34	—
5	60	45	0.5	15	TO-126	SEM	BDX36	—
6	50	100	1	10	TO-126	SEM/ST	BUP41	BUP40
10	60	15	10	150	TO-3	ST	2N3772	—
10	80	50	1	150	TO-3	SEM	2N3716	—
10	100	20	0.5	80	TO-247	ST/ST	TIP33C	TIP34C
10	140	20	3	117	TO-3	MC	2N3442	—
10	60	15	10	150	TO-3	MC	2N3772	—
15	40	15	10	150	TO-3	ST	2N3771	—
15	60	5	10	150	TO-3	ST	—	MJ2955
15	60	5	10	115	TO-3	ST	2N3055	—
15	70	20	4	90	TO-247	MC	TIP3055	—
15	60	20	4	150	TO-3	SEM	—	PNP3055
15	60	5	10	150	TO-3	MC	—	MJ2955
15	70	20	4	90	SOT-93	MC	TIP2955	—
15	80	20	5	150	TO-3	SEM	2N6254	—
15	120	20	4	180	TO-3	ON/ON	MJ15015G	MJ15016G
15	60	20	4	115	TO-3	MC	2N3055	—
15	60	20	4	115	TO-3	MC	2N3055H	—
15	60	20	4	115	TO-3	SEM	2N3055H	—
15	70	20	4	90	TO-220	MC	—	TIP2955
16	140	15	8	150	TO-3	ON/MC	2N3773G	2N6609
16	200	15	8	250	TO-3	ON/ON	MJ15022G	MJ15023G
16	250	15	8	250	TO-3	ON/ON	MJ15024G	MJ15025G
16	140	15	8	150	TO-3	MC	2N3773	—
16	250	15	8	250	TO-3	MC	MJ15024	—
16	140	15	8	150	TO-3	ON	2N3773G	—
16	200	15	8	250	TO-3	MC	—	MJ15023
16	250	15	8	250	TO-3	MC	—	MJ15025
16	160	15	8	125	SOT-93	ON	—	MJE4353G
20	140	25	5	250	TO-3	ON/MC	MJ15003G	MJ15004G
20	100	20	12	140	TO-3	MC	2N5038	—
20	140	25	5	250	TO-3	MC/MC	MJ15003	MJ15004
20	140	25	5	250	TO-3	ON	—	MJ15004G
25	60	20	10	200	TO-3	SEM	—	2N5883
25	80	20	10	200	TO-3	ON/MC	2N5886G	2N5884G
25	100	10	15	125	TO-247	ST/MC	TIP35C	TIP36C
25	100	25	1.5	125	TO-247	ON/MC	———	BD250C
25	100	25	1.5	125	TO-247	MC	BD249C	—
25	100	10	15	125	TO-3P	MC/MC	TIP35C	TIP36C
30	60	10	40	150	TO-247	SEM	BUW48	—
30	80	10	30	150	TO-247	SEM	BUW49	—
30	90	25	7.5	200	TO-3	ST	MJ802	—
30	100	6	30	200	TO-3	SEM/SEM	2N6328	2N6331
30	450	—	—	250	TO-3	ST	BUX98A	—
50	125	20	25	250	TO-3	ST	BUV20	—
100	200	—	100	250	ISOTOP	ST	BUT30V	—

211280

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	500+	1K+
BD135	ST	**980-1529**	0.950	0.440	0.310	0.220	0.210
BD136	ST	**995-6263**	0.590	0.310	0.210	0.150	0.131
BD136-16	ST	SMD **108-4564**	0.280	0.240	0.161	0.119	0.108
BD138	ST	**995-6271**	0.340	0.270	0.200	0.165	0.155
BD139G	ON	**955-6052**	0.440	0.310	0.220	0.177	0.141
BD139	ST	**101-5770**	0.370	0.240	0.183	0.137	0.128
BD139-10	ST	SMD **108-4507**	0.290	0.220	0.153	0.133	0.116
BD139-16	ST	SMD **108-4508**	0.280	0.240	0.161	0.119	0.108
BD140-10	ST	SMD **108-4565**	0.270	0.220	0.147	0.128	0.109
BD140-16	ST	SMD **108-4566**	0.280	0.240	0.161	0.119	0.108
BD140G	ON	**955-6060**	0.650	0.440	0.320	0.250	0.191
BD179G	ON	**955-7059**	0.580	0.350	0.280	0.220	0.180
BD180G	ON	**955-7067**	0.490	0.350	0.280	0.220	0.180
BD237G	ON	**955-7571**	0.540	0.310	0.270	0.199	0.179
BD237	ST	**994-6560**	0.480	0.350	0.290	0.230	0.210
BD238	ST	**980-1537**	1.280	1.060	0.880	0.750	0.240
BD249C	MC	**929-4031**	2.810	2.020	1.670	1.450	1.350
BD250C	MC	**929-4414**	3.370	2.410	2.020	1.730	1.640
BD434	ST	**995-6301**	0.510	0.310	0.230	0.188	– –
BD435	ST	**995-6310**	0.510	0.310	0.230	0.188	– –
BD436	ST	**995-6328**	0.350	0.310	0.290	0.230	– –
BD437G	ON	**955-7610**	0.560	0.350	0.280	0.220	0.192
BD438G	ON	**955-7628**	0.710	0.370	0.330	0.220	0.200
BD438	ST	**101-5772**	0.710	0.380	0.270	0.177	– –
BD439	ST	SMD **108-4509**	0.440	0.330	0.240	0.200	0.182
BD441	ST	SMD **108-4510**	0.440	0.340	0.260	0.210	0.186
BDX36	SEM	**120-8623**	2.480	1.760	1.380	0.750	0.670
BFX34	ST	**994-6632**	2.950	1.840	1.380	1.220	1.180
BUP40	SEM	**120-8624**	2.160	1.480	0.940	0.650	0.630
BUT30V	ST	**993-5240**	30.570	24.190	20.150	– –	– –
BUV20	ST	**117-5680**	12.640	9.050	7.020	5.740	4.910
BUW48	SEM	**120-8678**	12.320	8.670	6.060	3.520	3.130
BUW49	SEM	**120-8679**	11.530	8.240	6.010	3.520	3.130
BUX98A	ST	**980-1855**	10.670	7.920	6.160	5.170	4.800
MJ802	ST	**994-6578**	4.340	3.210	2.420	2.100	1.810
MJ2955	ST	**994-6659**	2.070	1.460	1.020	0.870	0.750
MJ2955	MC	**116-5912**	0.970	0.950	0.730	0.560	0.550
MJ15003G	ON	**955-6460**	3.360	2.500	1.780	1.530	1.360
MJ15003	MC	**116-5909**	2.990	2.130	1.770	1.560	1.460
MJ15004G	ON	**955-6478**	3.360	2.500	1.780	1.530	1.360
MJ15004	MC	**116-5921**	3.090	2.220	1.830	1.600	1.530
MJ15004G	ON	**955-6478**	3.360	2.500	1.780	1.530	1.360
MJ15015G	ON	**955-6486**	2.270	1.610	1.300	1.080	0.880
MJ15016G	ON	**955-7130**	3.340	2.260	1.750	1.400	1.140
MJ15022G	ON	**955-7784**	3.920	2.910	2.070	1.780	1.580
MJ15023G	ON	**955-7792**	3.920	2.910	2.070	1.780	1.580
MJ15023	MC	**116-5922**	6.340	4.520	3.770	3.290	3.070
MJ15024G	ON	**955-6729**	3.920	2.910	2.070	1.780	1.580
MJ15024	MC	**116-5910**	6.710	4.780	3.980	3.470	3.270
MJ15025G	ON	**955-6737**	3.920	2.910	2.070	1.780	1.580
MJ15025	MC	**116-5923**	6.880	4.940	4.110	3.560	3.360
MJE340G	ON	**955-7822**	0.630	0.390	0.310	0.220	0.187
MJE340	ST	**980-2479**	0.640	0.480	0.330	0.270	0.220
MJE350G	ON	**955-7830**	0.630	0.430	0.310	0.250	0.187
MJE350	ST	**980-2487**	0.510	0.360	0.260	0.230	0.220
MJE4353G	ON	**955-6028**	5.810	3.180	2.630	1.860	1.760
PNP3055	SEM	**120-8592**	2.660	2.280	1.360	1.200	1.100
TIP33C	ST	**993-6106**	1.470	1.160	0.940	0.780	0.630
TIP34C	ST	**993-6114**	1.330	1.140	0.860	0.780	– –
TIP35C	MC	**929-4350**	1.620	1.140	0.970	0.850	0.770
TIP35C	ST	**993-6122**	1.580	1.160	0.930	0.790	– –
TIP36C	ST	**993-6130**	1.580	1.160	0.930	0.790	– –
TIP36C	MC	**929-4643**	1.680	1.200	1.000	0.890	0.820
TIP2955	MC	**929-4619**	0.910	0.900	0.740	0.610	0.600
TIP2955	MC	**993-6084**	1.460	1.130	0.910	0.730	0.590
TIP3055	MC	**929-4325**	1.110	0.810	0.670	0.580	0.550
2N3055	ST	**980-1308**	1.510	1.140	0.910	0.750	0.620
2N3055	MC	**116-5889**	0.710	0.680	0.480	0.430	0.420
2N3055H	SEM	**120-8631**	2.220	1.900	1.730	1.500	1.450
2N3055H	MC	**116-5890**	1.570	1.120	0.940	0.810	0.750
2N3442	MC	**116-5891**	1.430	1.010	0.860	0.730	0.700
2N3716	SEM	**120-8626**	4.320	2.680	1.920	1.180	1.120
2N3771	ST	**994-6608**	2.240	1.740	1.690	1.650	1.600
2N3772	ST	**994-6616**	2.550	1.890	1.670	1.640	1.590
2N3772	MC	**116-5892**	2.790	2.010	1.670	1.450	1.350
2N3773G	ON	**955-6745**	3.470	2.570	1.830	1.570	1.400
2N3773	MC	**116-5893**	2.920	2.080	1.730	1.530	1.410

RL Re-reeling available

High Power Bipolar Transistors - P_{tot} 5W to 250W - continued

General Purpose - continued

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	500+	1K+
2N4920G	ON	955-6435	0.700	0.480	0.340	0.290	0.230
2N3773G	ON	955-6745	3.470	2.570	1.830	1.570	1.400
2N4923G	ON	955-6443	0.700	0.480	0.340	0.290	0.230
2N5038	MC	116-5894	2.790	2.010	1.670	1.450	1.350
2N5192	ST	980-1324	1.180	0.850	0.670	0.520	0.480
2N5195G	ST	955-6451	0.760	0.520	0.370	0.310	0.240
2N5883	SEM	118-2790	9.350	5.970	4.430	2.750	2.570
2N5884G	ON	955-6044	3.130	2.330	1.660	1.420	1.270
2N5886G	ON	955-6087	3.130	2.320	1.650	1.420	1.260
2N6254	SEM	120-8632	10.100	5.210	4.000	2.600	2.100
2N6328	SEM	118-2792	6.910	4.410	3.270	2.030	1.880
2N6331	SEM	118-2793	10.010	6.250	4.530	2.740	2.560
2N6609	MC	116-5913	2.950	2.110	1.750	1.540	1.440
2SA1209	SY	120-8641	0.690	0.680	0.640	0.520	0.500
2SC2911	SY	120-8642	0.770	0.750	0.670	0.540	0.530
BUP41	SEM	120-8625	1.340	0.960	0.670	0.580	0.550
BD135-16	ST	SMD 108-4506	0.280	0.240	0.161	0.119	0.108

High Voltage Power Transistors - Vceo 150V to 800V

High Voltage Switching

ON Semiconductor

multicomp

BOURNS

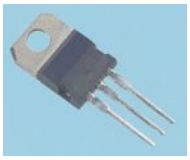
FAIRCHILD SEMICONDUCTOR



TO-247



TO-3 (TO-204AA)



TO-220AB (SOT-78B)



TO-126



TO-39

V_{CEO} max. V	$I_{C\ (av)}$ max. A	V_{CES} (V_{CBO}*) max. V	$V_{CE\ sat}$ @ V	I_C A	t_f max. (typ.*) µs	P_{tot} @ 25°C W	Package	Mftr.	Mftrs. List No.
NPN									
200	70	200	0.9	70		300	TO-3	SEM	BUP52
200	50	200	1.2	40		2	TO-3	ST	BUV61
200	10	400	1	5		60	TO-220	MC	BU406
200	7	400	1	5		60	TO-220	ST	BU406
250	60	250	1	60		180	TO-247	ST	BUTW92
250	1	250	1	1		40	TO-220	MC	TIP47
250	1	300	0.5	0.05	—	10	TO-39	ST	2N3440
250	1	300	0.5	0.05		10	TO-39	ST	2N3440
250	1	300	0.5	0.05		10	TO-39	MC	2N3440
300	1	300	0.5	0.05		10	TO-39	ST	2N3439
300	0.25	300	1			11	TO-126	SEM	BD232
400	30	400				250	TO-3	SEM	BUS14
400	15	400	5	15		175	TO-3	ST	BUX48
400	15	800	5	15		175	TO-3	MC	BUX48
400	15	850	5	15		175	TO-3	ST	2N6547
400	15	850	5	15		175	TO-3	MC	2N6547
400	12	700	1.5	8		100	TO-220	ON	MJE13009G
400	10	800	1.5	5		100	TO-3	MC	BUX80
400	10	1000	3.3	8		100	TO-3	MC	BUY69A
400	8	700	1.5	5		80	TO-220 (SOT-78B)	MC	TMJE13007
400	8	700	1.5	5		80	TO-220	ON	MJE13007G
400	6	900	3	4		70	TO-247	MC	BU426A
400	5	400	0.5			70	TO-220	ST	BUL381D
400	4	400	6	3		60	TO-220	ON	MJE13005G
400	4	400	6	3		60	TO-220	MC	MJE13005
400	4	400	6	3		60	TO-220	ON	MJE13005G
400	4	400	0.7			70	TO-220	ST	BUL128D-B
400	4	400	0.7			70	TO-220	ST	BUL128
400	2	800	0.8	0.3		40	TO-220	MC	BUX84
400	1.5	700	1	1		40	TO-126	ON	MJE13003G
400	1	400	1	0.03		40	TO-220AB	ON	TIP50G
400	1	400	1	1		40	TO-220	MC	TIP50
450	160	450	2			270	ISOTOP	ST	BUF460AV
450	50	450	1.2	32		250	ISOTOP	ST	BUV298V
450	30	450	1.5			200	TO-247	ST	BUF420AW
450	30	450	1.5			250	TO-3	SEM	BUS14A
450	30	450	1.5	16		150	ISOTOP	ST	BUV98AV
450	30	1000	1.5	16		250	TO-3	ST	BUX98A
450	24	450	1.2	16		200	TO-247	ST	BUX98APW
450	15	450	1			125	SOT-93	ST	BUL810
450	15	450	2			125	SOT-93	ST	BUF410A
450	15	450	1.5	8		175	TO-3	ST	BUX48A
450	15	1000	5	0.4		175	TO-3	MC	BUX48A
450	15	1000	2	2		150	TO-247	MC	BUV48A
450	15	1000	2	2		150	SOT-93	ST	BUV48A
450	10	1000	0.8			100	TO-220	ST	BUL510
450	10	450				100	TO-3	SEM	BUX81

V_{CEO} max. V	$I_{C\ (av)}$ max. A	V_{CES} (V_{CBO}*) max. V	$V_{CE\ sat}$ @ V	I_C A	t_f max. (typ.*) µs	P_{tot} @ 25°C W	Package	Mftr.	Mftrs. List No.
NPN									
450	8	1000	1.5	6		125	TO-247	MC	BUW12A
450	8		1.5			85	TO-220	ST	BUL58D
450	8		0.5			90	TO-220	ST	BUL59
450	8		1.5	0.25		70	TO-220	ST	BUL1102E
450	5	1000				100	TO-3	SEM	BUS11A
450	5		0.5			80	TO-220	ST	BUL38D
450	4	450	1.5			30	TO-220FP	ST	BUL1102EFP
450	4		0.5			70	TO-220	ST	BUL39D
450	3		1			35	D2-PAK	ST	BULD1101ET4
450	1.6		0.5	0.8		20	D-PAK	ST	STD616AT4
450	0.5		1	0.2		20	D-PAK	ST	BUXD87T4
450	0.5		1	0.2		40	SOT-93	ST	BUX87
500	10	1000	0.5			36	TO-220FP	ST	BUL310FP
500	5	500	1.1			36	TO-220FP	ST	BUL312FP
500	5	1000	0.5			75	TO-220	ST	BUL310
600	3		0.5			60	TO-220	ST	BUL213
800	12	1200	1			160	TO-3	SEM	BUX88
800	6	1600	1.5			110	TO-220	ST	BUL416
800	4	1600	1			90	TO-220	ST	BUL216
700	15		1.5	6		175	TO-3 (TO-204AA)	ST	BUX48C
PNP									
400	8.0	450	2	4.0		80	TO-220AB	ON	MJE5852G
375	1	375	1	1		2	TO-220	ON	MJE5731AG

211250

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	500+	1K+
2N3439	ST	101-5769	1.27	0.85	0.70	0.62	0.55
2N3440	ST	994-6624	0.88	0.70	0.53	0.46	– –
2N3440	MC	920-7040	2.10	1.31	0.99	0.60	0.51
2N6547	ST	994-6594	3.20	2.70	2.62	2.55	– –
2N6547	MC	116-5898	5.09	3.66	3.03	2.64	2.48
BD232	SEM	120-8611	1.79	1.71	1.16	0.62	0.56
BU406	ST	980-1782	2.15	1.18	0.92	0.44	0.40
BU406	MC	929-4104	0.98	0.70	0.58	0.52	0.48
BU426A	MC	929-4112	1.95	1.37	1.16	1.00	0.95
BUL38D	ST	108-4526	0.82	0.62	0.46	0.41	– –
BUL39D	ST	108-4527	0.78	0.56	0.43	0.35	0.33
BUL58D	ST	108-4528	1.38	1.02	0.79	0.67	0.58
BUL59	ST	108-4529	0.92	0.71	0.52	0.42	0.37
BUL128	ST	993-5177	0.93	0.70	0.57	0.46	0.40
BUL213	ST	108-4523	0.84	0.62	0.48	0.37	0.34
BUL216	ST	993-5193	1.51	1.14	0.91	0.73	0.62
BUL310	ST	993-5207	1.45	1.07	0.82	0.70	0.60
BUL310FP	ST	993-5215	2.10	1.58	1.26	1.02	0.95
BUL312FP	ST	108-4545	0.80	0.60	0.46	0.34	0.31
BUL381D	ST	108-4524	1.14	0.87	0.66	0.51	0.46
BUL416	ST	993-5223	3.45	2.55	2.05	1.51	1.06
BUL510	ST	993-5231	2.08	1.58	1.20	1.01	– –
BUL810	ST	108-4514	3.06	2.37	1.78	1.38	1.23
BUL128D-B	ST	108-4520	0.52	0.38	0.30	0.26	0.22
BUL1102E	ST	108-4539	0.92	0.71	0.52	0.42	0.37
BUL1102EFP	ST	108-4542	1.00	0.78	0.56	0.46	0.42
BUP52	SEM	120-8613	18.96	15.14	12.01	9.65	9.14
BUS11A	SEM	120-8614	6.19	4.58	3.75	2.22	1.99
BUS14	SEM	120-8617	20.35	14.79	11.67	6.81	6.13
BUS14A	SEM	120-8618	20.48	15.15	12.27	7.69	6.88
BUV48A	ST	980-1839	3.21	3.07	1.72	1.59	1.55
BUV48A	MC	929-4139	4.49	3.22	2.67	2.32	2.20
BUV61	ST	108-4462	21.43	15.92	12.02	9.42	8.68
BUW12A	MC	929-4147	2.00	1.44	1.19	1.03	0.96
BUX48	MC	116-5899	4.30	3.05	2.57	2.22	2.10
BUX48A	MC	116-5900	4.48	3.20	2.66	2.31	2.18
BUX80	MC	116-5901	1.99	1.43	1.19	1.03	0.96
BUX81	SEM	118-2798	7.50	5.61	4.50	2.66	2.47
BUX84	MC	929-4155	0.91	0.64	0.54	0.46	0.44
BUX88	SEM	120-8619	18.17	13.93	11.32	7.08	6.75
BUX98A	ST	980-1855	10.67	7.92	6.16	5.17	4.80
BUY69A	MC	116-5903	3.22	2.29	1.92	1.66	1.57
BUTW92	ST	108-4463	11.33	9.51	6.64	5.13	4.88
BUX98APW	ST	108-4474	11.26	9.06	7.34	7.15	6.96
BUX48	ST	108-4475	7.53	5.61	4.23	3.45	3.07
BUXD87T4	ST	SMD 108-4476 RL	0.85	0.63	0.48	0.36	0.34
BUV298V	ST	108-4477	54.35	42.12	31.67	23.53	21.91
BUV98AV	ST	108-4478	29.63	22.96	17.26	12.83	11.96
BUX87	ST	108-4479	1.03	0.88	0.59	0.46	0.43
BUX48A	ST	108-4480	8.04	5.96	4.50	3.64	3.25
BUX48C	ST	108-4488	10.72	7.96	6.01	4.78	4.35
BULD1101ET4	ST	SMD 108-4493	1.24	0.96	0.73	0.53	0.50
BUF460AV	ST	108-4503	78.36	60.75	45.67	34.97	31.60
BUF410A	ST	108-4512	6.68	4.97	3.75	3.05	2.69
BUF420AW	ST	108-4546	6.70	5.40	4.50	4.09	3.77
MJE5731AG	ON	955-6290	1.43	1.05	0.78	0.65	0.49
MJE5852G	ON	955-5889	2.74	2.03	1.45	1.24	1.11
MJE13003G	ON	955-6273	0.67	0.39	0.30	0.22	0.21
MJE13005G	ON	955-7849	0.86	0.59	0.42	0.36	0.28
MJE13005	MC	929-4171	0.91	0.64	0.54	0.46	0.44
MJE13005G	ON	955-7849	0.86	0.59	0.42	0.36	0.28
TMJE13007	MC	920-6957	1.86	0.92	0.69	0.62	0.57
MJE13007G	ON	955-7857	1.23	0.71	0.61	0.44	0.35
MJE13009G	ON	955-7865	1.35	0.98	0.72	0.60	0.46
STD616AT4	ST	SMD 108-4461 RL	0.63	0.54	0.45	0.36	0.27
TIP47	MC	929-4376	0.44	0.43	0.34	0.28	0.27
TIP50G	ON	116-6989	0.82	0.61	0.45	0.37	0.30
TIP50	MC	929-4384	0.68	0.49	0.40	0.36	0.34

Mftrs. List No.		Order Code	Price Per Tube 1+	3+	8+
BUV298V	TUBE 10	NEW 156-4179	412.74	392.10	307.16
BUV48A	TUBE 30	NEW 156-4181	63.34	56.35	53.83

RL Re-reeling available

Farnell

NPN High Voltage Power Modules



ISOTOP
H=12.2, W=25.4, D=38.2

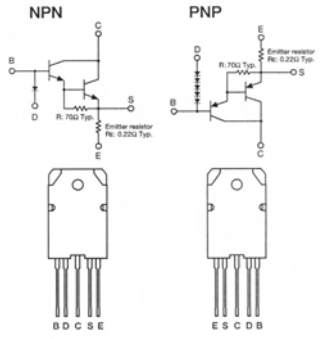
$I_C$max A	V_{CEO} V	$I_{C(pk)}$ A	h_{FE} typ.	@	I_c A	P_{TOT} W	Mftrs. List No.
150	200	150	27 typ		100	250	BUT30V
160	450	160	15 min		60	270	BUF460AV

423028

Mftrs. List No.	Mftrs.	Order Code	Price Each 1+	25+	100+
BUT30V	ST	**993-5240**	30.57	24.19	20.15
BUF460AV	ST	**108-4503**	78.36	60.75	45.67

High-Gain Audio Power Output Transistors

With In-built Temperature Compensating Diodes



- Built-in temperature compensation diodes and one emitter resistor
- Real-time temperature compensation
- Symmetrical NPN/PNP pin-out design
- Designed for high quality audio output stages

Body H=28, W=17.8, D=4.5
Lead L=18

$I_{C\ (av)}$ max. A	V_{CEO} max. V	V_{CBO} max. V	$V_{CEO(sat)}$ max. V	I_B max. A	h_{FE} min.	@ I_C A	Emitter resistor Ω	P_{tot} @ 25C W	Mftr.	Mftrs. List No. NPN	PNP
15	160	160	2.0	1	5000	10	0.22	150	SNK	SAP15N	SAP15P

241459

Mftrs. List No.	Order Code	Price Each 1+	10+	25+	100+	250+
SAP15N	**118-2829**	4.74	4.65	4.21	3.55	3.43
SAP15P	**118-2830**	4.74	4.65	4.21	3.55	3.43

Audio Power Output Transistors

ON Semiconductor



TO-220



TO-3



TO-264

- High power complimentary pairs
- For high quality audio output stages, and general purpose push-pull amplifier configurations
- Silicon epitaxial fabrication
- 2SB817/2SD1047 incorporate ballast resistors for wider SOA, improved f_T vs. I_C, and extended h.f. response

$I_{C\ (av)}$ max. A	V_{CEO} max. V	I_C pk A	V_{CBO} max. V	h_{FE} min.	@ I_C A	P_{tot} @ 25C W	Package	Mftr.	Mftrs. List No. NPN	PNP
1	250	—	250	50	1	50	TO-220	ON	MJE15032G	MJE15033G
1	250	—	250	50	1	50	TO-220	MC	MJE15032	
8	150	16	150	20	4	50	TO-220	ON	MJE15030G	MJE15031G
15	160	—	160	50	5	130	TO-3P	ASN	2SC3519	2SA1386
15	230	—	230	50	5	130	TO-3P	ASN	2SC3263	2SA1294
15	230	—	230	55	1	150	TO-264	MAG	2SC5200-0	2SA1943-0
15	200	200	200	60	7	200	TO-264	ON	MJL3281AG	MJL1302AG
15	160	160	160	5000	10	150	TO-3P5	SNK	SAP15N	SAP15P
16	250	—	400	25	8	200	TO-264	ON	MJL21194G	MJL21193G
16	250	—	400	25	8	250	TO-3	ON	MJ21194G	MJ21193G
17	180	16	180	30	8	200	MT-200	ASN	2SC2922Y	2SA1216Y
17	230	—	230	50	5	200	MT-200	ASN	2SC3264	2SA1295
With On-board Ballast Resistors for Improved SOA										
12	140	—	160	100	1	100	TO-3PB	SAN	2SD1047	—

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	500+	1K+
MJ21193G	ON	**955-6613**	3.92	2.91	2.07	1.78	1.58
MJ21194G	ON	**955-6605**	3.92	2.91	2.07	1.78	1.58
MJE15032G	ON	**955-6621**	1.20	0.89	0.65	0.55	0.41
MJE15033G	ON	**955-6630**	1.20	0.89	0.65	0.55	0.41
MJL1302AG	ON	**955-7040**	3.28	2.44	1.73	1.49	1.32
MJL21193G	ON	**955-5781**	4.33	3.21	2.29	1.96	1.75
MJL21194G	ON	**955-5790**	4.33	3.21	2.29	1.96	1.75
MJE15030G	ON	**955-7091**	1.16	0.85	0.63	0.53	0.40
MJE15031G	ON	**955-7105**	1.16	0.85	0.63	0.53	0.40
MJL3281AG	ON	**117-2585**	3.28	2.44	1.73	1.49	1.32
SAP15N	SNK	**118-2829**	4.74	4.65	4.21	3.55	3.43
SAP15P	SNK	**118-2830**	4.74	4.65	4.21	3.55	3.43
2SA1216Y	ASN	**119-2132**	4.98	4.89	4.78	4.21	4.04
2SA1294	ASN	**119-2130**	3.08	3.01	2.96	2.56	2.46
2SA1295	ASN	**119-2134**	5.05	4.96	3.81	2.94	2.86
2SA1386	ASN	**119-2128**	2.71	2.65	2.60	2.40	2.31
2SA1943-0	MAG	**121-8390**	2.58	2.53	1.55	1.33	1.28
2SC2922Y	ASN	**119-2131**	5.28	5.18	5.06	4.51	4.33
2SC3263	ASN	**119-2129**	3.27	3.21	3.15	2.73	2.64
2SC3264	ASN	**119-2133**	5.05	4.96	3.81	2.94	2.86
2SC3519	ASN	**118-2828**	2.71	2.65	2.60	2.40	2.31
2SC5200-0	MAG	**121-8389**	2.58	2.53	1.55	1.33	1.28
2SD1047-E	SAN	**119-2126**	2.10	2.06	1.84	1.37	1.32
MJE15032	MC	**157-4337**	1.56	0.76	0.57	0.52	0.47

222098

Tube of 25 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
MJL3281AG	NEW **156-4182**	44.03	34.61	31.98

CRT Deflection Transistors

NPN

multicomp



TO-3



TO-220

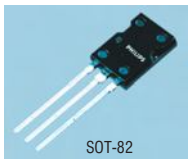
For use in horizontal deflection circuits of CRTs. Suitable for medium, high, and very high resolution monochrome and colour applications.

I_C cont. A	V_{CEO} (sus.) A	V_{CES} V	$V_{CE(sat)}$ V	@ I_C A	P_{tot} @ 25°C W	Package	Mftr.	Mftrs. List No.
4	700	1500	1	2	75	TO-220	ST	BU505
5	700	1500	1	4.5	150	TO-3	SEM	BU208A
7	150	330	1	5	60	TO-220	MC	BU407

211218

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	500+
BU208A	SEM	**120-8612**	2.93	2.24	1.82	1.58
BU505	ST	**108-4459**	1.79	1.32	1.00	0.82
Isolated Packages						
BU407	MC	NEW **157-4336**	1.41	0.82	0.68	0.53

SMPS and Lighting Transistors



SOT-82



TO-220AB

V_{CESM} (V)	$I_{C\ (dc)}$ A	t_f (max.) µs	Leaded Packages SOT-82	TO-220AB (SOT-78)
800	0.5	0.28	BUX86P	
1000	0.5	0.28	BUX87P	
1000	2	0.4		BUX85
1000	5	0.8		BUT11A

211320

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	500+	1K+
BUT11A	**108-1345**	1.67	1.24	0.89	0.71	0.60
BUX85	**108-1346**	1.81	1.03	0.72	0.50	0.36
BUX86P	SMD **108-1347**	0.96	0.63	0.46	0.33	0.31
BUX87P	SMD **108-1348**	0.88	0.58	0.43	0.32	0.24

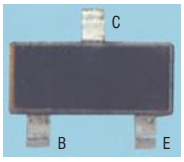
Darlington Transistors

Surface Mount Darlington

ON Semiconductor



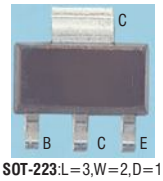
TO-252/D-pak
H=2.55, W=6.8, D=10.5



SOT-23F: L=3,W=2,D=1
SOT-23:L=3,W=2,D=1

Darlington Transistors - continued

Surface Mount Darlington - continued



SOT-223:L=3,W=2,D=1

h_{FE}* @ I_C Min	V_{CBO} Max (V)	V_{CEO} Max (V)	I_C Cont (A)	$V_{CE(sat)}$ Max (V)	$F_{T(min)}$ (MHz)	Case Style	Mftrs. List No.	Order Code
NPN								
1000	100	100	8	2	4	D-PAK	MJD122G	955-7075
2000	80	60	0.5	1	170	SOT-89	BCV49TA	147-1205
2000	90	80	0.5	1.3	—	SOT-89	BST52TA	147-1204
2000	90	80	0.5	1.3	—	SOT-89	BST52	873-5026
2000	160	140	2	1.1	150	SOT-223	FZT600	952-6650
3000	140	120	1	1.5	120	SOT-23F	ZXTN04120HFFTA	147-1197
5000	30	30	1	1.6	170	SOT-223	FZTA14TA	147-1163
5000	160	140	2	0.25	150	SOT-223	FZT603TA	147-1162
5000	140	120	1.5	1	150	SOT-223	FZT605	952-6374
10000	40	40	0.3	0.9	—	SOT-23	FMMTA14TA	147-1180
10000	80	60	0.3	1.25	—	SOT-23	FMMT38C	952-6315
10000	80	60	0.5	1	—	SOT-23	BCV47	108-1260
10000	30	30	1.2	1.5	125	SOT-23	MMBTA13	984-6590
15000	120	100	0.9	0.96	140	SOT-23	FMMT634TA	147-1179
15000	120	100	0.5	0.9	—	SOT-23	FMMT614	952-6030
PNP								
1000	100	100	2	1.5	—	D-PAK	2SB1316TL	168-0120
1000	100	100	8	-2	4	D-PAK	MJD127G	955-7083
3000	140	120	1	1.7	150	SOT-23F	ZXTP05120HFFTA	147-1198
3000	140	120	2	-1.3	—	SOT-223	FZT705	952-6382

1471198 complement to 1471197

**Measured under pulse conditions. Pulse width=300µs. Duty Cycle <2%

Mftrs. List No.	Case Style	Order Code	5+	100+	200+	500+	1K+
			Price Each				
FZT603TA	SOT-223	SMD 147-1162●	0.780	0.550	0.350	0.270	0.220
FZTA14TA	SOT-223	SMD 147-1163●	0.470	0.340	0.220	0.168	0.135
FMMT634TA	SOT-23	SMD 147-1179●	0.400	0.280	0.240	0.230	0.220
FMMTA14TA	SOT-23	SMD 147-1180●	0.280	0.200	0.152	0.132	0.097
BST52TA	SOT-89	SMD 147-1204●	0.260	0.178	0.152	0.145	0.138
BCV49TA	SOT-89	SMD 147-1205●	0.240	0.167	0.141	0.137	0.129
ZXTN04120HFFTA	SOT-23F	SMD 147-1197●	0.380	0.340	0.300	0.260	0.220
ZXTP05120HFFTA	SOT-23F	SMD 147-1198●	0.380	0.340	0.300	0.260	0.220
BCV47	SOT-23	SMD 108-1260●	0.137	0.072	0.048	0.041	0.039
BST52	SOT-89	SMD 873-5026● RL	0.520	0.390	0.310	0.250	0.196
FMMT38C	SOT-23	SMD 952-6315● RL	0.330	0.240	0.179	0.141	0.126
FMMT614	SOT-23	SMD 952-6030● RL	0.320	0.173	0.163	0.139	0.126
FZT600	SOT-223	SMD 952-6650● RL	0.890	0.680	0.440	0.280	0.260
FZT605	SOT-223	SMD 952-6374● RL	0.930	0.680	0.520	0.410	0.340
FZT705	SOT-223	SMD 952-6382● RL	0.760	0.630	0.500	0.370	0.240
Order Multiple=1			1+	25+	100+	500+	+
MJD122G	D-PAK	SMD 955-7075●	0.770	0.460	0.380	0.260	– –
MJD127G	D-PAK	SMD 955-7083●	0.840	0.570	0.460	0.380	– –
2SB1316TL	D-PAK	NEW SMD 168-0120●	0.910	0.630	0.480	0.400	0.290
Order Multiple=10			10+	100+	250+	1K+	3K+
MMBTA13	SOT-23	SMD 984-6590● RL	0.141	0.089	0.059	0.033	0.023

498286

Reels of 1000 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
FZT605TA	NEW SMD 156-2462●	253.25	227.93
FZT705TA	NEW SMD 156-2463●	212.45	– –
FZT600TA	NEW SMD 156-2464●	226.00	– –

0.3A to 2A

TO-92 (TO-226AA)

FAIRCHILD SEMICONDUCTOR™ BOURNS ON Semiconductor



$I_{C(av)}$ max. A	V_{CEO} (max.) V	h_{FE} min.	I_c A	P_{tot} @ 25°C W	Package	Mftr.	Mftrs. List No. NPN	PNP
0.3	30	10000	0.1	0.625	TO-92	FCH	—	MPSA63
0.3	60	20	0.1	625	TO-92	MC	MPSA14	
0.4	30	30000	0.02	0.6	TO-92	FCH	—	BC517
0.4	30	30000	0.02	0.6	TO-92	FCH	—	BC516
1	30	30000	0.02	0.625	TO-92	ON	BC517ZL1G	—
1	80	200 Typ	0.1	0.625	TO-92	ON	BC373G	—
2	80	1000	1	0.8	TO-92	BNS	TIPP111	—

428936

Order Multiple=5 Mftrs. List No.	Mftr.	Order Code	5+	25+	100+	1K+	5K+
			Price Each				
BC373G	ON	116-6981●	0.310	0.270	0.067	0.058	0.057
BC516	FCH	101-7670●	0.143	0.099	0.070	0.050	0.035
BC517	FCH	101-7671●	0.147	0.096	0.080	0.046	0.038
BC517ZL1G	ON	955-8438●	0.072	0.043	0.032	0.027	0.021
MPSA14	MC	NEW 157-4389●	0.340	0.250	0.171	0.156	0.140
MPSA63	FCH	101-7721●	0.093	0.065	0.063	0.040	0.029
Order Multiple=1							
Mftrs. List No.	Mftr.	Order Code	1+	25+	100+	500+	1K+
TIPP110	BNS	121-6263●	1.380	0.630	0.470	0.380	0.350

0.8A to 1A

E-Line (TO-92 Compatable)

ZETEX SEMICONDUCTORS



The E-Line package as used in these Darlington transistors uses a silicone encapsulant that is rated to a much higher temperature than the common epoxies used for TO92 manufacture. This feature allows higher temperature operation, higher power rating and much higher reliability.

$I_{C(av)}$ max. A	V_{CEO} (max.) V	h_{FE} min.	I_c A	P_{tot} @ 25°C W	Mftrs. List No. NPN	PNP
0.8	60	10000	0.5	1	BCX38C	—
0.8	100	10000	0.5	1	ZTX614	—
1	80	2000	1	1	ZTX603	—
1	120	3000	1	1	—	ZTX705

428943

Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	100+	1K+	5K+
		Price Each				
BCX38C	952-5890●	0.380	0.310	0.220	0.138	0.126
ZTX603	952-5904●	1.170	0.860	0.550	0.370	0.300
ZTX614	952-5971●	0.740	0.480	0.310	0.220	0.193
ZTX705	952-5963●	0.700	0.570	0.440	0.330	0.280

For **Heatsinks** see page 778
and for **Thermal Insulation Kits** see page 762

4A

TO-126 (SOT-32)

ON Semiconductor ON multicomp ST



Mftrs. List No.	V_{CEO} (max.) V	h_{FE} min.	I_c A	P_{tot} @ 25°C W	Mftr.
NPN					
BD675G	45	750	1.5	40	ON
BD677	60	750	1.5	40	ST
BD677AG	60	750	2	40	ON
BD679	60	750	1.5	40	ST
BD679AG	80	750	2	40	ON
BD681G	60	750	1.5	40	ON
BD677	60	750	1.5	40	MC
BD679	60	750	1.5	40	MC
BD681	60	750	1.5	40	MC
PNP					
BD676G	45	750	1.5	40	ON
BD678	60	750	1.5	40	ST
BD678G	60	750	1.5	40	ON
BD680	60	750	1.5	40	ST
BD680AG	80	750	2	40	ON
BD682G	60	750	1.5	40	ON
BD678	60	750	1.5	40	MC
BD680	60	750	1.5	40	MC
BD682	60	750	1.5	40	MC

428940

Order Multiple=1 Mftrs. List No.	Mftr.	Order Code	1+	25+	100+	500+	1K+
			Price Each				
NPN							
BD675G	ON	955-7636●	0.590	0.400	0.310	0.270	0.210
BD677	ST	994-6438●	0.860	0.600	0.430	– –	– –
BD677AG	ON	955-7660●	0.450	0.350	0.280	0.220	0.176
BD679	ST	994-6454●	0.850	0.500	0.370	– –	– –
BD679AG	ON	955-7687●	0.560	0.400	0.310	0.240	0.210
BD681G	ON	955-7709●	0.720	0.490	0.350	0.300	0.230
BD677	MC	NEW 157-4359●	0.640	0.340	0.250	0.195	0.182
BD679	MC	NEW 157-4362●	0.300	0.250	0.197	0.163	0.155
BD681	MC	NEW 157-4365●	0.640	0.340	0.310	0.220	0.210
PNP							
BD676G	ON	955-7644●	0.590	0.400	0.310	0.270	0.210
BD678	ST	994-6446●	0.660	0.490	0.370	0.270	– –
BD678G	ON	955-7679●	0.520	0.290	0.250	0.197	0.156

RL Re-reeling available

Farnell

Order Multiple=1			Price Each				
BD680	ST	994-6462●	0.780	0.490	0.360	– –	– –
BD680AG	ON	955-7695●	0.710	0.400	0.330	0.270	0.210
BD682G	ON	955-7717●	0.720	0.490	0.350	0.300	0.230
BD678	MC	NEW 157-4361●	0.640	0.340	0.250	0.195	0.182
BD680	MC	NEW 157-4364●	0.300	0.250	0.197	0.163	0.155
BD682	MC	NEW 157-4366●	0.640	0.340	0.310	0.220	0.210

2A to 20A

TO-220 (SOT-78B)

FAIRCHILD SEMICONDUCTOR™ ON Semiconductor ON multicomp



$I_{C\ (av)}$ max. A	V_{CEO} (max.) V	h_{FE} @ min.	I_c A	P_{tot} @ 25°C W	Mftr.	NPN	PNP
0.3	60	20	0.1	625mW	MC	MPSA14	—
2	60	1000	1	50	ST/ST	TIP110	TIP115
2	60	1000	1	50	MC/MC	TIP110	TIP115
2	100	1000	2	50	ST/ST	TIP112	TIP117
2	100	1000	1	50	MC/MC	TIP112	TIP117
4	350	1500	2	80	ST	ST901T	—
5	60	1000	3	65	ST/ST	TIP120	TIP125
5	60	1000	3	65	MC/MC	TIP120	TIP125
5	80	1000	3	65	MC/MC	TIP121	TIP126
5	80	1000	3	65	ST/ST	TIP121	TIP126
5	100	1000	3	65	ST/ST	TIP122	TIP127
5	100	1000	3	65	MC/MC	TIP122	TIP127
5	100	1000	3	65	ON/ON	TIP122G	TIP127G
7	300	15	7	80	MC	TIP150	—
7	400	100	2	75	ST	BU810	—
7	400	15	7	80	MC	TIP152	—
8	100	1	3	80	MC	—	TIP107
8	150		4	60	MC	BU806	—
8	60	750	3	62.5	SEM/SEM	BD645	BD646
8	80	750	3	62.5	SEM/SEM	BD647	BD648
8	80	750	3	60	ST	BDX53B	BDX54B
8	100	750	3	62.5	SEM/SEM	BD649	BD650
8	100	750	3	60	ST	BDX53C(G)	—
8	100	750	3	60	ON/ON	BDX53CG	BDX54CG
8	100	1000	3	80	MC	TIP102	—
8	100	1000	4	70	ST/ST	TIP132	TIP137
8	60	1000	4	70	ST	—	TIP135
8	100	1000	4	70	MC/ST	TIP132	TIP137
8	100	1000	3	80	ON	TIP102G	TIP107G
8	80	1000	4	70	MC	TIP131	TIP136
10	80	750	4	70	MC/MC	BDX33B(G)	BDX34B(G)
10	80	1000	3	90	SEM/SEM	BDT63A	BDT62A
10	80	1000	5	65	MC	—	2N6668
10	80	1000	5	40	ST	2N6388	—
10	80	1000	5	40	MC	2N6388	—
10	80	750	4	70	MC	BDX33B	—
10	80	750	4	70	ON	BDX33BG	—
10	100	750	4	70	ST/ST	BDX33C	BDX34C
10	100	750	4	70	ON/ON	BDX33CG	BDX34CG
10	100	750	4	70	MC/MC	BDX33C	BDX34C
10	120	1000	3	90	SEM/SEM	BDT63C	BDT62C
12	80	750	5	80	MC/MC	BDW93B	BDW94B
12	100	750	5	80	MC/MC	BDW93C	BDW94C
12	100	750	5	80	ST/ST	BDW93C	BDW94C
12	80	1000	5	125	SEM/SEM	BDT65A	BDT64A
12	120	1000	5	125	SEM/SEM	BDT65C	BDT64C
15	80	1000	5	85	ON	—	BDW46G
15	100	1000	5	85	ON/ON	BDW42G	BDW47G
20	100	1000	5	90	ST/ST	TIP142T	TIP147T

Order Multiple=1			Price Each				
Mftrs. List No.	Mftr.	Order Code	1+	25+	100+	500+	1K+
BD645	SEM	119-2110●	1.750	1.010	0.870	0.510	0.390
BD646	SEM	119-2111●	2.100	1.240	1.100	0.650	0.500
BD647	SEM	119-2112●	2.390	1.360	1.080	0.620	0.530
BD648	SEM	119-2113●	2.390	1.360	1.080	0.620	0.530
BD649	SEM	120-8566●	0.900	0.660	0.620	0.530	0.500
BD650	SEM	120-8567●	0.900	0.660	0.620	0.530	0.500
BDT62A	SEM	120-8568●	1.760	1.010	0.800	0.460	0.390
BDT62C	SEM	120-8569●	2.120	1.260	0.850	0.510	0.470
BDT63A	SEM	120-8570●	2.390	1.360	0.970	0.570	0.530
BDT63C	SEM	120-8571●	2.640	1.520	1.080	0.650	0.570
BDT64A	SEM	120-8572●	3.050	1.770	1.210	0.720	0.670
BDT64C	SEM	120-8574●	3.640	2.490	1.680	1.100	1.000
BDT65A	SEM	120-8575●	3.500	2.070	1.430	0.830	0.770
BDT65C	SEM	120-8576●	3.400	2.310	1.530	1.010	0.930
BDW42G	ON	955-6877●	1.260	0.720	0.620	0.470	0.390
BDW46G	ON	116-6983●	0.940	0.780	0.620	0.490	0.410
BDW47G	ON	955-6885●	1.230	0.910	0.670	0.560	0.420
BDW93B	MC	929-4066●	0.770	0.570	0.460	0.400	0.380
BDW93C	ST	101-5773●	0.620	0.400	0.330	0.270	0.240
BDW93C	MC	929-4074●	0.810	0.600	0.480	0.430	0.400
BDW94B	MC	929-4449●	0.880	0.610	0.530	0.440	0.420
BDW94C	ST	994-6470●	0.840	0.630	0.480	0.350	– –
BDW94C	MC	929-4457●	0.900	0.650	0.540	0.460	0.440
BDX33B	MC	929-4082●	0.640	0.450	0.380	0.340	0.330
BDX33BG	ON	955-7725●	0.970	0.690	0.550	0.400	0.370

Order Multiple=1			Price Each				
Mftrs. List No.	Mftr.	Order Code	1+	25+	100+	500+	1K+
BDX33C	ST	994-6489●	0.810	0.560	0.430	0.330	– –
BDX33C	MC	929-4090●	0.680	0.490	0.400	0.360	0.340
BDX33CG	ON	955-7733●	0.820	0.630	0.460	0.390	0.300
BDX34B	MC	929-4465●	0.680	0.490	0.400	0.360	0.340
BDX34C	MC	929-4473●	0.720	0.520	0.430	0.370	0.360
BDX34CG	ON	955-7741●	0.780	0.480	0.380	0.300	0.250
BDX33B	MC	929-4082●	0.640	0.450	0.380	0.340	0.330
BDX34C	ST	101-5774●	1.580	0.880	0.590	0.410	– –
BDX53B	ST	101-5775●	0.750	0.560	0.440	0.360	0.340
BDX53C	ST	994-6497●	0.910	0.680	0.530	0.340	0.260
BDX53CG	ON	955-7750●	0.890	0.640	0.500	0.370	0.340
BDX54B	ST	101-5776●	1.190	0.830	0.670	0.600	0.460
BDX54CG	ON	955-7768●	1.110	0.660	0.520	0.430	0.340
BU806	MC	929-4120●	1.570	1.120	0.940	0.810	0.750
BU810	ST	108-4497●	3.160	2.540	1.840	1.440	1.280
ST901T	ST	108-4498●	0.620	0.520	0.360	0.280	0.260
TIP102G	ON	955-6362●	1.000	0.680	0.490	0.420	0.320
TIP102	MC	NEW 157-4394●	1.090	0.630	0.460	0.360	0.340
TIP107G	ON	955-6370●	1.230	0.720	0.560	0.370	0.360
TIP107	MC	NEW 157-4338●	1.080	0.610	0.460	0.360	0.340
TIP117	MC	NEW 157-4340●	1.040	0.530	0.390	0.350	0.340
TIP110	ST	980-3963●	0.710	0.530	0.370	0.340	0.230
TIP110	MC	929-4201●	0.530	0.380	0.330	0.290	0.270
TIP112	ST	980-3971●	0.440	0.280	0.210	0.197	0.194
TIP112	MC	NEW 157-4339●	0.670	0.450	0.370	0.250	0.220
TIP115	ST	980-3980●	0.780	0.530	0.380	0.330	0.260
TIP115	MC	929-4511●	0.510	0.360	0.310	0.270	0.250
TIP117	ST	980-3998●	0.580	0.500	0.350	0.300	0.230
TIP120	ST	980-4005●	0.660	0.490	0.340	0.300	0.230
TIP120	MC	929-4210●	0.550	0.400	0.340	0.300	0.280
TIP121	ST	980-4013●	0.860	0.600	0.430	0.370	0.290
TIP121	MC	929-4228●	0.470	0.360	0.300	0.270	0.220
TIP122	ST	980-4021●	0.700	0.500	0.350	0.300	0.210
TIP122G	ON	955-7881●	0.650	0.440	0.310	0.270	0.210
TIP122	MC	929-4236●	0.580	0.440	0.360	0.310	0.300
TIP125	ST	980-4030●	0.740	0.520	0.340	0.330	0.230
TIP125	MC	929-4520●	0.520	0.380	0.310	0.280	0.270
TIP126	ST	980-4048●	0.640	0.480	0.340	0.290	0.210
TIP126	MC	929-4538●	0.550	0.400	0.340	0.300	0.280
TIP127	ST	980-4056●	0.700	0.440	0.330	0.300	0.210
TIP127G	ON	955-7890●	0.970	0.570	0.480	0.370	0.310
TIP127	MC	929-4546●	0.580	0.440	0.360	0.310	0.300
TIP131	MC	929-4244●	0.720	0.520	0.430	0.370	0.360
TIP132	MC	929-4252●	0.720	0.520	0.430	0.370	0.360
TIP132	ST	980-4064●	1.550	1.000	0.750	0.480	0.360
TIP135	ST	980-4072●	1.110	0.720	0.550	0.370	0.300
TIP136	MC	929-4554●	0.940	0.670	0.560	0.480	0.450
TIP137	MC	116-5939●	0.980	0.700	0.580	0.520	0.480
TIP137	ST	980-4080●	1.100	0.720	0.530	0.340	0.260
TIP142T	ST	993-6076●	1.780	1.310	1.000	0.880	0.750
TIP147T	ST	108-4499●	1.600	1.310	0.940	0.800	0.670
TIP150	MC	144-0104●	2.600	1.570	1.180	0.710	0.660
TIP152	MC	NEW 157-9972●	2.600	1.570	1.180	0.710	0.660
2N6388	ST	994-6500●	0.970	0.840	0.600	– –	– –
2N6388	MC	929-4023●	0.750	0.540	0.440	0.390	0.370
2N6668	MC	929-4406●	0.770	0.560	0.470	0.400	0.380

428935

Tubes of 50			Price Per Tube		
Mftrs. List No.		Order Code	1+	4+	10+
TIP121	NEW	156-3995●	20.37	18.20	13.79

10A to 20A

TO-218 (SOT-93)

multicomp ON Semiconductor ON



$I_{C\ (av)}$ max. A	V_{CEO} (max.) V	h_{FE} min.	I_c A	P_{tot} @ 25°C W	Mftr.	Mftrs. List No. NPN	PNP
10	380	200	4	125	BNS	TIP162	—
12	80	1000	5	125	—	BDV65A	BDV64A
12	100	1000	5	125	ON	BDV65BG	BDV64BG
12	120	1000	5	125	—	BDV65C	BDV64C
15	400	300	5	135	ST	BU931P	—
15	70	20	4	90	ST/MC	TIP3055	TIP2955
16	100	1000	10	200	SEM	BDV67A	—
16	100	1000	10	200	SEM	BDV67B	BDV66B
20	100	750	10	160	ON	MJH6284G	—
Auto-protected, with built-in 350V zener clamp							
10	350	150	5	150	ON	BU323ZG	—

428939

Order Multiple=1			Price Each				
Mftrs. List No.	Mftr.	Order Code	1+	25+	100+	500+	1K+
BDV64A	SEM	120-8579●	2.28	1.85	1.53	1.15	1.03
BDV64BG	ON	955-5943●	2.41	1.33	1.10	0.74	0.68
BDV64C	SEM	120-8580●	2.55	1.98	1.76	1.46	1.29
BDV65A	SEM	120-8581●	2.41	1.60	1.29	1.07	1.03
BDV65BG	ON	955-5951●	3.50	1.93	1.59	1.07	0.99
BDV65C	SEM	120-8582●	2.71	2.20	1.90	1.54	1.43

RL Re-reeling available

Farnell

RoHS ● Compliant ▲ Non-compliant

Darlington Transistors - continued

10A to 20A - continued

TO-218 (SOT-93) - continued

Order Multiple=1			Price Each				
BDV66B	SEM	**120-8583**	9.83	6.71	4.47	2.95	2.72
BDV67A	SEM	**120-8584**	11.39	6.63	4.61	2.72	2.51
BDV67B	SEM	**120-8586**	9.83	6.71	4.47	2.95	2.72
BU323ZG	ON	**955-5960**	3.93	2.45	2.01	1.57	1.48
BU931P	ST	**108-4494**	2.93	2.16	1.76	1.45	1.38
MJH6284G	ON	**955-6010**	5.92	3.51	2.73	2.29	1.85
TIP162	BNS	**121-6253**	4.44	2.68	1.99	1.16	1.04
TIP2955	MC	**993-6084**	1.46	1.13	0.91	0.73	0.59
TIP3055	ST	**993-6092**	1.36	1.03	0.85	0.66	0.55

8A to 60A

TO-3 (TO-204AA)

ON Semiconductor

multicomp



$I_{C\ (av)}$ max. A	V_{CEO} (max.) V	h_{FE} min.	I_c A	P_{tot} @ 25°C W	Mftr.	Mftrs. List No. NPN	PNP
10	80	1000	5	150	ST	MJ3001	—
10	80	1000	5	150	MC	MJ3001	—
12	80	750	6	150	MC	2N6058	2N6051
12	100	750	6	150	MC	—	2N6052
12	100	750	6	150	MC	—	MJ2501
12	100	750	6	150	MC	2N6059	—
12	100	750	6	150	ST	2N6059.	—
16	100	1000	10	150	ST	MJ4035	MJ4032
16	120	1000	10	150	SEM	BDX67C	BDX66C
20	100	100	20	160	ST	—	2N6284
20	350	40	10	175	MC	MJ10004	—
20	400	40	10	175	MC	MJ10005	—
20	400	10	5	175	MC	MJ13333	—
30	120	1000	20	200	MC	MJ11016	MJ11015
30	120	1000	20	200	ON	MJ11016G	MJ11015G
50	60	1000	25	300	SEM	MJ11028	—
50	120	1000	25	300	MC	MJ11032	MJ11033
50	120	1000	25	300	SEM	MJ11032	MJ11033/
60	250	75	15	250	MC	MJ10021	—

428937

Order Multiple=1			Price Each				
Mftrs. List No.	Mftr.	Order Code	1+	25+	100+	500+	1K+
BDX66C	SEM	**118-2794**	10.67	7.45	5.75	3.34	2.84
BDX67C	SEM	**118-2795**	10.67	5.99	4.82	3.07	2.84
MJ3001	ST	**994-6551**	2.32	1.74	1.38	1.26	– –
MJ3001	MC	**116-5911**	2.24	1.62	1.32	1.18	1.09
MJ2501	ST	**994-6543**	2.60	2.13	1.75	– –	– –
MJ4032	ST	**994-6527**	4.42	3.26	2.53	1.90	1.61
MJ4035	ST	**994-6535**	4.11	3.05	2.32	1.76	1.49
MJ10004	MC	**116-5904**	4.30	3.05	2.57	2.22	2.10
MJ10005	MC	**116-5888**	6.22	4.14	3.23	2.65	2.38
MJ10021	MC	**116-5905**	8.75	6.25	5.21	4.52	4.25
MJ11015	MC	**116-5917**	3.59	2.56	2.14	1.86	1.74
MJ11015G	ON	**955-6575**	3.50	2.59	1.84	1.58	1.41
MJ11016	MC	**116-5906**	5.40	3.86	3.23	2.81	2.63
MJ11016G	ON	**955-6583**	3.32	2.45	1.75	1.50	1.34
MJ11028	SEM	**120-8643**	23.02	16.16	10.31	6.50	5.95
MJ11032	MC	**116-5907**	8.56	6.12	5.09	4.43	4.16
MJ11032	SEM	**120-8680**	12.63	10.23	9.29	5.84	5.36
MJ11033	MC	**116-5919**	7.82	5.59	4.66	4.05	3.80
MJ11033/	SEM	**120-8681**	12.88	10.44	9.48	5.96	5.47
MJ13333	MC	**116-5908**	3.37	2.40	2.00	1.74	1.64
2N6051	MC	**116-5916**	1.49	1.07	0.90	0.77	0.72
2N6052	MC	**116-5915**	2.17	1.56	1.29	1.13	1.04
2N6058	MC	**116-5897**	1.64	1.18	0.99	0.85	0.80
2N6059.	ST	**994-6519**	3.71	2.75	2.03	1.38	1.35
2N6059	MC	**116-5895**	2.12	1.54	1.27	1.10	1.03
2N6284	ST	**108-4502**	4.75	3.52	2.84	2.53	2.21

10A to 16A

TO-247

multicomp



$I_{C\ (av)}$ max. A	V_{CEO} (max.) V	h_{FE} @ min.	I_c A	P_{tot} @ 25°C W	Mftrs. List No. NPN	PNP
10	380	200	4	125	TIP162	—
10	60	1000	5	125	TIP140	TIP145
10	80	1000	5	125	TIP141	TIP146
10	100	1000	5	125	TIP142	TIP147
16	100	1000	10	200	BDV67A	BDV66A
16	100	1000	10	200	BDV67B	BDV66B

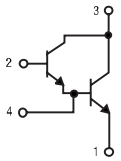
428941

Order Multiple=1		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	500+	1K+
BDV66A	**929-4422**	2.78	2.00	1.65	1.44	1.34
BDV66B	**929-4430**	2.84	2.04	1.69	1.47	1.37
BDV67A	**929-4040**	2.66	1.89	1.58	1.36	1.29
BDV67B	**929-4058**	2.74	1.95	1.63	1.39	1.32
TIP140	**929-4260**	1.72	1.23	1.03	0.90	0.85
TIP141	**929-4279**	1.73	1.27	1.03	0.92	0.86
TIP142	**929-4287**	1.76	1.30	1.07	0.93	0.89
TIP145	**929-4562**	1.25	0.90	0.74	0.66	0.62
TIP146	**929-4570**	1.78	1.28	1.08	0.93	0.89
TIP147	**929-4589**	1.47	1.09	0.90	0.76	0.73
TIP162	**929-4295**	3.03	2.18	1.80	1.57	1.47

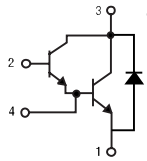
NPN Darlington Power Modules



ISOTOP
H=12.2, W=25.4, D=38.2



Pin Config. a



Pin Config. b

I_C A	V_{CEO} V	$I_{C(pk)}$ A	I_B A	h_{FE} typ.	@ I_c A	P_{TOT} W	Pin Config.	Mftrs. List No.
120	125	128	2	1200	120	175	b	ESM2012DV
67	300	100	3	300	56	150	b	ESM2030DV
100	300	150	5	300	85	225	b	ESM3030DV
42	450	63	4	220	35	150	a	ESM4045DV
60	450	90	6	150	50	175	b	ESM5045DV
72	450	108	8	150	60	250	b	ESM6045AV
84	450	126	8	120	70	250	b	ESM6045DV

		Price Each				
Mftrs. List No.	Order Code	1+	5+	10+	25+	50+
ESM2012DV	**980-2290**	19.69	17.82	16.25	14.96	13.84
ESM2030DV	**980-2304**	18.44	16.75	15.29	14.11	13.07
ESM3030DV	**980-2312**	22.34	18.95	16.77	15.58	15.00
ESM4045DV	**980-2339**	18.54	15.75	13.94	12.99	11.68
ESM5045DV	**980-2347**	25.00	21.32	20.74	20.21	19.69
ESM6045AV	**980-2355**	33.07	30.02	27.35	25.18	23.33
ESM6045DV	**980-2363**	49.52	38.48	32.63	29.85	28.87

211179

Tubes of 10		Price Per Tube		
Mftrs. List No.	Order Code	1+	3+	8+
ESM3030DV	NEW **156-3991**	164.35	145.51	142.59
ESM6045AV	NEW **156-3992**	248.86	– –	– –
ESM6045DV	NEW **156-3994**	319.75	280.02	274.43

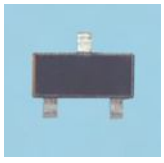
RF Bipolar Transistors

RF Transistors

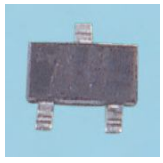
2 to 15V $_{CEO}$

SMD

Infineon technologies



SOT-23



SOT-143



SOT-223



SOT-323

V_{CEO} V	$F_{T(typ)}$ GHz	$I_{C\ (av)}$ A	P_{tot} mW	h_{FE} @ min.	I_c mA	Package	Device I.D.	Mftrs. List No.
2.3	65	0.08	185	110	50	TSFP4	R2s	BFP620
4	36	0.05	200	100	30	SOT-343	R4s	BFP640
4.5	1.8	0.08	250	50	50	SOT-343	ATs	BFP540
4.5	25	0.01	55	50	5	SOT-343	ALs	BFP405
4.5	25	0.03	160	50	20	SOT-343	AMs	BFP420
6	9	0.08	380	60	40	TSFP3	FCs	BFR380F
6	14	0.01	60	60	5	TSFP3	FAs	BFR340F
6	14	0.035	210	60	15	TSFP3	FB2	BFR360F
10	9	0.035	250	100	5	TSFP3	RKs	BFR949F
12	6	0.03	300	50	30	SOT-323	R1s	BFR93AW
12	8	0.05	580	50	30	SOT-343	RCs	BFP193W
12	8	0.02	175	50	5	SOT-323	RFs	BFR181W
12	8	0.035	250	50	10	SOT-323	RGs	BFR182W
12	8	0.065	450	50	15	SOT-323	RHs	BFR183W
15	2.5	0.05	280	20	25	SOT-23	MC	BFS17P
15	5	0.03	280	40	14	SOT-23	GF	BFR92P
15	5.5	0.2	2000	50	200	SOT-223	BFG235	BFG235

422853

Order Multiple=1		Price Each		
Mftrs List No.	Order Code	1+	25+	100+
BFG235	SMD **121-4293** RL	3.640	2.180	1.880
BFP193W	SMD **121-4294** RL	0.920	0.680	0.500
BFP405	SMD **105-6518** RL	0.530	0.340	0.270
BFP420	SMD **105-6519** RL	0.830	0.470	0.340
BFP540	SMD **109-5659** RL	0.670	0.460	0.380

RL Re-reeling available

Farnell

Order Multiple=1		Price Each		
Mftrs List No.	Order Code	1+	25+	100+
BFP620	SMD 109-5660 ●	0.820	0.550	0.450
BFP640	SMD 109-5661 ● RL	1.350	0.910	0.730
BFR92P	SMD 105-6520 ● RL	0.340	0.184	0.141
BFR181W	SMD 109-5662 ● RL	0.330	0.197	0.156
BFR182W	SMD 109-5664 ● RL	0.250	0.165	0.125
BFR183W	SMD 109-5665 ● RL	0.290	0.172	0.138
BFR340F	SMD 109-5666 ●	0.260	0.166	0.130
BFR360F	SMD 109-5667 ●	0.320	0.195	0.154
BFR380F	SMD 109-5668 ●	0.320	0.198	0.158
BFR949F	SMD 109-5669 ●	0.185	0.120	0.094
BFS17P	SMD 105-6522 ● RL	0.250	0.112	0.073
		5+	100+	250+
BFR93AW	SMD 105-6521 ●	0.250	0.133	0.118

R.F. Transistors



SOT-343



SOT-223

- Transition frequencies 1GHz to 25GHz
- Power ratings up to 1 Watt

V_{CEO} V	I_c (pk) mA	P_{tot} mW	f_T (typ.) GHz	NF (typ.) dB	@ I_C mA	G_{ms} (typ.) dB	@ I_C mA	Package	Device I.D.	Mftrs. List No.
NPN										
4.5	12	55	25	1.15	2	22	5	SOT-343	ALs	BFP405
4.5	35	160	25	1.05	5	20	20	SOT-343	AMs	BFP420
12	50	300	6	2	5	15	30	SOT-323	R1s	BFR93AW
12	80	580	8	2.1	10	13	30	SOT-343	RCs	BFP193W
15	300	2000	5.5	2.7	60	12	200	SOT-223	—	BFG235

211077

Mftrs List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
BFG235	SMD 121-4293 ● RL	3.640	2.180	1.880	1.150	1.130
BFP193W	SMD 121-4294 ● RL	0.920	0.680	0.500	0.310	0.290
BFP405	SMD 105-6518 ● RL	0.530	0.340	0.270	– –	– –
BFP420	SMD 105-6519 ● RL	0.830	0.470	0.340	– –	– –
Order Multiple=5		5+	100+	250+	+	+
BFR93AW	SMD 105-6521 ●	0.250	0.133	0.118	– –	– –

Low Power, Wideband



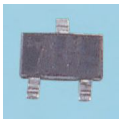
SOT-143



SOT-89



SOT-223



SOT-323



SOT-23

V_{CEO} max V	NPN/ PNP	I_c max mA	P_{tot} W	f_T GHz	h_{FE} min	Case Style	@ I_C mA	Mftr.	Mftrs. List No.
5	NPN	6.5	0.03	1.2	20	SOT-23	1	NXP	BFT25
10	NPN	—	0.36	8	50	SOT-23	5	NXP	PBR941
12	NPN	35	0.3	6	40	SOT-23	30	NXP	BFR93A
12	NPN	35	0.3	5	20	SOT-23	30	NXP	BFT93
15	NPN	25	0.3	1	25	SOT-23	25	NXP	BFS17
15	NPN	25	0.3	2.8	25	SOT-23	25	NXP	BFS17A
15	NPN	50	0.3	1.6	25	SOT-323	2	NXP	BFS17W
15	NPN	25	0.3	5	40	SOT-23	15	NXP	BFR92A
15	NPN	25	0.3	5	40	SOT-323	15	NXP	BFR92AW,115
15	NPN	100	0.5	5	25	SOT-23	50	NXP	BFR106
15	NPN	100	1	5.5	25	SOT-89	70	NXP	BFQ19
15	NPN	200	0.4	5	50	SOT-143	35	NXP	BFG590
15	NPN	150	1	7	80	SOT-223	100	NXP	BFG135
15	NPN	200	2	7	60	SOT-223	70	NXP	BFG591
15	NPN	70	0.3	9	60	SOT-23	20	NXP	BFR520
15	NPN	70	300	9	60	SOT-143B	20	NXP	BFG520
15	NPN	120	0.5	9	100	SOT-23	40	NXP	BFR540
15	NPN	—	—	9	100	SOT-343	40	NXP	BFG540W/X
15	NPN	—	—	9	100	SOT-323	40	NXP	BFS540
15	PNP	—	—	9	20	SOT-23	14	NXP	BFT92

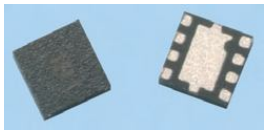
◆ Warning: These products contain a beryllium oxide disc, the disc of which is toxic. Provided this disc is not damaged, the device is entirely safe. Safe disposal precautions must be carried out according to local regulations.

211260

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	30+	100+
BFG135	NXP	SMD 108-1288 ● RL	2.770	1.670	1.140
BFG520	NXP	SMD 108-1289 ● RL	0.350	0.270	0.210
BFG590	NXP	SMD 108-1290 ● RL	1.330	0.790	0.590
BFG591	NXP	SMD 108-1291 ● RL	1.500	0.900	0.590
BFQ19	NXP	SMD 108-1292 ● RL	1.220	0.750	0.460
BFR92A	NXP	SMD 108-1297 ● RL	0.430	0.270	0.161
BFR92AW,115	NXP	SMD 121-2470 ●	0.640	0.390	0.220

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	30+	100+
BFR93A	NXP	SMD 108-1300 ● RL	0.270	0.189	0.147
BFR106	NXP	SMD 108-1293 ● RL	0.550	0.330	0.220
BFR520	NXP	SMD 108-1294 ● RL	0.570	0.380	0.280
BFR540	NXP	SMD 108-1295 ● RL	0.680	0.490	0.380
Order Multiple=5			5+	25+	100+
BFG540W/X	NXP	SMD 134-9659 ●	0.450	0.320	0.260
BFS17	NXP	SMD 108-1301 ● RL	0.200	0.137	0.112
BFS17A	NXP	SMD 108-1302 ● RL	0.280	0.155	0.099
BFS17W	NXP	SMD 108-1303 ● RL	0.149	0.100	0.080
BFS540	NXP	SMD 134-9660 ●	0.330	0.220	0.180
BFT92	NXP	SMD 134-9662 ●	0.520	0.360	0.290
Order Multiple=1			1+	30+	100+
BFT25	NXP	SMD 108-1304 ● RL	1.000	0.590	0.390
BFT93	NXP	SMD 109-7184 ● RL	0.600	0.350	0.340
Order Multiple=5			5+	30+	100+
PBR941	NXP	NEW SMD 162-6497 ●	0.240	0.184	0.138

GaAs MMIC Amplifiers



LPCC
H=0.75, W=2, D=2



SOT-343
H=1, W=2, D=2.1



SOT-363
H=1, W=2.2, D=2.2

V_{DS} V	I_c (pk) mA	P_{tot} W	Test Freq GHz	NF dB	Gain dB	P_{1dB} dBm	OIP_3 dBm	Package	Device I.D.	Mftrs. List No.
Fixed Gain Amplifers										
7	65	0.425	1.9	14.2	14.2	17.4	31.7	SOT-343	42	MGA-52543
5.5	70	0.4	1.9	1.3	17.4	18.6	39.1	SOT-343	53x	MGA-53543
Smart Bias Amplifers										
6	100	0.5	2	0.9	19.3	15.1	31.7	SOT-363	6Ax	MGA-61563
6	100	0.6	0.5	0.93	21.8	18	34.8	SOT-363	62x	MGA-62563

V_{DS} V	I_c (pk) mA	P_{tot} W	Test Freq GHz	Test Voltage V	P_{sat} dBm	Gain dB	PAE %	Package	Device I.D.	Mftrs. List No.
Medium Power Amplifiers										
5	145	0.8	5.8	3.3	22		46	LPCC	4Tx	MGA-545P8
High Isolation Buffer Amplifiers										
V_{DS} V	I_c (pk) mA	P_{tot} W	Test Freq GHz	Test Votage V	P_{sat} dBm	Gain dB	Isolation dB	Package	Device I.D.	Mftrs. List No.
8	67	0.448	2	4	20	21.8	46	LPCC	1Bx	MGA-565P8

361154

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
MGA-52543	SMD 782-0429 ●	2.15	1.77	1.60	1.45	1.40
MGA-53543	SMD 782-0437 ●	2.53	2.06	1.87	1.69	1.64
MGA-61563	SMD 782-0445 ●	1.48	1.22	1.11	1.00	0.97
MGA-62563	SMD 782-0453 ●	1.60	1.32	1.18	1.08	1.05
MGA-545P8	SMD 782-0470 ●	2.53	2.06	1.87	1.69	1.64
MGA-565P8	SMD 782-0461 ●	2.12	1.74	1.58	1.42	1.38

Unijunction Transistors

TO-18, TO-92 Unijunction

Package and Pin Out	Intrinsic Standoff Ratio	Interbase Resistance kΩ	Max Point Emitter Current	Emitter Reverse Current @ V_{BE}	Minimum Valley Current	Mftrs. List No.
TO-18	0.56-0.75	4.7 to 9.1	5µA	12µA @ 30V	4mA	2N2646

Programmable Unijunction Transistors

Package and Pin Out	Max Point Current @ R_G=10kΩ	Min valley Current @ R_G=10kΩ	Pulsed Output Voltage V_0	Max dc Anode Current	Mftrs. List No.
TO-92	5µA	70µA	6V min	150mA	2N6027RLRAG
TO-92	1µA	25µA	6V min	150mA	2N6028G

Max. interbase voltage = 35V

211310

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	1K+
2N2646	118-2799 ●	2.310	2.060	1.960	1.760
2N6027RLRAG	955-6591 ●	0.310	0.190	0.136	0.106
2N6028G	955-5935 ●	0.300	0.196	0.142	0.107

Insulated Gate Bipolar Transistors (IGBTs)

600V, IGBT



TO-220



SOT-227

RL Re-reeling available

Insulated Gate Bipolar Transistors (IGBTs) - continued

600V, IGBT - continued



D-Pak (TO-252)



TO-247



TO-220FP

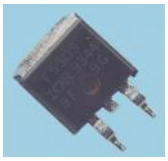
I_C @ T_c=25°C A	I_C pulsed A	$V_{CE(sat)}$ max. V	P_D @ T_c=25°C W	Package	Mftrs. List No.
6	21	2.5	20W*	TO-220FP	STGF6NC60HD
6	21	2.5	20W*	TO-220	STGP6NC60HD
6	21	2.5	20W	TO-220	STGP6NC60HD
9	30	2.5	25W*	TO-220	STGP10NC60KD
9	30	2.5	25W*	TO-220FP	STGF10NC60KD
9	30	2.5	25W*	TO-220FP	STGF10NC60HD
11	50	2.5	—	TO-220	STGP14NC60KD
11	50	2.5	—	TO-220FP	STGF14NC60KD
15	20	1.6	25W*	TO-220FP	STGF7NB60SL
20	40	2.5	60W*	TO-220	STGP10NC60HD
20	100	1.8	25W*	TO-220FP	STGF10NB60SD
20	—	1.7	80W	TO-220	STGP10NB60SD
60	200	2.5	200W*	TO-247	STGW30NC60WD
70	220	2.5	250W*	TO-247	STGW39NC60VD
70	250	1.7	200W*	TO-247	STGW35NB60SD
150	400	1.2	600W*	ISOTOP	STGE200NB60S

451638

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
STGE200NB60S	129-3645●	54.20	35.79	31.19	28.76
STGP6NC60HD	129-3649●	1.65	1.20	0.99	0.81
STGP10NB60SD	131-7111●	2.88	1.90	1.55	1.35
STGP14NC60KD	129-3646●	2.59	1.90	1.53	1.27
STGP10NC60KD	129-3647●	2.40	1.74	1.42	1.17
STGP10NC60HD	129-3648●	2.03	1.50	1.20	1.01
STGP6NC60HD	129-3649●	1.65	1.20	0.99	0.81
STGF14NC60KD	129-3651●	1.72	1.42	1.17	0.81
STGF10NB60SD	129-3652●	1.62	1.07	0.94	0.86
STGF7NB60SL	129-3653●	1.65	1.07	0.94	0.87
STGF10NC60KD	129-3654●	1.65	1.20	0.99	0.81
STGF10NC60HD	129-3656●	0.84	0.55	0.49	0.44
STGF6NC60HD	129-3657●	1.65	1.20	0.99	0.81
STGW35NB60SD	129-3658●	4.45	2.95	2.58	2.37
STGW30NC60WD	129-3659●	4.77	4.10	3.01	2.38
STGW39NC60VD	129-3660●	6.01	3.98	3.46	3.20

See our range of **IGBT Drivers and Modules** on page 663

PowerMesh™ IGBTs



D²PAK

Suffix Key:
- D - with antiparallel diode
- H - optimized for high frequency application in order to achieve very high switching performances (reduced tfall) maintaining a low voltage drop
- K - optimized for high frequency motor control applications with short circuit withstand capability
- L - built in collector-gate zener that exhibits a very precise active clamping while the gate-emitter zener supplies an ESD protection
- S - optimized to achieve minimum on-voltage drop for low frequency applications (<1kHz)

V_{CES} V	$I_{C\ cont}$ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	t_f max. typ. ns	P_D 25°C W	Package	Mftrs. List No.
400	20	1.8	60	340	1500	125	D2-PAK	STGB10NB37LZ
600	6	1.5	25	150	720	70	D2-PAK	STGB3NB60SDT4
600	20	2.5	30	6	82	60	D2-PAK	STGB10NC60KDT4

496460

Mftrs. List No.	Order Code	Price Each 1+	25+	100+
STGB10NB37LZ	SMD 145-6833●	3.25	2.47	1.97
STGB10NC60KDT4	SMD 145-6836●	1.30	1.00	0.81
STGB3NB60SDT4	SMD 145-6845●	1.23	0.92	0.75

IGBT, W/Diode, 1200V

International IOR Rectifier New



TO-247

V_{CEO} V	$I_{C\ cont}$ @ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	t_f max. (*typ.) ns	P_D @ 25°C W	Package	Mftrs. List No.
1200	60	2.66	120	25	75	300	TO-247AD	IRGP30B120KD-EP
1200	105	2.75	240	32	58	595	Super-247	IRGPS60B120KDP
600	28	2.7	58	42	120	100	TO-247AC	IRG4PC30KDPBF

528663

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
IRGP30B120KD-EP	168-8566●	11.91	8.50	6.77	5.62	4.96
IRGPS60B120KDP	168-8567●	20.16	14.40	11.45	9.51	8.40
IRG4PC30KDPBF	168-8569●	4.49	3.20	2.55	2.12	1.87

£ € 40,000 PRICES REDUCED

For **Static Protection and Cleanroom Products** see page 1052

Heatsinks see page 778



General Purpose IGBT's

300 V to 1200 V_{CEO}

FAIRCHILD SEMICONDUCTOR



TO-247 (SOT-249)



TO-220 (SOT-78b)

- Optimised for high frequency SMPS or PDP applications
- High voltage switching SOA capability
- Low conduction losses
- Increased reliability – cooler operating temperatures
- Integral anti-parallel Hyperfast™ diode options (Those with 'D' suffix)

$I_{C\ cont.}$ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	t_f max. (*typ.) ns	P_D 25°C W	Flywheel Diode	Package	Mftrs. List No.
V_{CEO} = 300 V								
90	1.4	220	200	110	219		TO-3P	FGA90N30TU
120	1.4	300	270	130	290	✓	TO-3P	FGA120N30DTU
180	1.4	450	210	140	480	✓	TO-3P	FGA180N30DTU
V_{CEO} = 600 V								
7	2.8	21	60	170	41	✓	TO-220F	FGPF7N60RUFDTU
34	2.7	56	11	45	125	✓	TO-247	HGTG7N60A4D
34	2.7	56	11	45	125	✓	TO-220AB	HGTP7N60A4D
40	2	160	20	200	165	✓	TO-247	HGTG20N60B3D
54	2.7	96	8	18	167		TO-247	HGTG12N60A4
54	2.7	96	16	95	167	✓	TO-247	HGTG12N60A4D
70	2.7	280	12	32	290	✓	TO-247	HGTG20N60A4D
70	2.7	280	12	32	290		TO-247	HGTG20N60A4
70	2.7	280	12	32	290		D2-PAK	HGT1S20N60A4S9A
75	2.6	240	12	38	463		TO-247	HGTG30N60A4
75	2.6	240	12	38	463	✓	TO-247	HGTG30N60A4D
V_{CEO} = 1200 V								
30	2.4	45	20	100	186	✓	TO-3P	FGA15N120ANTDTU
54	2.7	160	22		390	✓	TO-247	HGTG18N120BND

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
HGTG12N60A4	109-5108●	2.61	1.78	1.32	1.26	1.17
HGTG20N60A4	109-5112●	3.81	2.60	1.93	1.84	1.71
HGTG30N60A4	109-5113●	5.72	3.91	3.15	3.04	2.83
FGA90N30TU	132-4827●	1.68	1.34	1.12	1.09	1.06
HGT1S20N60A4S9A	SMD 132-4847●	2.59	2.14	1.70	1.56	1.38
Integral anti-parallel Hyperfast™ Diode						
HGTG7N60A4D	109-5116●	2.01	1.37	1.02	0.97	0.90
HGTG12N60A4D	105-7677●	3.11	2.12	1.58	1.50	1.40
HGTG18N120BND	109-5111●	4.60	3.19	2.57	2.48	2.31

RL Re-reeling available

Farnell

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
Integral anti-parallel Hyperfast™ Diode						
HGTG20N60A4D	**105-7679**	4.62	3.14	2.34	2.22	2.07
HGTG20N60B3D	**984-6603**	3.13	2.22	1.65	– –	– –
HGTG30N60A4D	**984-6611**	5.28	3.74	3.09	3.02	2.93
HGTP7N60A4D	**109-5123**	1.90	1.29	0.93	0.86	0.80
FGA120N30DTU	**132-4823**	2.24	1.86	1.55	1.51	1.47
FGA15N120ANTDTU	**132-4824**	2.30	1.69	1.26	1.20	1.12
FGA180N30DTU	**132-4825**	4.39	3.11	2.35	2.23	2.08
FGPF7N60RUFDTU	**132-4828**	0.72	0.58	0.47	0.40	0.35

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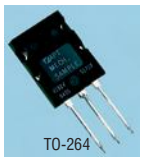
Tubes of 30 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
HGTG30N60A4	NEW **156-4032**	145.69	115.04	105.80
HGTG20N60A4D	NEW **156-4036**	60.65	59.33	– –

NPT Trench and Short Circuit Rated IGBT

FAIRCHILD SEMICONDUCTOR

1000, 1200 V_{CEO}


TO-3P


TO-264

- NPT Trench Technology
- High avalance ruggedness and easy parallel operation
- Ideal for the resonant or soft switching applications such as induction heating, microwave ovens etc.

Using Fairchilds proprietary trench design and advanced Non-punch-through (NPT) technology, these range of IGBT offer superior conduction and switching performances, high avalanche ruggedness and may be connected in parallel configuration.
FGA50N60LS is short-circuit rated; 10 µs @ 100 °C

V_{CEO} V	$I_{C\ cont.}$ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	P_D 25°C W	Package	Mftrs. List No.
600	100	1.8	150	96	240	TO-3P	FGA50N60LS
1000	60	2.9	120	320	180	TO-264	FGL60N100BNTD
1200	50	2.5	75	50	312	TO-3P	FGA25N120ANTD
1200	50	2.5	90	60	312	TO-3PN	FGA25N120ANTDTU
1200	64	3.2	120	20	500	TO-264	FGL40N120AND
1200	64	3.2	160	20	500	TO-264	FGL40N120ANTU

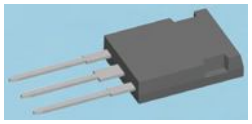
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
FGA25N120ANTD	**109-5025**	3.77	2.83	2.32	1.84	1.68
FGA25N120ANTDTU	NEW **149-8965**	3.21	2.19	1.63	1.55	1.44
FGA50N60LS	**122-8224**	3.56	3.03	2.67	2.30	– –
FGL40N120AND	**109-5036**	15.28	11.46	9.44	7.45	6.82
FGL40N120ANTU	NEW **149-5137**	9.44	6.91	5.45	4.96	4.65
FGL60N100BNTD	**109-5037**	4.58	3.44	2.84	2.23	2.05

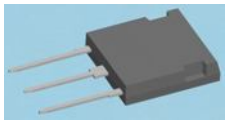
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Mftrs. List No.		Order Code	Price Per Tube 1+	4+	10+
FGL40N120AND	TUBE 25	NEW **156-4047**	224.15	180.64	167.16
FGA25N120ANTD	TUBE 30	NEW **156-4048**	90.31	71.52	65.60

600V to 1700V, Isolated

IXYS


ISOPLUS-247


ISOI4-PAK

- Isolated Mounting Surface
- 2500 V electrical isolation
- SOA short circuit rated options
- Non-punch through technology

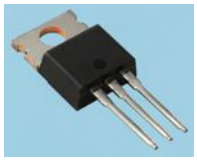
V_{CES} V	I_C @ 25 °C A	$V_{CE(sat)}$ max V	t_{rise} ns	Package	Mftrs. List No.
Non-Punch through (NPT)					
600	75	2	100	ISOPLUS-247	IXGR60N60B2
600	75	2	100	ISOPLUS-247	IXGR60N60B2D1
600	75	2.7	35	ISOPLUS-247	IXGR60N60C2
600	75	2.7	35	ISOPLUS-247	IXGR60N60C2D1
600	60	1.9	82	ISOPLUS-247	IXGR40N60B2
600	60	1.9	82	ISOPLUS-247	IXGR40N60B2D1
600	60	2.2	65	ISOPLUS-247	IXGR50N60B2D1
600	56	2.7	32	ISOPLUS-247	IXGR40N60C2
1200	70	3.6	180	ISOPLUS-247	IXSR35N120BD1
1200	70	3.3	160	ISOPLUS-247	IXGR35N120B
1200	95	2.1	50	ISOPLUS-247	IXER60N120
1200	50	2.4	70	ISOPLUS-247	IXDR30N120
1200	50	2.4	70	ISOPLUS-247	IXDR30N120D1
1200	50	2.2	50	ISOPLUS-247	IXER35N120D1
1700	38	3.5	250	ISOPLUS-247	IXGR32N170H1
1700	26	3.5	—	ISOi4-PAC	IXGF32N170
1700	26	5.2	50	ISOPLUS-247	IXGR32N170AH1
1700	16	5	40	ISOPLUS-247	IXGR16N170AH1

451173

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
IXDR30N120	**130-0074**	4.99	4.09	3.48	3.18
IXDR30N120D1	**130-0075**	5.46	4.47	3.79	3.47
IXER35N120D1	**130-0078**	6.35	5.18	4.41	4.04
IXER60N120	**130-0079**	7.50	6.13	5.22	4.78
IXGF32N170	**130-0108**	10.87	8.89	7.56	6.92
IXGR16N170AH1	**130-0110**	4.54	3.72	3.16	2.89
IXGR32N170AH1	**130-0111**	8.22	6.72	5.71	5.23
IXGR32N170H1	**130-0112**	7.79	6.36	5.41	4.95
IXGR35N120B	**130-0113**	8.11	6.64	5.63	5.16
IXGR40N60B2	**130-0114**	4.01	3.28	2.79	2.55
IXGR40N60B2D1	**130-0115**	4.82	3.95	3.35	3.07
IXGR40N60C2	**130-0116**	3.82	3.14	2.66	2.43
IXGR50N60B2D1	**130-0119**	6.14	5.03	4.28	3.92
IXGR60N60B2	**130-0121**	5.23	4.28	3.64	3.33
IXGR60N60B2D1	**130-0122**	7.10	5.81	4.94	4.51
IXGR60N60C2	**130-0123**	5.37	4.38	3.73	3.42
IXGR60N60C2D1	**130-0124**	6.56	5.37	4.57	4.17
IXSR35N120BD1	**130-0132**	10.59	8.67	7.36	6.73

Switching, 250V to 1200 V

TOSHIBA International IOR Rectifier


TO-220


TO-247AC


TO-3P(N)

V_{CEO} V	$I_{C\ cont}$ @ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	P_D @ 25°C W	Package	Mftrs. List No.
Ultra-fast Switching, with Integral Soft-Recovery Diode							
600	11.8	2.16	52	14	34	TO-220FP	IRG4IBC20WPBF
600	13	2.4	52	13	60	TO-220	IRG4BC20UPBF
600	13	2.4	52	15	60	TO-220	IRG4BC20UDPBF
600	17	1.95	92	21	45	TO-220FP	IRG4IBC30UDPBF
600	23	2.5	92	21	100	TO-247	IRG4PC30UDPBF
600	23	2.5	92	21	100	TO-220	IRG4BC30UDPBF
600	23	2.5	92	9.6	100	TO-220	IRG4BC30UPBF
600	23	2.5	92	9.6	100	TO-247AC	IRG4PC30UPBF
600	40	2.1	160	57	160	TO-247AC	IRG4PC40UD-EPBF
600	40	2.4	160	57	160	TO-247AC	IRG4PC40UDPBF
600	40	2.4	160	19	160	TO-247AC	IRG4PC40UPBF
600	55	2.4	220	20	200	TO-247AC	IRG4PC50UPBF
600	55	2	220	25	200	TO-247	IRG4PC50UDPBF
600	55	2	220	25	200	TO-247AC	IRG4PC50UD-EPBF
600	75	2	300	42	520	TO-247AC	IRG4PC60UPBF
600	85	2	200	94	350	Super-247	IRG4PSC71UDPBF
600	12	1.7	20	11	77	TO-220	IRGB4045DPBF
600	20	1.6	40	15	101	TO-220	IRGB4064DPBF
1200	30	3.5	120	59	160	TO-247AC	IRG4PH40UDPBF
1200	45	3.7	180	24	200	TO-247AC	IRG4PH50UDPBF
1200	78	3.9	42	84	350	Super-247	IRG4PSH71KDPBF
1200	78	3.9	42	38	350	Super-247	IRG4PSH71KPBF
1200	80	3.5	160	25	595	TO-274AA	IRGPS40B120UPBF
Fast Switching, with Integral Soft -Recovery Diode							
600	16	1.66	64	20	60	TO-220	IRG4BC20FDPBF
600	31	1.9	120	26	100	TO-220	IRG4BC30FDPBF
600	49	1.8	200	32	160	TO-247AC	IRG4PC40FDPBF
600	70	1.7	280	25	200	TO-247	IRG4PC50FDPBF
Fast Switching, Low Saturation Voltage, with Integral Soft -Recovery Diode							
600	16	1.66	64	17	60	TO-220	IRG4BC20FPBF
600	31	1.9	120	15	100	TO-220	IRG4BC30FPBF
600	49	1.8	200	18	160	TO-220	IRG4BC40FPBF
600	49	1.8	200	18	160	TO-247	IRG4PC40FPBF
600	70	1.7	280	25	200	TO-247	IRG4PC50FPBF
Low Saturation Voltage							
600	23.5	1.6	68	19	45	TO-220FP	IRG4IBC30SPBF
600	34	1.6	68	18	100	TO-220	IRG4BC30SPBF
600	60	1.6	120	18	160	TO-247AC	IRG4PC40SPBF
600	70	1.36	140	30	200	TO-247AC	IRG4PC50SPBF
1200	57	1.47	114	29	200	TO-247AC	IRG4PH50SPBF
Low Saturation Voltage, with Integral Soft-Recovery Diode							
600	14	1.7	18	32	38	TO-220	IRG4BC10SDPBF
600	19	1.6	38	35	60	TO-220AB	IRG4BC20SDPBF
Ultra-Fast Switching							
1200	30	3.5	120	18	160	TO-247AC	IRG4PH40UPBF
1200	45	3.7	180	15	200	TO-247AC	IRG4PH50UPBF
Ignition IGBT with Integral Gate-Emitter and Gate Collector Clamps							
430	20	1.4		2.8	125	D2-PAK	IRGS14C40LPBF
430	20	1.75		2400	125	TO-220	IRGB14C40LPBF
High Power Switching							
600	20	2.7	40	12	130	TO-3P (N)	GT20J101
600	50	2.7	100	120	200	TO-3P (LH)	GT50J102
600	16	1.55	32	15	99	TO-220	IRGB4060DPBF
600	24	1.55	48	17	140	TO-220	IRGB4056DPBF
600	48	1.65	96	22	250	TO-220	IRGB4062DPBF
600	48	1.65	96	22	250	TO-247	IRGP4062DPBF
1200	10	2.7	20	70	140	TO-3P (N)	GT10Q101
1200	15	2.7	30	50	170	TO-3P (N)	GT15Q102
1200	25	2.7	50	100	200	TO-3P (LH)	GT25Q102
Medium Power Switching							
600	14	1.1	18	32	38	D-PAK	IRG4RC10SDTRPBF
600	15	2.7	30	120	35	TO-220NIS	GT15J301

RL Re-reeling available

Insulated Gate Bipolar Transistors (IGBTs) - continued

Switching, 250V to 1200 V - continued

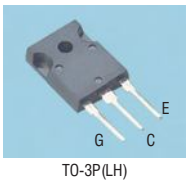
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
GT10Q101	130-0798●	3.54	2.48	2.26	2.13
GT15Q102	130-0800●	4.53	3.17	2.89	2.73
GT20J101	130-0801●	2.88	2.02	1.84	1.74
GT25Q102	130-0802●	6.06	4.24	3.86	3.65
GT50J102	130-0803●	7.05	4.94	4.49	4.25
IRGB14C40LPBF	865-0829●	3.24	1.84	1.40	1.23
IRG4BC10SDPBF	865-0322●	2.28	1.25	0.93	0.77
IRG4BC20FDPBF	865-0330●	2.19	1.20	0.89	0.74
IRG4BC20FPBF	865-0349●	2.13	1.17	0.87	0.72
IRG4BC20SDPBF	865-9435●	3.38	1.92	1.47	1.29
IRG4BC20UPBF	865-0365●	1.88	1.02	0.92	0.89
IRG4BC20UDPBF	865-0357●	2.81	1.59	1.22	1.07
IRG4BC30FPBF	910-5000●	2.43	1.33	1.15	1.12
IRG4BC30FDPBF	865-0381●	5.63	3.31	2.54	2.23
IRG4BC30SPBF	865-0403●	2.82	1.55	1.15	0.95
IRG4IBC30SPBF	865-9478●	4.11	2.42	1.86	1.62
IRG4BC30UPBF	865-0420●	2.86	1.57	1.23	1.20
IRG4BC30UDPBF	865-0411●	5.76	3.41	2.61	2.27
IRG4BC40FPBF	910-5018●	3.74	2.13	1.63	1.42
IRG4IBC20WPBF	865-0454●	3.42	1.94	1.49	1.30
IRG4IBC30UDPBF	865-0470●	5.04	3.16	2.51	2.23
IRG4PC30UDPBF	910-5093●	4.77	2.71	2.07	1.81
IRG4PC30UPBF	865-0500●	3.50	2.30	1.77	1.32
IRG4PC40FDPBF	865-0527●	5.75	3.52	3.26	3.17
IRG4PC40FPBF	910-5107●	4.81	2.73	2.09	1.83
IRG4PC40SPBF	865-0543●	4.83	2.75	2.10	1.84
IRG4PC40UD-EPBF	865-9486●	5.58	3.51	2.85	2.78
IRG4PC40UDPBF	865-0551●	5.35	3.04	2.32	2.03
IRG4PC40UPBF	865-0560●	5.35	3.04	2.32	2.03
IRG4PC50FPBF	910-5115●	5.86	3.70	3.25	3.17
IRG4PC50FDPBF	910-5123●	7.72	5.28	5.14	5.01
IRG4PC50UDPBF	910-5131●	11.32	6.48	4.90	4.19
IRG4PC50UD-EPBF	865-0616●	7.80	4.92	3.81	3.54
IRG4PC50UPBF	865-0624●	9.93	6.50	5.05	4.43
IRG4PC50SPBF	865-0608●	5.98	3.61	3.34	3.25
IRG4PC60UPBF	865-9516●	7.07	5.55	3.85	3.51
IRG4PH40UDPBF	865-0683●	6.62	3.75	2.87	2.51
IRG4PH40UPBF	865-0691●	5.24	3.43	2.66	2.34
IRG4PH50SPBF	865-0713●	6.47	4.07	3.16	2.84
IRG4PH50UDPBF	865-0721●	13.27	9.13	7.24	6.59
IRG4PH50UPBF	865-0730●	6.36	4.00	3.10	2.79
IRG4PSC71UDPBF	865-0764●	12.84	8.26	6.42	5.76
IRG4PSH71KPBF	865-0799●	15.49	10.66	8.44	7.69
IRG4PSH71KDPBF	865-0780●	18.06	12.32	10.31	9.20
IRGPS40B120UPBF	865-9680●	10.29	7.08	5.84	5.68
GT15J301	130-0809●	1.75	1.23	1.12	1.06
IRGS14C40LPBF	SMD 910-4895●	3.04	1.73	1.32	1.16
IRG4RC10SDTRPBF	NEW SMD 129-8572● RL	2.14	1.43	1.10	0.95
IRGB4056DPBF	NEW 129-8578●	2.76	2.05	1.75	1.53
IRGB4060DPBF	NEW 129-8580●	2.03	1.49	1.29	1.13
IRGB4062DPBF	NEW 129-8582●	4.31	3.15	2.71	2.39
IRGP4062DPBF	NEW 129-8583●	5.05	3.72	3.18	2.81
IRGB4045DPBF	NEW 156-1051●	1.90	1.22	0.95	0.85
IRGB4064DPBF	NEW 156-1052●	2.80	1.79	1.41	1.25

386074

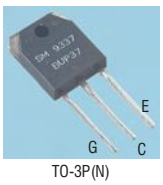
Mftrs. List No.		Order Code	Price Per Tube 1+	4+	10+
IRG4BC30UDPBF	TUBE 50	NEW 156-4035●	128.49	114.50	106.38
IRG4PC30UDPBF	TUBE 25	NEW 156-4037●	67.33	58.69	52.81
IRG4PC50FDPBF	TUBE 25	NEW 156-4038●	154.97	140.39	126.36
IRG4PC50UDPBF	TUBE 25	NEW 156-4039●	177.78	155.07	139.57
IRG4PC30UPBF	TUBE 25	NEW 156-4040●	64.52	41.14	40.41
IRG4PC40UDPBF	TUBE 25	NEW 156-4041●	101.43	93.49	90.10
IRG4PH50SPBF	TUBE 25	NEW 156-4046●	96.92	72.21	71.22

600V, Fast Switching T_{Jmax} = 150 °C

TOSHIBA



TO-3P(LH)



TO-3P(N)

- Fourth generation IGBT
- Enhancement mode type
- Low saturation voltage: V_{CE} = 1.9 to 2V
- Integrated reverse protection diode

$I_{C\ cont}$ @ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	P_D @ 25°C W	Package	Mftrs. List No.
30	2.45	60	70	170	TO-3P (N)	GT30J324
50	2.45	100	70	240	TO-3P (LH)	GT50J325

457091

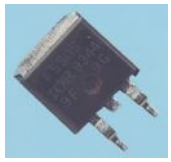
Mftrs. List No.	Order Code	1+	25+	100+	250+
GT30J324	130-0815●	3.51	2.46	2.22	2.12
GT50J325	130-0816●	5.81	4.07	3.69	3.51

Fast Switching

600 - 1200 V_{CEO}

Infineon International IOR Rectifier

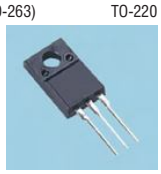

TO-247

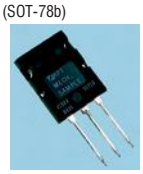

D^2Pak (TO-263)


TO-220 (SOT-78b)


SOT-93 (TO-218)


D-Pak(TO-252)


TO-220 FP


TO-264

$I_{C\ cont}$ @ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	$t_{f\ max.}$ (*typ.) ns	P_D @ 25°C W	Package	Mftrs. List No.
300 V_{CEO}, Fast Switching, with Integral Soft-Recovery Diode							
17	1.8	120	27	230	100	D2-PAK	IRG4BC30FD-SPBF
600 V_{CEO}, commutation rapide							
10	2.5	50	25	29	104	TO-220	SGP10N60
16	1.66	64	17	320	60	TO-220	IRG4BC20FPBF
22	2.1	44	24	340	66	D-PAK (TO-252)	IRG4RC20FPBF
31	1.9	120	15	180	100	TO-220	IRG4BC30FPBF
31	1.9	120	15	180	100	TO-247AC	IRG4PC30FPBF
49	1.8	200	18	170	160	TO-220	IRG4BC40FPBF
49	1.8	200	18	170	160	TO-247	IRG4PC40FPBF
70	1.7	280	25	130	200	TO-247	IRG4PC50FPBF
600 V_{CEO}, Fast Switching, with Integral Soft-Recovery Diode							
16	1.66	64	20	220	60	TO-220	IRG4BC20FDPBF
17	1.8	120	27	230	100	D2-PAK	IRG4BC30FD-SPBF
31	1.9	120	26	160	100	TO-220	IRG4BC30FDPBF
31	1.8	120	24	210	100	TO-220AB	IRG4BC30FD1PBF
49	1.8	200	32	170	160	TO-247AC	IRG4PC40FDPBF
70	1.7	280	25	140	200	TO-247	IRG4PC50FDPBF
1200 V_{CEO}							
32	3.2	64	45		200	TO-218AB	BUP313D

386076

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
BUP313D	INF	115-6458●	23.89	17.18	12.75	7.52
IRG4BC20FPBF	IR	865-0349●	2.13	1.17	0.87	0.72
IRG4BC20FDPBF	IR	865-0330●	2.19	1.20	0.89	0.74
IRG4BC30FD-SPBF	IR	SMD 101-3521●	4.11	2.43	1.86	1.81
IRG4BC30FD1PBF	IR	865-9443●	3.88	2.30	1.76	1.53
IRG4BC30FD-SPBF	IR	SMD 101-3521●	4.11	2.43	1.86	1.81
IRG4BC30FPBF	IR	910-5000●	2.43	1.33	1.15	1.12
IRG4BC30FDPBF	IR	865-0381●	5.63	3.31	2.54	2.23
IRG4BC40FPBF	IR	910-5018●	3.74	2.13	1.63	1.42
IRG4PC30FPBF	IR	865-0497●	1.86	1.83	1.79	1.76
IRG4PC40FPBF	IR	910-5107●	4.81	2.73	2.09	1.83
IRG4PC40FDPBF	IR	865-0527●	5.75	3.52	3.26	3.17
IRG4PC50FPBF	IR	910-5115●	5.86	3.70	3.25	3.17
IRG4PC50FDPBF	IR	910-5123●	7.72	5.28	5.14	5.01
IRG4PC60F-PPBF	IR	865-9508●	11.68	7.52	5.79	5.33
IRG4RC20FPBF	IR	SMD 910-4941●	1.41	1.32	1.02	0.88
SGP10N60	INF	115-6459●	3.47	1.95	1.59	1.18

Fast Switching, with Integral Diode

N-Channel

International IOR Rectifier

SMD


TO-220


TO-220FP


D_2Pak (TO-263)


D-Pak (TO-252)

V_{CEO} V	$I_{C\ cont}$ @ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	P_D @ 25°C W	Package	Mftrs. List No.
300	110	1.7	270	39	255	TO-220	IRGB4055PBF
600	8	1.75	16	10	56	TO-220	IRGB4059DPBF
600	8.5	2.15	34	16	38	D-PAK	IRG4RC10UDTRLP
600	14	1.1	18	32	38	D-PAK	IRG4RC10SDTRPBF
600	16	1.55	32	15	99	TO-220	IRGB4060DPBF
600	24	1.55	48	17	140	TO-220	IRGB4056DPBF

RL Re-reeling available

Farnell

V_{CEO}	$I_{C\ cont}$ @ 25°C	$V_{CE(sat)}$ max.	I_C pulsed	t_r typ.	P_D @ 25°C		
600	36	1.65	72	25	206	TO-220	IRGB4061DPBF
600	48	1.65	96	22	250	TO-220	IRGB4062DPBF
600	48	1.65	96	22	250	TO-247	IRGP4062DPBF
1200	5	3.17	22	26	60	D2-PAK	IRG4BH20K-SPBF

454402

Mftrs. List No.	Order Code	1+	25+	100+	250+
IRGB4056DPBF	**129-8578**	2.76	2.05	1.75	1.53
IRGB4062DPBF	**129-8582**	4.31	3.15	2.71	2.39
IRGP4062DPBF	**129-8583**	5.05	3.72	3.18	2.81
IRG4RC10SDTRPBF	SMD **129-8572** RL	2.14	1.43	1.10	0.95
IRG4RC10UDTRLP	SMD **129-8573** RL	1.53	1.03	0.79	0.73
IRG4BH20K-SPBF	SMD **129-8569**	2.70	1.64	1.22	1.01
IRGB4055PBF	**129-8575**	7.33	4.72	3.69	3.26
IRGB4059DPBF	**129-8579**	1.53	1.12	0.96	0.84
IRGB4060DPBF	**129-8580**	2.03	1.49	1.29	1.13
IRGB4061DPBF	**129-8581**	3.82	2.56	1.98	1.94

Ultrafast Switching

International IOR Rectifier


TO-247 (SOT-249)


TO-220 (SOT-78B)


TO-252 (D-Pak)

V_{CEO} V	$I_{C\ cont}$ @ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	$t_{f\ max.}$ (*typ.) ns	P_D @ 25°C W	Package	Mftrs. List No.
Ultra-Fast Switching								
430	20	1.4	—	2.8	—	125	D2-PAK	IRGS14C40LPBF
430	20	1.75	—	2400	2.8	125	TO-220	IRGB14C40LPBF
600	23	2.1	92	9.6	—	100	D2-PAK	IRG4BC30U-SPBF
600	16	1.66	64	17	320	60	TO-220	IRG4BC20FPBF
600	13	2.4	52	13	120	60	TO-220	IRG4BC20UPBF
600	34	1.6	68	18	590	100	TO-220	IRG4BC30SPBF
600	23	2.5	92	9.6	97	100	TO-220	IRG4BC30UPBF
600	11.8	2.16	52	14	—	34	TO-220FP	IRG4IBC20WPBF
600	31	1.9	120	15	180	100	TO-247AC	IRG4PC30FPBF
600	23	2.5	92	9.6	97	100	TO-247AC	IRG4PC30UPBF
600	60	1.6	120	18	380	160	TO-247AC	IRG4PC40SPBF
600	40	2.4	160	19	180	160	TO-247AC	IRG4PC40UPBF
600	70	1.36	140	30	600	200	TO-247AC	IRG4PC50SPBF
600	55	2.4	220	20	120	200	TO-247AC	IRG4PC50UPBF
600	85	2	200	50	130	350	Super-247	IRG4PSC71UPBF
600	14	1.7	18	28	1100	38	D-PAK	IRG4RC10SPBF
600	8.5	2.6	34	11	180	38	D-PAK (TO-252)	IRG4RC10UPBF
600	75	2	300	42	100	520	TO-247AC	IRG4PC60UPBF
600	22	2.1	44	24	340	66	D-PAK (TO-252)	IRG4RC20FPBF
600	19	1.6	38	9.7	640	60	TO-220 (SOT-78B)	IRG4BC20SPBF
600	31	1.9	120	15	180	100	TO-220	IRG4BC30FPBF
600	31	1.9	120	15	180	100	TO-220	IRG4BC30FPBF
600	49	1.8	200	18	170	160	TO-220	IRG4BC40FPBF
600	49	1.8	200	18	170	160	TO-220	IRG4BC40FPBF
600	49	1.8	200	18	170	160	TO-247	IRG4PC40FPBF
600	70	1.7	280	25	130	200	TO-247	IRG4PC50FPBF
1200	20	3.2	120	30	35	300	TO-247AC	IRGP20B120U-EP
1200	30	3.5	120	18	190	160	TO-247AC	IRG4PH40UPBF
1200	57	1.47	114	29	638	200	TO-247AC	IRG4PH50SPBF
1200	80	3.5	160	25	33	595	TO-274AA	IRGPS40B120UPBF
1200	45	3.7	180	15	500	200	TO-247AC	IRG4PH50UPBF
Ultra-fast Switching, with Integral Soft-Recovery Diode								
600	14	1.7	18	32	1080	38	TO-220	IRG4BC10SDPBF
600	16	1.66	64	20	220	60	TO-220	IRG4BC20FDPBF
600	13	2.4	52	15	110	60	TO-220	IRG4BC20UDPBF
600	31	1.9	120	26	160	100	TO-220	IRG4BC30FDPBF
600	23	2.5	92	21	80	100	TO-220	IRG4BC30UDPBF
600	17	1.95	92	21	180	45	TO-220FP	IRG4IBC30UDPBF
600	49	1.8	200	32	170	160	TO-247AC	IRG4PC40FDPBF
600	40	2.4	160	57	80	160	TO-247AC	IRG4PC40UDPBF
600	55	2	220	25	110	200	TO-247AC	IRG4PC50UD-EPBF
600	85	2	200	94	167	350	Super-247	IRG4PSC71UDPBF
600	6.8	2.15	27	16	140	25	TO-220FP	IRG4IBC10UDPBF
600	40	2.1	160	57	120	160	TO-247AC	IRG4PC40UD-EPBF
600	16	1.66	64	22	290	60	TO-263 (D2-PAK)	IRG4BC20FD-SPBF
600	11.4	1.85	52	17	220	34	TO-220FP	IRG4IBC20UDPBF
600	23	2.5	92	21	80	100	TO-247	IRG4PC30UDPBF
600	70	1.7	280	25	140	200	TO-247	IRG4PC50FDPBF
600	55	2	220	25	110	200	TO-247	IRG4PC50UDPBF
1200	21	3.1	82	26	200	160	TO-247AD	IRG4PH40UD2-EP
1200	50	2.7	200	77	—	350	TO-247AA	IRG4PSH71UPBF
1200	30	3.5	120	59	150	160	TO-247AC	IRG4PH40UDPBF
1200	45	3.7	180	24	260	200	TO-247AC	IRG4PH50UDPBF
1200	42	4.1	82	35	360	—	TO-247AC	IRG4PH40UD-EPBF

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
IRG4BC10SDPBF	**865-0322**	2.28	1.25	0.93	0.77
IRG4BC20FPBF	**865-0349**	2.13	1.17	0.87	0.72
IRG4BC20FDPBF	**865-0330**	2.19	1.20	0.89	0.74
IRG4BC20FD-SPBF	SMD **910-4917**	2.00	1.29	1.22	1.19
IRG4BC30FDPBF	**865-0381**	5.63	3.31	2.54	2.23
IRG4BC30FPBF	**910-5000**	2.43	1.33	1.15	1.12

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
IRG4BC20UPBF	**865-0365**	1.88	1.02	0.92	0.89
IRG4BC20UDPBF	**865-0357**	2.81	1.59	1.22	1.07
IRG4BC30SPBF	**865-0403**	2.82	1.55	1.15	0.95
IRG4BC30UPBF	**865-0420**	2.86	1.57	1.23	1.20
IRG4BC30UDPBF	**865-0411**	5.76	3.41	2.61	2.27
IRG4BC40FPBF	**910-5018**	3.74	2.13	1.63	1.42
IRG4IBC10UDPBF	**865-9451**	3.51	2.06	1.58	1.46
IRG4IBC20UDPBF	**910-5034**	4.59	2.72	2.08	1.87
IRG4IBC30UDPBF	**865-0470**	5.04	3.16	2.51	2.23
IRG4IBC20WPBF	**865-0454**	3.42	1.94	1.49	1.30
IRG4BC20SPBF	**910-4976**	2.01	1.18	0.98	0.96
IRG4BC30FPBF	**910-5000**	2.43	1.33	1.15	1.12
IRG4BC40FPBF	**910-5018**	3.74	2.13	1.63	1.42
IRG4PC30FPBF	**865-0497**	1.86	1.83	1.79	1.76
IRG4PC30UPBF	**865-0500**	3.50	2.30	1.77	1.32
IRG4PC30UDPBF	**910-5093**	4.77	2.71	2.07	1.81
IRG4PC40FPBF	**910-5107**	4.81	2.73	2.09	1.83
IRG4PC40FDPBF	**865-0527**	5.75	3.52	3.26	3.17
IRG4PC40SPBF	**865-0543**	4.83	2.75	2.10	1.84
IRG4PC40UD-EPBF	**865-9486**	5.58	3.51	2.85	2.78
IRG4PC40UDPBF	**865-0551**	5.35	3.04	2.32	2.03
IRG4PC40UPBF	**865-0560**	5.35	3.04	2.32	2.03
IRG4PC50FPBF	**910-5115**	5.86	3.70	3.25	3.17
IRG4PC50FDPBF	**910-5123**	7.72	5.28	5.14	5.01
IRG4PC50UDPBF	**910-5131**	11.32	6.48	4.90	4.19
IRG4PC50UD-EPBF	**865-0616**	7.80	4.92	3.81	3.54
IRG4PC50UPBF	**865-0624**	9.93	6.50	5.05	4.43
IRG4PC50SPBF	**865-0608**	5.98	3.61	3.34	3.25
IRG4PC60UPBF	**865-9516**	7.07	5.55	3.85	3.51
IRG4PH40UD-EPBF	**865-9532**	5.55	3.93	2.81	2.79
IRG4PH40UDPBF	**865-0683**	6.62	3.75	2.87	2.51
IRG4PH40UPBF	**865-0691**	5.24	3.43	2.66	2.34
IRG4PH50SPBF	**865-0713**	6.47	4.07	3.16	2.84
IRG4PH50UDPBF	**865-0721**	13.27	9.13	7.24	6.59
IRG4PH50UPBF	**865-0730**	6.36	4.00	3.10	2.79
IRG4PSC71UDPBF	**865-0764**	12.84	8.26	6.42	5.76
IRG4PSC71UPBF	**865-0772**	9.89	6.82	5.40	4.91
IRG4RC10SPBF	SMD **865-0802**	1.26	0.81	0.70	0.68
IRG4RC10UPBF	SMD **865-0810**	1.38	0.89	0.69	0.67
IRG4RC20FPBF	SMD **910-4941**	1.41	1.32	1.02	0.88
IRG4BC30U-SPBF	SMD **101-3524**	3.39	2.31	1.91	1.58
IRG4PH40UD2-EP	**107-8440**	7.78	4.90	3.80	3.42
IRG4PSH71UDPBF	**107-8441**	18.39	12.53	10.49	9.36
IRGB14C40LPBF	**865-0829**	3.24	1.84	1.40	1.23
IRGP20B120U-EP	**107-8444**	6.24	3.93	3.33	3.24
IRGPS40B120UPBF	**865-9680**	10.29	7.08	5.84	5.68
IRGS14C40LPBF	SMD **910-4895**	3.04	1.73	1.32	1.16

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Mftrs. List No.		Order Code	Price Per Tube 1+	4+	10+
IRG4BC30UDPBF	TUBE 50	NEW **156-4035**	128.49	114.50	106.38
IRG4PC30UDPBF	TUBE 25	NEW **156-4037**	67.33	58.69	52.81
IRG4PC50FDPBF	TUBE 25	NEW **156-4038**	154.97	140.39	126.36
IRG4PC50UDPBF	TUBE 25	NEW **156-4039**	177.78	155.07	139.57
IRG4PC30UPBF	TUBE 25	NEW **156-4040**	64.52	41.14	40.41
IRG4PC40UDPBF	TUBE 25	NEW **156-4041**	101.43	93.49	90.10
IRG4PH50SPBF	TUBE 25	NEW **156-4046**	96.92	72.21	71.22

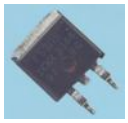
Ultrafast Switching, 10μs Short-Circuit Rated

International IOR Rectifier


TO-220FP


TO-247AC


TO-247


D2-PAK

V_{CEO} V	$I_{C\ cont}$ @ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	t_f max. (*typ.) ns	P_D 25°C W	Package	Mftrs. List No.
Ultra-Fast Switching								
600	9	2.62	18	24	290	38	D-PAK	IRG4RC10KPBF
600	13	1.8	26	17	18	90	TO-220AB	IRGB6B60KPBF
600	13	2.2	56	21	27	167	D2-PAK	IRGS6B60KPBF
600	28	2.2	56	21	56	167	TO-220AB	IRGB8B60KPBF
600	78	2.95	120	28	—	370	D2-PAK (TO-263)	IRGS30B60KPBF
600	42	2.1	84	18	210	160	TO-220 (SOT-78B)	IRG4BC40KPBF
600	78	2.35	120	28	40	370	TO-220AB	IRGB30B60KPBF
1200	11	3.17	22	28	620	60	TO-247AC	IRG4PH20KPBF
1200	20	3.1	40	23	170	100	TO-247	IRG4PH30KPBF
1200	30	2.74	60	22	230	160	TO-247AC	IRG4PH40KPBF
1200	78	3.9	42	38	250	350	Super-247	IRG4PSH71KPBF
Ultra-Fast Switching, with Integral Soft-Recovery Diode								
600	12	2.2	24	22	42	39	TO-220FP	IRGIB7B60KDPBF
600	13	2	26	17	22	90	TO-220AB	IRGB6B60KDPBF
600	16	2.1	32	34	—	44	TO-220FP	IRGIB10B60KD1P
600	19	2.2	38	35	—	52	TO-220FP	IRGIB15B60KD1P
600	22	2.2	44	20	32	104	TO-220AB	IRGB10B60KDPBF
600	28	2.21	58	42	120	100	TO-220	IRG4BC30KDPBF
600	31	2.2	62	16	26	139	TO-220AB	IRGB15B60KDPBF
600	42	2.1	84	37	150	160	TO-247AC	IRG4PC40KDPBF
600	52	1.84	104	49	140	104	TO-247AC	IRG4PC50KDPBF
600	85	2.3	200	107	146	350	Super-247	IRG4PSC71KDPBF
1200	11	3.17	22	30	620	60	TO-247	IRG4PH20KDPBF
1200	20	3.1	40	79	*97	100	TO-247	IRG4PH30KDPBF
1200	30	3.4	60	31	330	160	TO-247	IRG4PH40KDPBF
1200	45	2.77	90	100	300	200	TO-247AC	IRG4PH50KDPBF
1200	78	3.9	42	84	190	350	Super-247	IRG4PSH71KDPBF

RL Re-reeling available

Farnell

Insulated Gate Bipolar Transistors (IGBTs) - continued

Ultrafast Switching, 10μs Short-Circuit Rated - continued

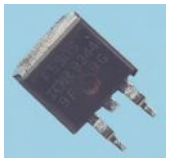
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
IRG4BC10KPBF	107-8428	2.13	1.21	0.90	0.75
IRG4BC10KDPBF	865-0314	2.22	1.26	1.05	1.03
IRG4BC20KD-SPBF	SMD 910-4984	1.98	1.63	1.26	1.21
IRG4BC20K-SPBF	SMD 107-8432	2.52	1.62	1.26	1.10
IRG4BC30KDPBF	865-0390	4.01	2.28	1.74	1.53
IRG4BC30K-SPBF	SMD 101-3522	3.09	1.83	1.40	1.22
IRG4BC30KD-SPBF	SMD 910-4925	3.35	1.98	1.51	1.46
IRG4BC40KPBF	865-0446	3.76	2.43	1.87	1.84
IRG4IBC30KDPBF	865-9460	3.77	2.23	1.70	1.49
IRG4PC30KPBF	107-8437	3.93	2.32	1.77	1.71
IRG4PC40KPBF	107-8439	4.71	3.08	2.40	2.31
IRG4PC40KDPBF	865-0535	5.76	3.61	3.34	3.25
IRG4PC50KDPBF	865-0586	7.40	4.66	3.62	3.26
IRG4PC50KPBF	865-0594	7.21	4.72	4.52	4.40
IRG4PH20KDPBF	910-5085	5.47	3.10	2.40	2.33
IRG4PH20KPBF	865-0667	3.69	2.10	1.65	1.60
IRG4PH30KPBF	910-5042	3.77	2.14	1.64	1.43
IRG4PH30KDPBF	910-5050	5.13	3.03	2.34	2.03
IRG4PH40KPBF	865-0675	5.08	2.88	2.21	1.93
IRG4PH40KDPBF	910-5077	6.37	4.17	3.23	2.77
IRG4PH50KDPBF	865-0705	9.15	5.77	4.47	4.02
IRG4PH50KPBF.	910-5069	7.33	4.03	3.02	2.94
IRG4PSC71KPBF	865-0756	11.25	7.75	6.13	5.74
IRG4PSC71KDPBF	865-0748	12.03	7.97	6.97	6.79
IRG4PSH71KPBF	865-0799	15.49	10.66	8.44	7.69
IRG4PSH71KDPBF	865-0780	18.06	12.32	10.31	9.20
IRG4RC10KPBF	SMD 910-4933	1.57	0.85	0.64	0.56
IRG4RC10KDPBF	SMD 865-9540	0.90	0.88	0.86	0.85
IRGB10B60KDPBF	865-9567	3.21	1.82	1.39	1.22
IRGB15B60KDPBF	865-9575	3.74	2.13	1.84	1.79
IRGB30B60KPBF	865-9591	3.47	1.97	1.51	1.32
IRGB4B60KD1PBF	865-9605	2.18	1.24	0.92	0.77
IRGB4B60KPBF	865-9613	1.33	0.77	0.57	0.51
IRGB6B60KPBF	865-0837	1.74	0.96	0.71	0.59
IRGB8B60KPBF	865-0845	2.16	1.32	0.98	0.81
IRGB6B60KDPBF	865-9621	3.11	1.77	1.35	1.18
IRGIB6B60KDPBF	865-9630	3.35	1.98	1.51	1.33
IRGIB7B60KDPBF	865-9648	3.09	1.69	1.26	1.04
IRGIB10B60KD1P	101-3529	4.01	2.28	1.74	1.53
IRGIB15B60KD1P	101-3530	5.13	3.30	2.58	2.25
IRGR3B60KD2PBF	SMD 865-9699	1.74	0.97	0.78	0.63
IRGS6B60KPBF	SMD 910-4909	1.22	0.78	0.64	0.48
IRGS4B60KD1PBF	SMD 101-3527	1.79	1.15	0.93	0.90
IRGS6B60KDPBF	SMD 865-9702	2.56	1.62	1.29	1.11
IRGS8B60KPBF	SMD 926-4370	1.03	0.86	0.70	0.69
IRGS30B60KPBF	SMD 107-8445	3.31	2.14	1.65	1.43
IRGS4B60KPBF	SMD 101-3528	1.90	1.22	0.95	0.82
IRGS30B60KPBF	SMD 107-8445	3.31	2.14	1.65	1.43

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Tubes of 25 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRG4PH50KDPBF	NEW 156-4045	145.59	135.18	133.26

Warp Speed™ IGBTs


TO-247AC


D²Pak (TO-263)


TO-220

- Class-leading low switching losses
- Low-cost alternative to power MOSFETs in switch mode power supplies <150kHz
- Ideal for Power Factor Correction applications

V_{CEO} V	$I_{C\ cont}$ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	P_D 25°C W	Package	Mftrs. List No.
600	11.8	2.16	52	14	34	TO-220FP	IRG4IBC20WPBF
600	13	2.6	52	15	60	TO-220	IRG4BC20WPBF
600	17	2.1	92	16	45	TO-220FP	IRG4IBC30WPBF
600	23	2.7	92	17	100	TO-220	IRG4BC30WPBF
600	40	2.5	160	22	160	TO-220	IRG4BC40WPBF
600	40	2.5	160	23	160	D2-PAK	IRG4BC40W-SPBF
600	40	2.5	160	23	160	TO-247AC	IRG4PC40WPBF
600	40	2.35	80	5	215	TO-220AB	IRGB20B60PD1PBF
600	40	2.35	80	5	220	TO-247AC	IRGP20B60PDPBF
600	40	2.15	120	6	308	TO-247AC	IRGP35B60PDPBF
600	55	2.3	220	33	200	TO-247AC	IRG4PC50WPBF
600	75	2.35	150	10	390	TO-247AC	IRGP50B60PD1PBF
900	51	2.7	204	26	200	TO-247AC	IRG4PF50WPBF
Warp Speed™, with Integral Anti-Parallel Diode							
900	51	2.25	204	52	200	TO-247AC	IRG4PF50WDPBF

211302

Mftrs. List No.	Order Code	Price Each 1+	25+	100+
IRG4BC20WPBF	865-0373	2.69	1.59	1.21
IRG4BC30WPBF	865-0438	1.96	1.62	1.28
IRG4BC40WPBF	910-5026	3.71	2.23	1.90
IRG4BC40W-SPBF	SMD 107-8435	3.47	1.97	1.81
IRG4IBC20WPBF	865-0454	3.42	1.94	1.49
IRG4IBC30WPBF	865-0489	3.61	2.05	1.57
IRG4PC40WPBF	865-0578	4.83	2.75	2.10
IRG4PC50WPBF	865-0632	6.23	4.08	3.17
IRG4PF50WDPBF	865-0640	7.53	4.75	3.68
IRG4PF50WPBF	865-0659	6.47	3.67	2.81
IRGB20B60PD1PBF	865-9583	2.14	1.84	1.61
IRGP20B60PDPBF	865-9656	5.62	3.19	2.44
IRGP35B60PDPBF	865-9664	6.24	3.93	3.16
IRGP50B60PD1PBF	865-9672	7.47	4.71	3.65

Tubes of 25 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRG4PF50WDPBF	NEW 156-4042	157.79	99.25	84.29
IRG4PF50WPBF	NEW 156-4044	101.43	75.66	74.41
IRGP50B60PD1PBF	NEW 156-4029	121.44	111.05	100.57

Ultra-Fast Switching IGBTs

60 - 300kHz


TO-247


TO-220

- Ultra-low switching losses
- NPT (Non-Punch Through) technology
- Minimal dynamic losses
- Extremely rugged
- Cost-effective alternative to power MOSFETs in switch mode and uninterruptible power supplies, up to 300kHz
- Ideal for Power Factor Correction (PFC)

V_{CEO} V	$I_{C\ cont}$ @ 25°C A	$V_{CE(sat)}$ max. V	I_{CM} pulsed A	t_r typ. ns	t_f typ. ns	P_D @ 25°C W	Package	Mftrs. List No.
600	10	2.5	50	25	24	125	TO-220	SGP10N60
600	30	2.1	116	40	70	250	TO-220AB	SGP30N60
600	41	2.4	112	35	70	250	TO-247AC	SGW30N60
600	20	2.4	40	12	29	92	TO-220	SKP10N60
600	40	2.4	80	36	65	179	TO-247	SKW20N60
600	23	2.1	92	9.6	140	100	D2-PAK	IRG4BC30U-SPBF
1200	46	3.6	84	40	39	313	TO-247AC	SKW25N120

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
SGP10N60	115-6459	3.47	1.95	1.59	1.18
SGP30N60	105-6534	4.30	2.96	2.25	– –
SGW30N60	105-6535	4.39	3.23	2.55	– –
SKP10N60	115-6455	1.93	1.49	1.21	1.00
SKW20N60	115-6456	4.71	3.48	2.80	– –
SKW25N120	105-6536	8.56	6.17	5.17	3.99
IRG4BC30U-SPBF	SMD 101-3524	3.39	2.31	1.91	1.58

211328

Tubes of 30 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
SGH80N60UFDTU	NEW 156-4028	82.41	74.17	66.75
SKW25N120	NEW 156-4030	151.81	119.48	107.53

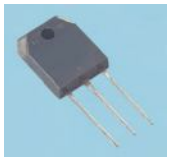
300 V_{CEO}, 600 V_{CEO} & 1200 V_{CEO}, Ultra-Fast IGBT, N-Channel

With Anti-Parallel Hyperfast Diode Options


D²PAK


TO-220


TO-247/AC


TO-3P

- >100kHz or better operation
- 600V switching SOA capability
- Extremely small fall time
- Low conduction losses
- High pulsed current capability

This family of MOS gated high voltage switching devices combine the best features of MOSFETs and bipolar transistors. These devices have the high input impedance of a MOSFET and the low on-state conduction loss of a bipolar transistor.
These IGBT's are ideal for many high voltage switching applications operating at high frequencies where low conduction losses are essential. These devices have been optimised for high frequency switch mode power supplies.

RL Re-reeling available

Farnell

$I_{C\ cont}$ 25°C A	$V_{CE(sat)}$ max. V	I_C pulsed A	t_r typ. ns	t_f max. typ.(max*) ns	P_D 25°C W	Mftr.	Package	Mftrs. List No.
600 V_{CEO}								
11	2.5	22	23	79	63	IR	D2-PAK (TO-263)	IRGS4B60KD1PBF
14	2.5	50	7	60	80	ST	TO-247	STGP7NC60HD
23	2.1	92	9.6		100	IR	D2-PAK	IRG4BC30U-SPBF
30	2.1	116	40	70	250	INF	TO-220AB	SGP30N60
40	3	180	37	100	160	FCH	TO-3P	FGA40N60UFD
40	2.4	160	19	180	160	IR	TO-220	IRG4BC40UPBF
40	2.4	160	19	180	160	IR	TO-247AC	IRG4PC40UPBF
41	2.4	112	35	70	250	INF	TO-247AC	SGW30N60
55	2.4	220	20	130	200	IR	TO-247AC	IRG4PC50UPBF
60	2.5	100	11.5	75	200	ST	TO-247	STGW20NC60VD
75	2.7	240	15	50	463	FCH	TO-247	FGH50N6S2
75	2.7	240	15	50	463	FCH	TO-247	FGH50N6S2D
80	2.5	200	19	45	260	ST	TO-247MAX	STGY40NC60VD
80	2.6	220	50	50	195	FCH	TO-3P	SGH80N60UFDTU
1200 V_{CEO}								
32	2.7	64	70	95	200	INF	TO-220AB	BUP213
46	3.6	84	40	39	313	INF	TO-247AC	SKW25N120

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+
BUP213	INF	**105-6527●**	9.78	7.06	5.20
FGH50N6S2	FCH	**109-5033●**	7.34	5.00	4.04
SGP30N60	INF	**105-6534●**	4.30	2.96	2.25
SGW30N60	INF	**105-6535●**	4.39	3.23	2.55
IRG4BC30U-SPBF	IR	SMD **101-3524●**	3.39	2.31	1.91
IRG4PC40UPBF	IR	**865-0560●**	5.35	3.04	2.32
IRG4PC50UPBF	IR	**865-0624●**	9.93	6.50	5.05
IRG4BC40UPBF	IR	**910-4992●**	3.55	2.02	1.84
With Integral Anti-Parallel Diode					
FGA40N60UFD	FCH	**109-5026●**	3.39	2.53	2.08
FGH50N6S2D	FCH	**109-5034●**	8.42	6.46	5.48
SGH80N60UFDTU	FCH	**105-7675●**	5.00	3.33	2.75
SKW25N120	INF	**105-6536●**	8.56	6.17	5.17
STGP7NC60HD	ST	**951-2527●**	1.81	1.38	1.14
STGW20NC60VD	ST	**951-2535●**	4.67	3.61	2.57
STGY40NC60VD	ST	**951-2551●**	11.13	8.50	6.97
IRGS4B60KD1PBF	IR	SMD **101-3527●**	1.79	1.15	0.93

424435

Tubes of 30 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
SGH80N60UFDTU	NEW **156-4028●**	82.41	74.17	66.75
SKW25N120	NEW **156-4030●**	151.81	119.48	107.53

SIP Modules



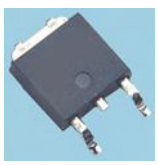
- PCB mounted
- Fully isolated, 2.5kV isolation voltage
- Incorporates HEXFRED soft ultra-fast diodes
- Frequency optimised
- Switching loss rating includes all 'tail' losses

V_{CES} V	I_C @ T_c=25°C A	I_C pulsed A	$V_{CE(sat)}$ max. A	@ I_C A	t_r typ. ns	t_f max. ns	P_D @ T_c=25°C W	Mftrs. List No.
Ultra-Fast Switching, Short Circuit Rated								
600	24	48	2.3	13	30	140	63	CPV364M4KPBF

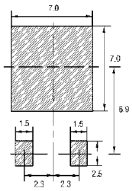
211332

Mftrs. List No.	Order Code	Price Each 1+	5+	25+
CPV364M4KPBF	**910-1918●**	49.92	29.39	21.73

General Purpose IGBTs

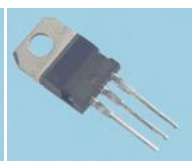


D-PAK (TO-252)





TO-247

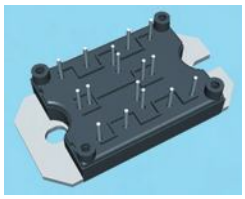


TO-220

498163

Mftrs. List No.	Case Style	V_{CEO} Max. (V)	I_C max.(A)	Order Code	Price Each 1+	25+	100+	250+
IKP10N60T	TO-220	600	10	**147-1741●**	1.27	1.00	0.89	0.84
IKP15N60T	TO-220	600	15	**147-1742●**	1.64	1.27	1.15	1.08
IKP20N60T	TO-220	600	20	**147-1743●**	2.28	1.78	1.59	1.51
SGP30N60HS	TO-220	600	30	NEW **160-0272●**	2.45	1.71	1.48	1.39
IKW20N60T	TO-247	600	20	**147-1746●**	2.30	1.79	1.60	1.52
IKW30N60T	TO-247	600	25	**147-1748●**	3.75	2.92	2.62	2.49
SGW30N60HS	TO-247	600	30	NEW **160-0271●**	3.37	2.36	2.03	1.90
IKW50N60T	TO-247	600	50	**147-1750●**	4.68	3.64	3.27	3.09
IKW75N60T	TO-247	600	75	**147-1751●**	7.40	5.76	5.18	4.89
IGD01N120H2	D-PAK	1200	1.3	SMD **147-1726●**	0.89	0.69	0.63	0.60
IGP01N120H2	TO-220	1200	1.3	**147-1728●**	0.89	0.68	0.62	0.58
IKP01N120H2	TO-220	1200	1.3	**147-1735●**	1.23	0.97	0.86	0.82
IKA03N120H2	TO-220	1200	3	**147-1731●**	1.30	1.01	0.90	0.85
IGP03N120H2	TO-220	1200	3.9	**147-1729●**	1.17	0.91	0.82	0.78
IGW03N120H2	TO-247	1200	3.9	**147-1730●**	1.54	1.20	1.08	1.02
IKP03N120H2	TO-220	1200	3.9	**147-1736●**	1.24	0.98	0.87	0.83
IKW08T120	TO-247	1200	8	**147-1744●**	2.49	1.94	1.74	1.65
IKW15T120	TO-247	1200	15	**147-1745●**	3.06	2.38	2.15	2.02
IKW25T120	TO-247	1200	25	**147-1747●**	4.10	3.20	2.89	2.72
IKW40T120	TO-247	1200	40	**147-1749●**	6.83	5.31	4.79	4.51

IGBT Modules



- Modules combining high-speed IGBTs with optimised diodes
- Single package offers space and assembly-cost savings compared to discrete solutions
- Fully isolated modules are insulated with a ceramic nitride layer for improved thermal conductivity

MTP

Configuration	V_{CES} V	I_C @ T_c=25°C A	I_C pulsed A	$V_{CE(sat)}$ max. V	@ I_C A	P_D @ T_c=25°C W	Mftrs. List No.
Half-Bridge	600	114	350	2.3	50	658W*	50MT060WHTAPBF

451634

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
50MT060WHTAPBF	SMD **129-7333●**	48.11	34.54	30.62	28.59

Power Modules



V_{CEO} V	$I_{C\ cont}$ 25°C, A	$V_{CE(sat)}$ typ.,V	I_C pulsed, A	t_r typ. ns	t_f max. ns	P_D 25°C, W	Package	Mftrs. List No.
600	200	1.6	400	75	460	500	ISOTOP	GA200SA60UPBF
600	200	1.1	400	60	660	630	ISOTOP	GA200SA60SPBF

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	5+	10+	25+	50+
GA200SA60SPBF	VISH	**910-4950●**	44.77	26.86	20.65	17.82	15.68
GA200SA60UPBF	VISH	**910-4968●**	44.77	26.86	20.65	17.88	15.78

211341

Tubes of 10 Mftrs. List No.	Order Code	Price Per Tube 1+	3+	8+
GA200SA60SPBF	NEW **156-4033●**	192.67	144.77	141.87
GA200SA60UPBF	NEW **156-4034●**	192.67	145.79	142.88

High Performance Power Modules



- High speed switching
- Single or half-bridge configurations

Additional S-Series Features:

- NPT Technology options (S-Series)
- Square short-circuit SOA at 10 x I_C
- High short-circuit withstand capability
- Low loss
- Soft switching

Package	H	W	D	Package	H	W	D	Package	H	W	D
M127	35	108	62	M232	30	92	34	M234	30	108	62
M138	35	110	80	M233	30	92	45	M235	30	108	62

V_{CES} V	I_C @ T_c=25°C A	I_C pulsed A	$V_{CE(sat)}$ max. V	@ I_C A	t_r max. ns	t_f max. ns	P_D @ T_c=25°C W	Package	Mftrs. List No.
Half-Bridge Configuration, N-Series									
600	50	100	2.8	50	600	350	250	M232	2MBI50N-060
600	100	200	2.8	100	600	350	400	M232	2MBI100N-060
600	150	300	2.8	150	600	350	600	M233	2MBI150N-060
600	200	400	2.8	200	600	350	780	M233	2MBI200N-060
600	400	800	2.8	400	600	350	1500	M235	2MBI400N-060
Single Switch Configuration, Non-Punch Through S-Series									
1200	300	600	2.6	200	600	300	1500	M127	1MBI200S-120
1200	600	1200	2.6	400	600	300	3100	M127	1MBI400S-120
1200	900	1800	2.6	600	600	300	4150	M138	1MBI600S-120
Half-Bridge Configuration, Non-Punch Through S-Series									
1200	100	200	2.6	75	600	300	600	M232	2MBI75S-120
1200	100	300	2.6	75	600	300	780	M234	2MBI100S-120

RL Re-reeling available

Insulated Gate Bipolar Transistors (IGBTs) - continued

High Performance Power Modules - continued

339077

Mftrs. List No.		Price Each		
Half-Bridge, N-Series	**Order Code**	**1+**	**3+**	**10+**
2MBI50N-060	**120-8663**	42.20	33.63	26.61
2MBI100N-060	**120-8665**	50.12	39.98	31.60
2MBI150N-060	**120-8666**	78.09	62.29	49.22
2MBI200N-060	**120-8667**	116.95	93.29	73.73
2MBI400N-060	**120-8668**	189.04	150.80	119.17
Single-Bridge, S-Series		**1+**	**3+**	**10+**
1MBI200S-120	**120-8669**	98.03	78.20	61.82
1MBI400S-120	**120-8670**	149.04	118.88	93.95
1MBI600S-120	**120-8671**	257.15	205.16	162.14
Half-Bridge, S-Series		**1+**	**3+**	**10+**
2MBI75S-120	**120-8672**	65.94	52.60	41.56
2MBI100S-120	**120-8673**	88.80	70.82	55.96

Power Modules

Dual IGBTs in 7PM-GA package



- High impedance MOS input (voltage controlled)
- N channel
- Low conduction
- Low switching losses
- Short circuit ruggedness (10µs @ T_C=100 °C, V_{GE})

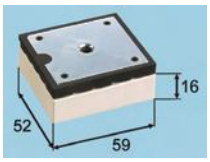
H=31, W=32, D=90

V_{CES} V	$I_{C\ cont}$ @ 25°C A	I_{CM} @ 25°C A	$V_{CE(sat)}$ V	P_D W	Mftrs. List No.
600	75	150	2.8	310	FMG2G75US60

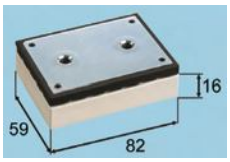
424980

Mftrs. List No.	Order Code	Price Each 1+	5+	15+
FMG2G75US60	**109-5047**	84.58	63.46	52.22

Mini Skiip Packages



Mini SKiiP-2



Mini SKiiP-3

For fast, solder-free assemblies

- Reliable spring contacts used as electrical contact to control unit
- Fast assembly from the top, in one direction
- Solder-free connection to control unit in one production step

Spring contacts for driver connection

- Solder-free assembly
- 300 million springs already in operation
- Since 15 years operating successfully in fork lifts

V_{CEO} V	I_C @ 25°C A	I_C Nom. A	V_{CE} Sat Typ. V	Type	Package	Mftrs. List No.
600	39	27	1.45	A	MiniSkiip-2	SKIIP25NAB066V1
1200	56	45	1.85	A	MiniSkiip-2	SKIIP24NAB12T4V1
1200	71	54	1.85	A	MiniSkiip-3	SKIIP35NAB12T4V1
1200	169	137	1.85	B	MiniSkiip-3	SKIIP39AC12T4V1

A: 3-phase bridge rectifier +brake chopper + 3-phase bridge inverter
B: 3-phase bridge inverter
C: 3-phase bridge rectifier + 3-phase bridge inverter

493735

Mftrs. List No.	Order Code	Price Each 1+	6+	24+
SKIIP39AC12T4V1	**151-8353**	133.34	126.44	122.23
SKIIP25NAB066V1	**151-8362**	41.11	38.99	37.69
SKIIP24NAB12T4V1	**151-8363**	61.67	58.48	56.54
SKIIP35NAB12T4V1	**151-8364**	86.68	82.20	79.45

Semix Power Modules

3 Phase Controlled IGBT Modules


Semix 13s


Semix 33

SEMiX

- Low module platform for optimum connection between driver and intermediate circuit
- Bases on well-tried SEMIKRON technologies
- 3mm Cu baseplate and soldered main terminals
- 17mm high, flat modules
- Easy parallel connections
- Driver interface on top of module
- Low-inductive module case
- High insulation voltage, long creepage distances

V_{CES} V	$I_{C\ cont}$ @ 25°C A	$I_{C\ cont}$ @ 80°C A	$V_{CE(sat)}$ V	Package	Mftrs. List No.
1200	120	85	2.15/2.7	SEMiX 13s	SEMIX 101GD126HDS
1700	380	270	2.45/2.7	SEMiX 33c	SEMIX 353GD176HDC

423781

Mftrs. List No.	Mftrs. List No.	Order Code	Price Each 1+	3+	6+
SEMiX 13s	SEMIX 101GD126HDS	**109-5578**	104.39	82.80	73.60
SEMiX 33c	SEMIX 353GD176HDC	**109-5589**	462.59	366.95	326.18

1200V, Power Modules

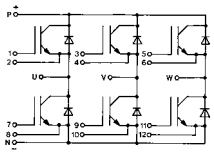
SEMITRANS IGBT Modules – Dual, Semitrans 2, 3 and Six Pack

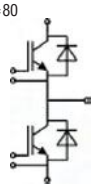


Six Pack H=24, W=105, D=45
Mounting Holes=5.5 dia.
Fixing centres=93

Dual H=29.5, W=94, D=34
Mounting holes=6.4 dia
Fixing centres=80


Semitrans-2/3





- MOS input (voltage controlled)
- N channel
- Low inductance case
- Very low tail current
- High short circuit capability
- Latch up free
- Fast and soft inverse CAL diodes
- Isolated copper baseplate
- Used with driver module, Order Code 118-2752

Configuration	$I_{C\ cont}$ @ 25°C A	$I_{C\ cont}$ @ 80°C A	$V_{CE(sat)}$ V	Package	Mftrs. List No.
3 Phase	25	15	3/2.7	SEMITRANS 6	SKM22GD123D
3 Phase	40	25	3.3/2.7	SEMITRANS 6	SKM40GD123D
Dual IGBT	50	40	2.8/2.7	SEMITRANS 2	SKM50GB123D
Dual IGBT	70	50	2.5/2.7	SEMITRANS 2	SKM50GB063D
Dual IGBT	78	50	3.2/2.7	SEMITRANS 2	SKM75GB123D
Dual IGBT	100	70	1.15/2.7	SEMITRANS 2	SKM 75GB128D
Dual IGBT	145	105	2.35/2.7	SEMITRANS 2	SKM 100GB128D
Dual IGBT	200	140	2.35/2.7	SEMITRANS 3	SKM 150GB128D
Dual IGBT	200	180	3/2.7	SEMITRANS 3	SKM200GB123D
Dual IGBT	260	190	2.15/2.7	SEMITRANS 3	SKM200GB126D
Dual IGBT	260	190	1.2/2.7	SEMITRANS 3	SKM400GB126D
Dual IGBT	310	220	2.4/2.7	SEMITRANS 3	SKM 200GB128D
Dual IGBT	310	200	2.15/2.7	SEMITRANS 3	SKM300GB126D
Dual IGBT	430	310	2.4/2.7	SEMITRANS 3	SKM400GB176D
Dual IGBT	690	480	1.9/2.7	SEMITRANS 3	SKM600GB066D
IGBT + Series Diode	35	25	2.3/2.7	SEMITOP 2	SK30GB128

222090

Mftrs. List No.	Package	Order Code	Price Each 1+	25+
Dual Series IGBT - Semitrans 2				
SKM50GB123D	SEMITRANS 2	**956-3032**	63.45	51.15
SKM75GB123D	SEMITRANS 2	**956-3040**	54.02	45.02
			1+	**5+**
SKM 75GB128D	SEMITRANS 2	**133-0039**	69.41	54.47
SKM 100GB128D	SEMITRANS 2	**133-0040**	83.83	65.77
Dual Series IGBT - Semitrans 3				
SKM 150GB128D	SEMITRANS 3	**133-0041**	86.33	65.37
SKM200GB123D	SEMITRANS 3	**956-2915**	128.00	106.00
SKM 200GB128D	SEMITRANS 3	**133-0042**	113.40	90.00
			1+	**4+**
Dual Series IGBT - Semitrans 2				
SKM50GB063D	SEMITRANS 2	**109-5526**	51.90	37.02
Dual Series IGBT - Semitrans 3				
SKM400GB176D	SEMITRANS 3	**109-5525**	311.66	211.38
SKM200GB126D	SEMITRANS 3	**109-5517**	109.00	85.85
SKM300GB126D	SEMITRANS 3	**109-5518**	146.00	114.98
SKM400GB126D	SEMITRANS 3	**109-5519**	196.51	147.38
SKM600GB066D	SEMITRANS 3	**109-5530**	195.63	142.28

RL Re-reeling available

Farnell

			Price Each	
3-Phase Controlled Bridge - Semitrans-6				
SKM40GD123D	SEMITRANS 6	**956-3024**●	145.50	119.10
SKM22GD123D	SEMITRANS 6	**956-3008**●	126.00	99.70
IGBT + Series Diode - Semitrans-3				
SK30GB128	SEMITOP 2	**146-7126**●	28.25	21.98

3 Phase Power Controllers

SEMIKRON innovation+service

IGBT Modules -Combined Single Phase Bridge and 3 Phase Controlled Bridge Rectifer



SEMITOP2, H=28, W=40.5, D=12



SEMITOP3, H=15.5, W=28, D=40.5



SEMITOP4, H=60.25, W=55, D=12

- Compact design
- One screw mounting
- Isolated Package
- Trench technology IGBT
- CAL High density FWD
- NTC temperature sensor options
- Fast and soft inverse CAL diodes
- Isolated copper baseplate

V_{CES} V	$I_{C\ cont}$ @ 80°C A	$V_{CE(sat)}$ max V	Package	Integrated NTC Temp Sensor	Mftrs. List No.
3 Phase					
600	174*	1.9	SEMITOP4	✓	SK200GD066T
600	100*	—	SEMITOP4	✓	SK100GD066T
600	8*	2.5	SEMITOP 2		SK9GD065
1200	68*	2.1	SEMITOP4	✓	SK50GD126T
1200	11*	3.2	SEMITOP 3		SK10GD123
1200	40*	2.1	SEMITOP 3		SK35GD126ET
1200	114*	2.15	SEMITOP4	✓	SK100GD126T
3 phase controlled bridge + 3 phase bridge rectifier + brake chopper					
600	106*	1.9	SEMITOP4	✓	SK100DGDL066T
1200	68*	2.15	SEMITOP4	✓	SK50DGDL126T
IGBT + Series Diode					
1200	58*	3	SEMITOP 2		SK60GAL123
Dual IGBT					
600	54*	2	SEMITOP 2		SK50GB065
1200	25*	2.3	SEMITOP 2		SK30GB128
Half Bridge					
1200	16*	3.2	SEMITOP 2		SK10GH123
1200	23*	3	SEMITOP 2		SK20GH123

423071

			Price Each	
Mftrs. List No.	Package	**Order Code**	1+	4+
SK50DGDL126T	SEMITOP 4	**133-1252**●	57.35	46.22
SK100DGDL066T	SEMITOP 4	**133-1253**●	72.14	57.02
3 phase controlled bridge				
SK100GD066T	SEMITOP 4	**133-1254**●	46.18	42.73
SK100GD126T	SEMITOP 4	**133-1258**●	85.60	68.99
SK200GD066T	SEMITOP 4	**133-1256**●	97.46	77.04
SK50GD126T	SEMITOP 4	**133-1257**●	51.25	41.31
Half Bridge			1+	5+
SK10GH123	SEMITOP 2	**109-5548**●	16.69	12.70
SK20GH123	SEMITOP 2	**109-5549**●	28.22	20.13
3 phase controlled bridge				
SK35GD126ET	SEMITOP 3	**109-5552**●	49.34	35.20
SK10GD123	SEMITOP 3	**146-7125**●	35.62	27.70
SK9GD065	SEMITOP 2	**146-7127**●	21.70	16.89
Dual IGBT				
SK50GB065	SEMITOP 2	**109-5537**●	32.31	23.04
SK30GB128	SEMITOP 2	**146-7126**●	28.25	21.98
IGBT + Series Diode				
SK60GAL123	SEMITOP 2	**109-5545**●	17.20	16.06

IGBT Module, Intelligent

Infineon



New

This is designed to control AC motors in variable speed drives for applications like air conditioning, compressors and washing machines. The package concept is specially adapted to power applications, which need extremely good thermal conduction and electrical isolation, but also EMI-save control and overload protection.

Features

- Fully isolated Single In-Line molded module
- Temperature monitor and over temperature shutdown
- Overcurrent shutdown
- Undervoltage lockout at all channels
- Cross-conduction prevention
- Lead-free terminal plating; RoHS compliant
- Qualified according to JEDEC1 (high temperature stress tests for 500h) for target applications

Target Applications

- Washing machines
- Consumer Fans and Consumer Compressors

Voltage, Vces	600V	Power Dissipation	35W
Voltage, Vce sat max	2.15V	Current, Ic cont. max	40μA

509927

Mftrs. List No.	**Order Code**	Price Each 1+	25+	100+	250+
IKCS12F60AA	**160-0269**●	15.73	11.01	9.49	8.87

FSA Series, Smart Power Modules

FAIRCHILD SEMICONDUCTOR

V_{PN} = 450 V



Applications:

- 100 Vac to 253Vac, 3 Phase invertor drive for small power (0.5kW) ac motor drives
- Home appliance applications requiring high switching frequency operation like washing machines drive system.

Designed to provide very compact and high performance AC motor drives, ideal for high speed, low-power inverter driven applications, such as washing machines.Incorporating optimized circuit protection and drive matched to low-loss IGBT's.Highly effective short-circuit current detection/protection is realized through the use of advanced current sensing IGBT chips that allow continuous monitoring of the IGBTs current.

I_C per IGBT (A)	$I_{C\ PK}$ per IGBT (A)	Collector Power P_C (W)	On time t_{ON} nS	V_{CES} (V)	Mftrs List No.	Order Code
10	20	43	270	600	FSAM10SH60A	109-5101
20	40	59	350	600	FSAM20SH60A	109-5104

424852

Mftrs. List No.	**Order Code**	Price Each 1+	25+	100+	250+	500+
FSAM10SH60A	**109-5101**●	16.21	12.89	11.45	11.23	10.51
FSAM20SH60A	**109-5104**●	16.67	15.16	13.47	13.21	12.36

FSB Series, Smart Power Modules

FAIRCHILD SEMICONDUCTOR

V_{DS} = 500 V



- 500 V, 3 Phase FRFET invertor, including HV-IC
- 3 dc-link terminals for current sensing
- Undervoltage protection, CMOS/TTL 3/5V compatable
- Isolation voltage:1500V rms (1 min)

Based on FRFET technology as a compact invertor solution for small power motor drive applications such as fan motors and water suppliers. It is composed of 6 fast recovery MOSFET (FRFET) and 3 half-bridge HVICs for FRFET gate driving. They provide low electro-magnetic interference (EMI) characteristics with optimized switching speed. Moreover, since it employs FRFET as a power switch, it has much better ruggedness and larger safe operation area (SOA) than that of an IGBT-based power module or one-chip solution.

I_D per MOS (A)	I_{DM} per MOS (A)	P_D (W)	R_{DS} Ω	Mftrs List No.	Order Code
1	2	10	4	FSB50250S	132-4838
1.5	3	10	2.4	FSB50450S	132-4840
SMD					
1.8	3.5	4.5	1.3	FSB50550T	149-5133

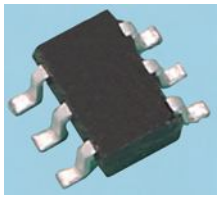
424859

Mftrs. List No.	**Order Code**	Price Each 1+	25+	100+	250+	500+
FSB50550T	**149-5133**●	6.62	4.68	3.77	3.63	3.39
FSB50250S	SMD **132-4838**●	7.78	5.77	4.53	3.77	3.57
FSB50450S	SMD **132-4840**●	5.42	3.83	3.09	2.97	2.78

Low Power MOSFETs

General Purpose

ROHM SEMICONDUCTOR



- Single and Dual Version Options

498361

Mftrs. List No.	**Order Code**	Price Each 1+	25+	100+
P & N-Channel				
QS6M3TR	SMD **152-5473**●	0.220	0.167	0.121
SP8M3FU6TB	SMD **152-5586**●	0.730	0.610	0.460
SP8M4FU6TB	SMD **152-5587**●	1.190	0.990	0.750

RL Re-reeling available

Farnell

Low Power MOSFETs - continued

See our range of **MOSFET Drivers** on page 663

Digital FETs

FAIRCHILD SEMICONDUCTOR



- Easy to drive
- Replacements for digital bipolar transistors
- Suitable for 5V and 3V logic signals
- >6kV ESD protected
- Industry standard SOT-23 package
- No additional bias resistors required[LineBreak]

SMD

V_{DS} V	N/P Channel	$R_{DS(on)}$ @ 2.7V, Ω	I_D A	$I_{D\ pulsed}$ A	$V_{GS(th)}$ V	P_D W	Device I.D.	Mftrs. List No.
25	N	0.6	0.68	2	1.5	0.35	303	FDV303N
25	N	5	0.22	0.5	1.5	0.35	301	FDV301N
25	P	1.5	0.46	0.5	-1.5	0.35	304P	FDV304P
25	P	13	0.12	0.5	-1.5	0.35	302P	FDV302P

211305

Order Multiple = 5

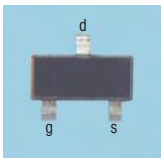
Mftrs. List No.	Order Code	5+	25+	100+	1K+
FDV303N	SMD 984-5020● RL	0.240	0.176	0.108	0.052
FDV301N	SMD 984-5011● RL	0.143	0.098	0.074	0.031
FDV304P	SMD 984-6123● RL	0.320	0.176	0.151	0.084
FDV302P	SMD 984-6115● RL	0.153	0.098	0.096	0.048

Reels of 3000

Mftrs. List No.	Order Code	Price Per Reel 1+
FDV301N	NEW SMD 156-2544●	203.08
FDV303N	NEW SMD 156-2545●	183.97
FDV304P	NEW SMD 156-2554●	237.98

SC-75A

VISHAY



- Very small size - 45% smaller footprint than SOT-323
- Very low threshold voltage
- 2000V ESD protected
- Applications include portable communications, remote controls, PC's

SMD

H=0.8, W=1.7, D=1.7 Supplied on 8mm tape.

V_{DS} V	$R_{DS(on)}$ Ω	@ V_{GS} V	$I_{D\ cont}$ @ 25°C A	$I_{D\ pulsed}$ A	$V_{GS(th)}$ min. V	P_D @ 25°C W	Device Marking	Mftrs. List No.
N Channel								
20	10	1.5	0.14	0.5	0.4	0.25	G	SI1032R
20	1.25	1.8	0.5	1	0.45	0.15	C	SI1012R
60	1.25	10	0.33	0.65	1	0.25	E	SI1022R
P Channel								
20	20	1.5	0.14	0.5	-0.4	0.25	H	SI1031R
20	2.7	1.8	0.35	1	-0.45	0.15	D	SI1013R
60	4	10	0.19	0.65	-1	0.25	F	SI1021R

241400

Order Multiple=5

Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
SI1012R	SMD 955-0445● RL	0.260	0.200	0.169	0.133	0.109
SI1013R	SMD 955-0453● RL	0.240	0.182	0.145	0.120	0.100
SI1021R	SMD 955-0461● RL	0.260	0.200	0.169	0.133	0.109
SI1022R	SMD 955-0470● RL	0.240	0.182	0.145	0.120	0.100
SI1031R	SMD 955-0488● RL	0.135	0.108	0.084	0.067	0.056
SI1032R	SMD 955-0496● RL	0.135	0.108	0.084	0.067	0.056

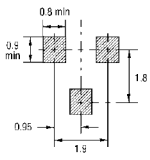
SOT-23 (3 & 6 pin)

ON Semiconductor

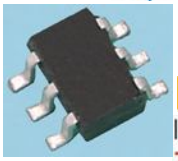
ON VISHAY ZETEX SEMICONDUCTORS Infineon FAIRCHILD SEMICONDUCTOR NXP International IOR Rectifier



H=1.12, W=3.05, D=2.5 Supplied on 8mm tape.



Footprint



SOT-23-6

SMD

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$I_{D\ pulsed}$ A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Mftr.	Device Marking	Mftrs. List No.
N Channel								
20	0.25	1.2	7.4	—	0.54	IR	1A	IRLML2402PBF
20	1	0.42	0.8	3	0.35	SLX	K3	TN0201K
20	0.04	5.4	26	1	—	ZET	—	ZXMN2B03E6
20	0.045	4.2	33	1.2	1.25	IR	1G	IRLML2502PBF
20	0.052	2.5	—	—	0.5	FCH	337	FDN337N
20	0.055	4.3	21	1	—	ZET	—	ZXMN2B14FH
20	0.06	2.1	10	1.2	0.7	SLX	2A	SI2302ADS
20	0.07	1.7	8	1.5	0.5	FCH	335	FDN335N

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$I_{D\ pulsed}$ A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Mftr.	Device Marking	Mftrs. List No.
N Channel								
20	0.085	0.75	—	2.4	0.4	ON	N2	MGSF1N02LT1G
20	0.1	2.4	11.8	1	—	ZET	—	ZXMN2B01F
20	0.14	1.7	10	2.7	0.5	FCH	335N	NDS335N
30	0.046	2.7	15	3	0.5	FCH	359A	FDN359AN
30	0.07	2.6	10	3	0.75	SLX	L4	SI2304BDS
30	0.08	2.5	—	—	0.5	FCH	357	FDN357N
30	0.1	1.8	8	3	0.5	FCH	361	FDN361AN
30	0.125	1.7	10	2	0.5	FCH	—	NDS355AN
30	0.25	1.2	10	2	0.5	FCH	—	NDS351AN
30	0.3	0.85	—	2.5	0.4	IR	1B	IRLML2803PBF
50	3.5	0.22	0.88	1.5	0.36	FCH	SS	BSS138....
50	10	0.13	0.52	-2	0.36	FCH	SP	BSS84
55	2.3	0.335	1.3	1.3	0.83	NXP	—	BSH111
60	0.16	2	10	1.5*	1.25	SLX	A8	SI2308DS
60	2	0.28	1.5	2.5	0.3	FCH	712	NDS7002A
60	2.5	0.2	3	3	0.33	ZET	MZ	ZVN4106F
60	2.8	0.3	1.2	2.5	0.83	NXP	—	2N7002
60	3.5	0.23	0.92	1.4	0.36	INF	SKs	BSS138N
60	5	0.15	3	3*	0.33	ZET	MV	BS170F
60	5	0.15	3	2.5	0.33	ZET	MY	VN10LF
60	5	0.15	3	2.4	0.33	ZET	MC	ZVN3306F
60	5	0.5	0.8	3	0.3	FCH	—	MMBF170
60	5	0.115	0.8	2.5	0.2	FCH	702	2N7002
60	7.5	0.115	0.8	2.5	0.2	ON	702	2N7002LT1G
60	7.5	0.115	0.8	—	0.2	SLX	72	2N7002
60	7.5	0.18	0.8	2.5	0.36	SLX	72	2N7002
60	8	0.17	0.68	-2	0.36	INF	YBs	BSS84P
100	3.5	0.15	0.6	2.8	0.25	NXP	—	BSS123
100	6	0.17	0.68	2	0.36	FCH	—	BSS123
100	6	0.17	0.68	2.8	0.225	ON	SA	BSS123LT1G
100	10	0.1	2	2.4	2.4	ZET	MF	ZVN3310F
240	16	0.1	0.4	2	0.36	INF	SRs	BSS131
250	100	0.04	0.12	0.7	0.36	INF	STs	BSS139
P Channel								
12	0.05	3	12	-0.9	0.75	SLX	M5	SI2315BDS
12	0.05	4.3	34	—	1.3	IR	—	IRLML6401PBF
20	0.052	2.4	—	-1.5	0.5	FCH	304P	FDN304P
20	0.065	3.7	22	-0.95	1.3	IR	1E	IRLML6402PBF
20	0.07	2	10	-1.5	0.5	FCH	340	FDN340P
20	0.1	2.2	10	-0.95	0.7	SLX	L1	SI2301BDS
20	0.13	1.6	—	—	0.5	FCH	338	FDN338P
20	0.27	1.2	10	-1	0.5	FCH	336P	NDS336P
20	0.047	3.9	15	0.85	0.75	SLX	M2	SI2312BDS-T1-E3
20	0.41	1	10	-1	0.5	FCH	332	NDS332P....
20	0.6	0.6	—	-1.4	0.4	IR	1C	IRLML6302PBF
20	0.65	0.58	2	-1	0.35	SLX	K4	TP0101K
30	1.4	0.35	0.75	-3	0.35	SLX	2K	TP0202K
30	0.6	0.61	4.8	—	0.54	IR	—	IRLML5103PBF
30	0.5	0.9	10	-2.5	0.5	FCH	—	NDS352AP
30	0.3	1.1	10	-2.5	0.5	FCH	—	NDS356AP
30	0.2	1.6	—	—	0.56	FCH	358	FDN358P
30	0.098	3	—	-2.5	1.25	IR	1H	IRLML5203PBF
30	0.08	2	20	-3	0.5	FCH	360	FDN360P
50	6	0.13	0.52	-2	0.25	NXP		BSS84
60	14	0.9	1.6	-3.5	0.33	ZET	ML	ZVP3306F
60	10	0.12	1	-3.5	0.3	FCH	610	NDS0610
60	6	0.185	0.8	-3	0.35	SLX	6K	TP0610K
60	5	0.18	1	-3	0.36	FCH	605	NDS0605
60	0.34	1.25	8	-1	1.25	SLX	A9	SI2309DS
60	0.17	1.25	10	-3	0.5	FCH	618	FDN5618P
100	20	0.075	1.2	-3.5	0.33	ZET	MR	ZVP3310F

* y=year code, w=week code, l=lot traceability

211126

Order Multiple=5

Mftrs. List No.	Mftr.	Order Code	5+	25+	100+	1K+
2N7002	SLX	SMD 102-1754● RL	0.095	0.066	0.053	0.042
2N7002	NXP	SMD 151-0761●	0.122	0.070	0.047	0.036
BSH111	NXP	SMD 151-0762●	0.134	0.108	0.092	0.081
BSS84	NXP	SMD 151-0765●	0.230	0.143	0.094	0.064
BSS84	FCH	SMD 109-4997● RL	0.260	0.164	0.113	0.047
BSS84P	INF	SMD 105-6526● RL	0.300	0.148	0.100	0.054
BSS123	NXP	SMD 151-0764●	0.066	0.054	0.046	0.041
BSS123	FCH	SMD 984-5321● RL	0.210	0.124	0.096	0.038
BSS131	INF	SMD 105-6524● RL	0.660	0.300	0.118	0.079
BSS138....	FCH	SMD 984-5330● RL	0.220	0.137	0.094	0.039
BSS138N	INF	SMD 115-6434● RL	0.142	0.114	0.099	0.074
BSS123LT1G	ON	SMD 955-8640● RL	0.220	0.121	0.080	0.058
BSS139	INF	SMD 105-6525● RL	0.380	0.270	0.220	– –
BS170F	ZET	SMD 952-6005● RL	0.330	0.310	0.270	0.230
FDN304P	FCH	SMD 984-6298● RL	0.510	0.350	0.250	0.116
FDN335N	FCH	SMD 984-5348● RL	0.350	0.250	0.177	0.092
FDN337N	FCH	SMD 984-5356● RL	0.370	0.250	0.185	0.116
FDN338P	FCH	SMD 984-6301● RL	0.320	0.220	0.160	0.075
FDN340P	FCH	SMD 984-6310● RL	0.440	0.280	0.210	0.114
FDN357N	FCH	SMD 984-5364● RL	0.420	0.300	0.210	0.117
FDN359AN	FCH	SMD 984-5372● RL	0.440	0.300	0.210	0.125
FDN358P	FCH	SMD 984-6328● RL	0.490	0.290	0.220	0.130

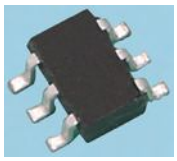
RL Re-reeling available

Farnell

Order Multiple=5			Price Each			
Mftrs. List No.	Mftr.	Order Code	5+	25+	100+	1K+
FDN360P	FCH	SMD 984-6336 RL	0.540	0.330	0.260	0.146
FDN361AN	FCH	SMD 984-5380 RL	0.530	0.320	0.240	0.145
FDN5618P	FCH	SMD 984-6344 RL	0.520	0.320	0.240	0.157
IRLML2402PBF	IR	SMD 910-2710 RL	0.930	0.540	0.500	0.330
IRLML2502PBF	IR	SMD 910-2981 RL	0.700	0.440	0.350	0.310
IRLML2803PBF	IR	SMD 910-2701 RL	0.640	0.630	0.460	0.290
IRLML5103PBF	IR	SMD 866-0085 RL	0.440	0.270	0.210	0.171
IRLML5203PBF	IR	SMD 910-3511 RL	0.480	0.310	0.230	0.187
IRLML6302PBF	IR	SMD 910-3406 RL	0.910	0.830	0.500	0.330
IRLML6401PBF	IR	SMD 866-0093 RL	0.820	0.530	0.400	0.320
IRLML6402PBF	IR	SMD 910-3503 RL	0.710	0.440	0.350	0.310
MGSF1N02LT1G	ON	SMD 121-6187 RL	0.360	0.220	0.171	0.135
MMBF170	FCH	SMD 984-5399 RL	0.280	0.162	0.128	0.074
NDS0605	FCH	SMD 984-6352 RL	0.280	0.200	0.132	0.062
NDS0610	FCH	SMD 984-6360 RL	0.183	0.120	0.089	0.037
NDS332P....	FCH	SMD 984-6379 RL	0.380	0.260	0.187	0.087
NDS335N	FCH	SMD 984-5402 RL	0.300	0.220	0.154	0.071
NDS336P	FCH	SMD 984-6387 RL	0.430	0.300	0.196	0.098
NDS351AN	FCH	SMD 984-5410 RL	0.370	0.260	0.183	0.096
NDS352AP	FCH	SMD 984-6395 RL	0.320	0.230	0.164	0.073
NDS355AN	FCH	SMD 984-5429 RL	0.330	0.230	0.164	0.086
NDS356AP	FCH	SMD 984-6409 RL	0.370	0.250	0.182	0.104
NDS7002A	FCH	SMD 984-5437 RL	0.310	0.210	0.144	0.061
SI2301BDS	SLX	SMD 815-6670 RL	0.460	0.260	0.163	0.136
SI2302ADS	SLX	SMD 815-6689 RL	0.620	0.320	0.210	0.177
SI2304BDS	SLX	SMD 815-6697 RL	0.710	0.380	0.260	0.199
SI2308DS	SLX	SMD 955-0500 RL	0.480	0.330	0.280	0.210
SI2309DS	SLX	SMD 955-0518 RL	0.390	0.290	0.250	0.176
SI2312BDS-T1-E3	SLX	SMD 149-7608	0.240	0.179	0.158	0.147
SI2315BDS	SLX	SMD 815-6328 RL	0.620	0.320	0.210	0.177
TN0201K	SLX	SMD 815-6638 RL	0.710	0.380	0.260	0.199
TP0101K	SLX	SMD 815-6646 RL	0.550	0.280	0.187	0.149
TP0202K	SLX	SMD 815-6654 RL	0.710	0.380	0.260	0.199
TP0610K	SLX	SMD 815-6662 RL	0.480	0.260	0.165	0.140
VN10LF	ZET	SMD 952-6234 RL	0.740	0.550	0.350	0.210
ZVN3306F	ZET	SMD 952-6218 RL	1.270	0.850	0.820	0.620
ZVN3310F	ZET	SMD 952-6242 RL	0.770	0.550	0.370	0.194
ZVN4106F	ZET	SMD 952-6250 RL	0.700	0.460	0.350	0.270
ZVP3306F	ZET	SMD 952-6226 RL	0.550	0.400	0.260	0.190
ZVP3310F	ZET	SMD 952-6269 RL	0.770	0.550	0.370	0.240
2N7002	FCH	SMD 984-5313 RL	0.120	0.073	0.056	0.025
2N7002	SLX	SMD 951-2608 RL	0.119	0.086	0.063	0.056
2N7002LT1G	ON	SMD 955-8624 RL	0.138	0.076	0.051	0.037
			5+	25+	100+	250+
ZXMN2B03E6	ZET	SMD 142-6251	0.790	0.520	0.410	0.350
ZXMN2B14FH	ZET	SMD 142-6252	0.700	0.460	0.350	0.310
ZXMN2B01F	ZET	SMD 142-6253	0.400	0.280	0.210	0.176

Reels of 3000		Price Per Reel	
Mftrs. List No.	Order Code	1+	3+
BSS138NE6327-BOX	NEW SMD 156-2517	127.84	115.06
SI2315BDS-T1-E3	NEW SMD 156-2518	422.66	– –
SI2301BDS-T1-E3	NEW SMD 156-2519	312.03	– –
SI2302ADS-T1-E3	NEW SMD 156-2520	422.66	– –
IRLML6401TRPBF	NEW SMD 156-2521	336.68	303.00
IRLML2803TRPBF	NEW SMD 156-2522	213.37	192.04
IRLML2402TRPBF	NEW SMD 156-2523	236.11	212.49
IRLML2502TRPBF	NEW SMD 156-2524	269.33	242.41
IRLML6302TRPBF	NEW SMD 156-2525	240.48	216.43
IRLML6402TRPBF	NEW SMD 156-2527	336.68	303.00
IRLML5203TRPBF	NEW SMD 156-2528	272.84	245.55
BS170FTA	NEW SMD 156-2535	562.75	– –
ZVN3306FTA	NEW SMD 156-2536	652.76	587.49
ZVP3306FTA	NEW SMD 156-2537	542.41	– –
VN10LFTA	NEW SMD 156-2539	486.88	438.19
ZVN3310FTA	NEW SMD 156-2541	505.12	– –
SI2308DS-T1-E3	NEW SMD 156-2542	504.92	– –
SI2309DS-T1-E3	NEW SMD 156-2543	445.35	– –
FDN335N	NEW SMD 156-2546	367.85	331.06
FDN337N	NEW SMD 156-2547	280.17	– –
FDN357N	NEW SMD 156-2548	329.28	296.35
FDN359AN	NEW SMD 156-2549	492.44	443.20
MMBF170	NEW SMD 156-2550	154.26	138.83
NDS351AN	NEW SMD 156-2552	234.35	210.91
NDS355AN	NEW SMD 156-2553	226.92	– –
FDN304P	NEW SMD 156-2555	388.60	349.74
FDN340P	NEW SMD 156-2556	338.18	304.37
FDN360P	NEW SMD 156-2557	280.91	– –
FDN5618P	NEW SMD 156-2558	457.69	– –
2N7002-T1-E3	NEW SMD 156-2508	132.31	– –
PMV213SN.215	NEW SMD 156-2511	361.29	325.17
PMV31XN.215	NEW SMD 156-2512	269.48	– –
PMV45EN.215	NEW SMD 156-2513	269.48	– –
PMV60EN.215	NEW SMD 156-2515	272.32	– –
BSS84	NEW SMD 156-2516	92.33	83.10

SC-89



	V_{DS}	$R_{DS(on)}$	$R_{DS(on)}$	$R_{DS(on)}$	$I_{D\ cont.}$ @ 25°C	I_D pulsed	$V_{GS(th)}$ max.	P_D @ 25°C		Mftrs
	V	Ω @ 10V	Ω @ 4.5V	Ω @ 2.5V	A	A	V	W	Mftr.	List No.
P Channel										
	30	0.167	0.188	0.244	0.96	6	-1.45	0.236	SLX	SI1071X-T1-E3

495894

		Price Each			
Mftrs. List No.	Order Code	1+	25+	100+	250+
SI1071X-T1-E3	SMD 149-7594	0.250	0.189	0.168	0.158

SOT-143 MOSFET, PNP



V_{DS}	$R_{DS(on)}$	$I_{D\ cont.}$ @ 25°C	$V_{GS(th)}$ max.	P_d @ 25°C		
V	Ω	A	V	W	Mftr.	Mftrs. List No.
10	0.045	0.05	2	0.23	NXP	BSS83
10	0.045	0.05	2	0.23	NXP	BSS83

Order Multiple=5		Price Each				
Mftrs. List No.	Order Code	5+	25+	100+	1K+	3K+
BSS83	SMD 108-1312 RL	1.63	0.95	0.63	0.32	0.31
BSS87	SMD 121-4273 RL	0.52	0.38	0.33	0.27	0.26

211419

Reel of 3000		Price Per Reel
Mftrs. List No.	Order Code	1+
BSS83.215	NEW SMD 156-2493	822.62

4 pin DIL



Pin spacing=2.54,
Row spacing=7.62

	V_{DS}	$R_{DS(on)}$	$I_{D\ cont.}$ @ 25°C	I_D pulsed	P_D @ 25°C	Mftrs.
	V	Ω	A	A	W	List No.
N-Channel						
	50	0.1	2.4	19	1.0	IRFD020PBF
	60	0.1	2.5	19	1.3	IRFD024PBF
	60	0.1	2.5	20	1	IRLD024PBF
	60	0.2	1.7	14	1	IRLD014PBF
	60	0.2	1.7	14	1.3	IRFD014PBF
	100	0.27	1.3	10.4	1.3	IRFD120PBF
	100	0.27	1.3	10	1.3	IRLD120PBF
	100	0.54	1	8	1.3	IRFD110PBF
	100	0.54	1	8	1.3	IRLD110PBF
	200	0.8	1.3	6.4	1	IRFD220PBF
	200	1.5	0.6	4.8	1	IRFD210PBF
	400	3.6	0.35	2.8	1	IRFD310PBF
P-Channel						
	60	0.28	1.6	13	1.3	IRFD9024PBF
	60	0.5	1.1	8.8	1.3	IRFD9014PBF
	100	0.6	1	8	1.3	IRFD9120PBF
	100	1.2	0.7	5.6	1.3	IRFD9110PBF
	200	3	0.4	3.2	1	IRFD9210PBF
	200	1.5	0.56	4.5	1.0	IRFD9220PBF

211422

		Price Each			
Mftrs. List No.	Order Code	1+	25+	100+	500+
IRFD014PBF	910-2337	0.89	0.48	0.34	0.27
IRFD020PBF	910-2396	1.06	0.60	0.45	0.42
IRFD024PBF	910-2345	1.19	0.64	0.45	0.37
IRFD110PBF	910-2353	1.11	0.55	0.35	0.28
IRFD120PBF	910-2361	1.22	0.65	0.46	0.37
IRFD210PBF	910-2370	0.89	0.48	0.34	0.30
IRFD220PBF	910-2388	1.07	0.57	0.40	0.33
IRFD9014PBF	910-3210	1.10	0.61	0.43	0.30
IRFD9024PBF	910-3228	1.28	0.68	0.48	0.41
IRFD9110PBF	910-3236	1.16	0.62	0.44	0.36
IRFD9120PBF	910-3244	1.43	0.76	0.54	0.44
IRFD9210PBF	910-3252	1.09	0.58	0.43	0.42
IRFD9220PBF	910-3260	1.72	0.98	0.72	0.67
IRLD014PBF	910-2515	1.04	0.55	0.39	0.34
IRLD024PBF	910-2523	1.24	0.67	0.49	0.48
IRLD120PBF	910-2531	1.27	0.67	0.48	0.41
IRFD310PBF	101-3390	1.67	0.89	0.63	0.51
IRLD110PBF	101-3423	0.96	0.53	0.44	0.43

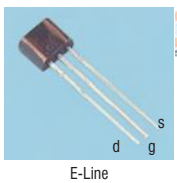
TO-92, E-Line



TO-92 (a),(d)
Pre-formed leads on 2.54 dia. circle



TO-92 (b),(c),(e)
Lead spacing=1.27
TO-92(f)
Lead spacing=2.5



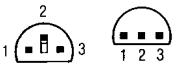
E-Line
Lead spacing=1.27

RL Re-reeling available

Low Power MOSFETs - continued

TO-92, E-Line - continued

Pin Out	1	2	3
(a), (e)	S	G	D
(b)	D	G	S
(c), (d), (f)	G	D	S



Pin Outs

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @25°C A	I_D pulsed A	P_D @ 25°C W	Package	Pin Config.	Mftr.	Mftrs. List No.
N-Channel								
60	0.45	1.1	20	0.85	E-Line	—	ZET	ZVN4306A
60	2.5	0.3	1.2	0.4	TO-92	—	REN	2SK1336-E
60	1.5	0.6	8	0.7	E-Line	—	ZET	ZVN4206A
60	1.5	0.6	8	0.7	E-Line	—	ZET	ZVN4206AV*
60	2	0.45	8	0.7	E-Line	—	ZET	ZVN2106A
60	2	0.4	2	0.625	TO-92	—	FCH	BS270
60	2	0.47	1	0.8	TO-92	(b)	SLX	2N7000KL
60	5	0.27	3	0.625	E-Line	—	ZET	ZVN3306A
60	5	0.5	1.2	0.83	TO-92	(a)	FCH	BS170...
60	5	0.5	—	0.35	TO-92	(e)	ON	BS170G
60	5.3	0.2	0.5	0.4	TO-92	(b)	FCH	2N7000
60	7.5	0.15	1	0.4	TO-92	(b)	ON	VN2222LLG
60	7.5	0.27	3	0.625	E-Line	—	ZET	VN10LP
100	0.65	0.9	12	0.85	E-Line	—	ZET	ZVN4310A
100	4	0.32	6	0.7	E-Line	—	ZET	ZVN2110A
100	5	0.19	0.8	0.83	TO-92	—	NXP	BST72A
100	10	0.2	2	0.625	E-Line	—	ZET	ZVN3310A
200	6.4	0.25	0.5	0.35	TO-92	(e)	ON	BS107AG
200	8	0.23	0.5	0.83	TO-92	(a)	ON	BS108G
200	10	0.18	2	0.7	E-Line	—	ZET	ZVNL120A
200	28	0.25	0.5	0.35	TO-92	(e)	ON	BS107G
240	2.2	0.3	1.4	0.8	TO-92	(e)	SLX	TN2404KL
240	6	0.26	1	0.57	E-Line	—	ZET	ZVN4424A
240	2.2	0.3	1.4	0.8	TO-92	(b)	SLX	TN2404KL
450	50	0.09	0.6	0.7	E-Line	—	ZET	ZVN0545A
P-Channel								
50	10	0.17	0.5	0.625	E-Line	—	ZET	ZVP4105A
60	14	0.16	1.6	0.625	E-Line	—	ZET	ZVP3306A
100	8	0.23	3	0.7	E-Line	—	ZET	ZVP2110A
100	4	0.32	6	0.7	E-Line	—	ZET	ZVN2110A
240	15	0.2	1	0.75	E-Line	—	ZET	ZVP4424A
450	150	0.045	0.4	0.7	E-Line	—	ZET	ZVP0545A
NPN Channel								
—	—	—	—	1.1	TO-92	—	ST	STSA1805
—	—	—	—	1.1	TO-92	—	ST	STSA851

*Avalanche energy rated

211046

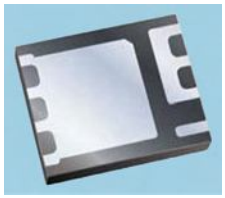
Order Multiple=5			Price Each			
Mftrs. List No.	Mftr.	Order Code	5+	25+	100+	1K+
2N7000	FCH	**984-5178**	0.124	0.099	0.076	0.052
2N7000	ST	**993-5118**	0.440	0.230	0.147	0.102
2N7000KL	SLX	**102-1755**	0.310	0.159	0.104	0.078
BS107G	ON	**955-6184**	0.410	0.240	0.192	0.124
BS107AG	ON	**955-7148**	0.460	0.270	0.210	0.135
BS108G	ON	**955-6818**	0.340	0.210	0.157	0.117
BS170...	FCH	**101-7687**	0.280	0.184	0.128	0.081
BS170G	ON	**955-6192**	0.430	0.290	0.196	0.147
BS170P	ZET	**952-4843**	0.970	0.650	0.420	0.280
BS270	FCH	**101-7689**	0.185	0.122	0.105	0.054
BST72A		**151-0766**	0.128	0.103	0.089	0.078
TN2404KL	SLX	**102-1756**	1.280	0.650	0.420	0.320
VN10LP	ZET	**952-5416**	0.550	0.380	0.280	0.210
VN2222LLG	ON	**955-6834**	0.540	0.370	0.260	0.210
			5+	**25+**	**100+**	**1K+**
ZVN0545A	ZET	**952-5424**	2.320	1.730	1.030	0.730
ZVN2106A	ZET	**952-5432**	0.690	0.460	0.350	0.270
ZVN2110A	ZET	**952-5440**	0.780	0.530	0.350	0.270
ZVN3306A	ZET	**952-5459**	0.540	0.380	0.300	0.220
ZVN3310A	ZET	**952-5467**	0.620	0.470	0.320	0.280
ZVN4206A	ZET	**952-5475**	0.800	0.550	0.370	0.290
ZVN4206AV	ZET	**952-6196**	1.010	0.650	0.370	0.290
ZVN4306A	ZET	**952-4924**	1.610	1.120	0.880	0.660
ZVN4310A	ZET	**952-4991**	2.190	1.420	0.890	0.700
ZVN4424A	ZET	**952-6200**	1.720	1.100	0.630	0.490
ZVNL120A	ZET	**952-5483**	0.920	0.590	0.380	0.300
ZVP0545A	ZET	**952-5491**	2.460	1.570	0.900	0.700
ZVP2106A	ZET	**952-5505**	0.810	0.660	0.490	0.380
ZVP2110A	ZET	**952-5955**	0.930	0.630	0.490	0.380
ZVP3306A	ZET	**952-4851**	0.770	0.510	0.310	0.240
ZVP4105A	ZET	**952-4916**	1.220	0.780	0.450	0.350
ZVP4424A	ZET	**952-6129**	1.770	1.130	0.650	0.510
STSA1805	ST	**993-5800**	0.520	0.370	0.280	0.230
STSA851	ST	**993-5819**	0.880	0.630	0.460	0.380
Order Multiple=1			**1+**	**25+**	**100+**	**250+**
2SK1336-E	REN	**117-4949**	0.960	0.690	0.570	0.320

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Power MOSFETs

MOSFET, 30V, PQFN



SMD International IOR Rectifier New

Applications:
- High Frequency Point-of-Load Synchronous Buck
- Converter for Applications in Networking & Computing Systems
- Optimised for Control FET Applications

Benefits:
- Very low $R_{DS(ON)}$ at 4.5V V_{GS}
- Low Gate Charge

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- 100% Tested for RG
- Lead-Free (Qualified up to 260°C Reflow)
- RoHS compliant (Halogen Free)
- Low Thermal Resistance
- Large Source Lead for more reliable Soldering

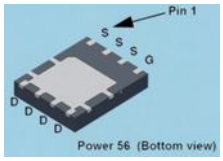
Voltage, Vds V	Resistance Rds On mohm	Current, Id cont A	Voltage Vgs, Typ V	Mftrs. List No.
30	7.1	15	1.8	IRFH7921TRPBF
30	6.8	15	1.8	IRFH7923TRPBF

528623

			Price Each			
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
IRFH7921TRPBF	SMD **168-8577**	0.59	0.42	0.34	0.28	0.25
IRFH7923TRPBF	SMD **168-8578**	0.60	0.43	0.34	0.29	0.25

Power56

FAIRCHILD SEMICONDUCTOR SMD



V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Mftrs. List No.
N Channel						
60	0.0115	10.6	60	4	2.5	FDMS5672
80	0.0165	8.8	50	4	2.5	FDMS3572
Dual N Channel						
30	0.0215,0.013	7.5,10	60	3	2.5	FDMS9620S

494847

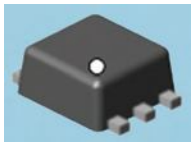
			Price Each			
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
FDMS3572	SMD **149-5180**	1.12	0.77	0.60	0.58	0.57
FDMS5672	SMD **149-5182**	1.22	0.83	0.60	0.56	0.51
FDMS9620S	SMD **149-8958**	0.66	0.53	0.46	0.42	0.37

Low Voltage MOSFETs

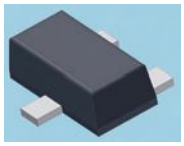
FAIRCHILD SEMICONDUCTOR SMD



SC70-6



SC75-6 FLMP



SC89

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Case Style	Device Marking	Mftrs. List No.
N Channel								
20	0.7	0.6	1	1.3	0.625	SC-89	C	FDY300NZ
20	5	0.2	1	1.5	0.625	SC-89	D	FDY301NZ
Dual N Channel								
20	0.7	0.6	1	1.3	0.625	SC-89	C	FDY3000NZ
20	5	0.2	1	1.5	0.625	SC-89	D	FDY3001NZ
30	0.4	0.75	2.2	1.5	0.36	SC-70		FDG8850NZ
P Channel								
12	0.11	2	6	-1.5	0.75	SC-70	.30	FDG330P
20	0.07	4.2	16	-1.5	1.6	SC-75	.A	FDJ129P
20	1.2	0.35	1	-1.5	0.625	SC-89	A	FDY100PZ
20	8	0.15	1	-1.5	0.625	SC-89	B	FDY101PZ
Dual P Channel								
20	1.2	0.35	1	-1.5	0.625	SC-89	A	FDY2000PZ
Dual NP Channel								
30, 25	0.4, 1.1	0.75, 0.41	2.2, 1.2	0.65*	0.38	SC-70	.42	FDG8842CZ

494850

			Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
FDG330P	SMD **149-5187**	0.440	0.350	0.300	0.280	0.250
FDG8842CZ	SMD **149-8955**	0.153	0.121	0.110	0.098	0.088
FDG8850NZ	SMD **149-8956**	0.153	0.121	0.110	0.098	0.088
FDJ129P	SMD **149-5189**	0.400	0.330	0.280	0.250	0.230
FDY100PZ	SMD **149-5190**	0.121	0.110	0.098	0.088	0.077
FDY101PZ	SMD **149-5191**	0.098	0.088	0.077	0.066	0.055

RL Re-reeling available

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
FDY2000PZ	SMD 149-5192	0.220	0.176	0.143	0.132	0.121
FDY3000NZ	SMD 149-5194	0.121	0.110	0.098	0.088	0.077
FDY3001NZ	SMD 149-5195	0.111	0.098	0.087	0.074	0.061
FDY300NZ	SMD 149-5196	0.187	0.153	0.132	0.121	0.110
FDY301NZ	SMD 149-5198	0.187	0.153	0.132	0.121	0.110

<50V, Low Voltage MOSFETS

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V_{DS} V	Polarity	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	P_D @ 25°C W	Mftr.	Package	Order Code	Mftrs. list No.
8	P	0.052	3.7	0.96	ON	SOT-23	143-1297	NTR2101PT1G
8	P	0.1	1.4	0.29	ON	SOT-323	145-3612	NTS2101PT1G
12	N	0.007	13	2.5	IR	SOIC	129-8514	IRF7410TRPBF
12	N	8	15	2.5	IR	SOIC	129-8486	IRF7476PBF
14	N	0.007	16	2.5	IR	SOIC	129-8512	IRF7210PBF
20	P	0.0082	15	2.5	IR	SOIC	129-8554	IRF7425PBF
20	N	0.04	5.4	1.1	ZET	SOT-23	142-6251	ZXMN2B03E6
20	N	0.042	24	75	IR	D2-PAK	129-8482	IRL5602STRLPBF
20	N	0.045	4.2	0.77	ON	SOIC	145-3623	NTMS4N01R2G
20	P	0.05	10	8.3	ON	SOT-223-4	145-3628	NTF6P02T3G
20	N	0.055	4.3	1	ZET	SOT-23	142-6252	ZXMN2B14FH
20	P	0.065	2.3	1.25	TS	SOT-23	129-9315	TSM2301CX
20	N	0.065	2.4	0.25	TS	SOT-23	129-9316	TSM2302CX
20	N	0.08	3.2	1.25	ON	SOT-23	143-1305	NTR4501NT1G
20	N	0.085	2.8	1.25	ON	SOT-23	145-3618	MGSF2N02ELT1G
20	P	0.085	3.2	0.73	ON	SOT-23	143-1303	NTR4101PT1G
20	N	0.1	2.4	0.625	ZET	SOT-23	142-6253	ZXMN2B01F
20	P	0.12	1.37	0.329	ON	SOT-323	145-3617	NTS4101PT1G
20	P	0.16	3.3	2	ON	SOIC	145-3621	MMDF2P02HDR2G
20	P	0.22	1.3	0.4	ON	SOT-23	143-1302	NTR1P02LT1G
20	P	0.8	0.4	0.225	ON	SOT-23	143-1301	NTR0202PLT1G
20	N	1	0.3	0.225	ON	SOT-23	143-1299	MMBF0201NLT1G
20	N	1	0.3	0.15	ON	SOT-323	145-3615	MMBF2201NT1G
20	P	2.2	0.3	0.15	ON	SC-70	143-1300	MMBF2202PT1G
20	N	9	10	2.5	IR	SOIC	129-8507	IRF7459TRPBF
25	N	4.8	100	81	IR	D-PAK	129-8551	IRLR8713PBF
30	N	0.0091	13		INF	SOIC	147-1689	BSO094N03S
30	N	0.01	54	50	ON	D-PAK	145-3641	NTD4810NH-1G
30	N	0.0119	11.9		INF	SOIC	147-1691	BSO119N03S
30	N	0.02	8.8		INF	SOIC	147-1693	BSO200N03S
30	N	0.03	7.2		INF	SOIC	147-1694	BSO300N03S
30	N	0.009	58	52	ON	D-PAK	143-1314	NTD4809NH-1G
30	N	0.013	35	32.6	ON	I-PAK	143-1310	NTD4815NH-1G
30	P	0.02	10	2.5	IR	SOIC	129-8502	IRF7416TRPBF
30	P	0.025	50	125	ON	D2-PAK	145-3639	MTB50P03HDLG
30	P	0.025	50	125	ON	TO-220	145-3640	MTP50P03HDLG
30	N	0.027	20	74	ON	D-PAK	145-9159	NTD20N03L27G
30	P	0.06	4.7	1.25	ON	TSOP-6	145-3637	NTGS4111PT2G
30	P	0.1	5	3.13	ON	SOT-223-4	145-3638	NTF5P03T3G
30	N	0.1	1.6	0.42	ON	SOT-23	145-3636	MGSF1N03LT1G
30	N	0.14	2.5	0.73	ON	SOT-23	143-1309	NTR4503NT1G
30	P	0.2	1.95	1.25	ON	SOT-23	143-1308	NTR4502PT1G
30	N	1.5	0.27	0.33	ON	SOT-323	145-3633	NTS4001NT1G
30	N	1.5	0.56	0.83	ON	SOT-23	145-3635	NTR4003NT1G
30	N	3	200	200	IR	D2-PAK	129-8508	IRL3713STRLPBF
30	N	3.8	21	2.5	IR	SOIC	129-8543	IRF7832ZPBF
20	P	0.125	3.2	1	ROHM	TSMT3	152-5561	RTR030P02TL
30	N	9.5	10	2	ROHM	SOP-8	152-5546	RSS100N03FU6TB
30	N	0.079	3.5	1	ROHM	TUMT6	152-5551	RTL035N03TR
30	N	11	9	2	ROHM	SOP-8	152-5543	RSS090N03FU6TB
40	P	0.015	10.5	2.5	IR	SOIC	129-8500	IRF7240PBF
40	P	0.028	6	1.5	IR	TSSOP-8	129-8531	IRF7703TRPBF
40	P	0.046	4.6	1.5	IR	TSSOP-8	129-8532	IRF7704TRPBF
40	N	0.112	3.4	2	IR	SOIC	129-8542	IRF5803D2TRPBF

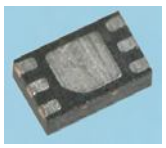
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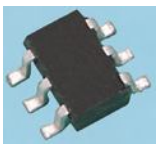
Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
IRL5602STRLPBF	IR	SMD 129-8482 RL	2.080	1.520	1.250	1.010
IRF7476PBF	IR	SMD 129-8486	1.220	0.900	0.780	0.670
IRF7240PBF	IR	SMD 129-8500	4.640	3.410	2.900	2.570
IRF7416TRPBF	IR	SMD 129-8502 RL	2.330	1.710	1.470	1.290
IRF7459TRPBF	IR	SMD 129-8507 RL	1.520	1.120	0.910	0.740
IRL3713STRLPBF	IR	SMD 129-8508 RL	5.630	4.140	3.520	3.120
IRF7210PBF	IR	SMD 129-8512	4.800	3.510	3.030	2.670
IRF7410TRPBF	IR	SMD 129-8514 RL	1.460	1.070	0.880	0.720
IRF7703TRPBF	IR	SMD 129-8531 RL	1.510	1.120	0.950	0.850
IRF7704TRPBF	IR	SMD 129-8532 RL	1.270	0.940	0.770	0.620
IRF5803D2TRPBF	IR	SMD 129-8542 RL	0.700	0.500	0.410	0.330
IRF7832ZPBF	IR	SMD 129-8543	1.490	0.990	0.840	0.730
IRLR8713PBF	IR	SMD 129-8551	1.500	1.100	0.890	0.720
IRF7425PBF	IR	SMD 129-8554	1.640	1.180	0.900	0.720
TSM2301CX	TS	SMD 129-9315	0.200	0.149	0.094	0.080
TSM2302CX	TS	SMD 129-9316	0.200	0.149	0.094	0.080
ZXMN2B01F	ZET	SMD 142-6253	0.400	0.280	0.210	0.176
ZXMN2B03E6	ZET	SMD 142-6251	0.790	0.520	0.410	0.350
ZXMN2B14FH	ZET	SMD 142-6252	0.700	0.460	0.350	0.310
NTR2101PT1G	ON	SMD 143-1297	0.270	0.166	0.119	0.093
MMBF0201NLT1G	ON	SMD 143-1299	0.280	0.199	0.153	0.122
MMBF2202PT1G	ON	SMD 143-1300	0.260	0.182	0.142	0.113
NTR0202PLT1G	ON	SMD 143-1301	0.240	0.166	0.130	0.103
NTR1P02LT1G	ON	SMD 143-1302	0.260	0.182	0.142	0.113
NTR4101PT1G	ON	SMD 143-1303	0.300	0.186	0.133	0.104
NTR4501NT1G	ON	SMD 143-1305	0.270	0.166	0.119	0.093

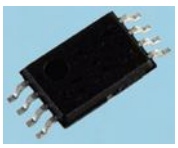
Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
NTR4502PT1G	ON	SMD 143-1308	0.390	0.270	0.186	0.140
NTR4503NT1G	ON	SMD 143-1309	0.310	0.191	0.137	0.107
NTD4815NH-1G	ON	143-1310	0.480	0.350	0.270	0.200
NTD4809NH-1G	ON	SMD 143-1314	0.710	0.500	0.390	0.300
NTS2101PT1G	ON	SMD 145-3612	0.310	0.191	0.137	0.107
MMBF2201NT1G	ON	SMD 145-3615	0.220	0.158	0.123	0.097
NTS4101PT1G	ON	SMD 145-3617	0.270	0.188	0.143	0.113
MGSF2N02ELT1G	ON	SMD 145-3618	0.350	0.260	0.196	0.156
MMDF2P02HDR2G	ON	SMD 145-3621	1.560	1.120	0.870	0.680
NTMS4N01R2G	ON	SMD 145-3623	0.900	0.650	0.490	0.390
NTF6P02T3G	ON	SMD 145-3628	0.930	0.670	0.520	0.400
NTS4001NT1G	ON	SMD 145-3633	0.210	0.144	0.103	0.077
NTR4003NT1G	ON	SMD 145-3635	0.105	0.077	0.058	0.047
MGSF1N03LT1G	ON	SMD 145-3636	0.400	0.280	0.220	0.172
NTGS4111PT2G	ON	SMD 145-3637	0.460	0.310	0.250	0.195
NTF5P03T3G	ON	SMD 145-3638	0.820	0.590	0.450	0.360
MTB50P03HDLG	ON	SMD 145-3639	4.620	3.310	2.540	2.030
MTP50P03HDLG	ON	145-3640	2.890	2.140	1.530	1.310
NTD4810NH-1G	ON	SMD 145-3641	0.580	0.430	0.330	0.260
NTD20N03L27G	ON	SMD 145-9159	0.520	0.470	0.450	– –
BSO094N03S	INF	SMD 147-1689	0.640	0.490	0.440	0.420
BSO119N03S	INF	SMD 147-1691	0.480	0.370	0.340	0.330
BSO200N03S	INF	SMD 147-1693	0.390	0.300	0.280	0.270
BSO300N03S	INF	SMD 147-1694	0.370	0.290	0.260	0.250
RTR030P02TL	ROHM	SMD 152-5561	0.210	0.176	0.132	0.095
RSS100N03FU6TB	ROHM	SMD 152-5546	0.470	0.400	0.290	0.210
RTL035N03TR	ROHM	SMD 152-5551	0.280	0.240	0.176	0.128
RSS090N03FU6TB	ROHM	SMD 152-5543	0.410	0.340	0.250	0.184

Low Voltage Dual MOSFETS

ON Semiconductor · International IOR Rectifier · SMD


DFN-6


TSOP-6


TSSOP-8

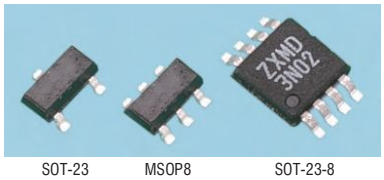
V_{DS} V	Polarity	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	P_D @ 25°C W	Mftr.	Package	Order Code	Mftrs. list No.
12	Dual P	0.025	5.4	1	IR	TSSOP-8	129-8566	IRF7754TRPBF
12	Dual P	0.04	4.3	1	IR	TSSOP-8	129-8568	IRF7756TRPBF
20	N & P comp	65mohm	4.6	2.3	ON	DFN-6	145-3624	NTLJD3119CTAG
20	Dual P	0.03	4.7	1	IR	TSSOP-8	129-8564	IRF7750TRPBF
20	Dual N	0.09	2.7	0.96	IR	TSOP-6	129-8559	IRF5852TRPBF
20	Dual P	0.09	2.9	0.96	IR	TSOP-6	129-8560	IRF5810TRPBF
20	Dual P	0.135	2.2	0.96	IR	TSOP-6	129-8561	IRF5850TRPBF
20	NP	0.135	2.2	0.96	IR	TSOP-6	129-8563	IRF5851TRPBF
30	Dual N	0.03	4.6	1	IR	TSSOP-8	129-8557	IRF7752TRPBF
30	Dual P	0.035	4.5	1	IR	TSSOP-8	129-8565	IRF7751TRPBF
30	Dual N	0.035	6.2	1.25	ZET	SOIC	147-1153	ZXMN3A06DN8TA
30	NP	0.07	4.4	1.25	ZET	SOIC	147-1154	ZXMC3A17DN8TA

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Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
IRF7752TRPBF	IR	SMD 129-8557 RL	1.57	1.03	0.79	0.64
IRF5852TRPBF	IR	SMD 129-8559 RL	1.19	0.87	0.75	0.64
IRF5810TRPBF	IR	SMD 129-8560 RL	0.66	0.48	0.41	0.37
IRF5850TRPBF	IR	SMD 129-8561 RL	0.71	0.49	0.45	0.39
IRF5851TRPBF	IR	SMD 129-8563 RL	0.86	0.55	0.42	0.34
IRF7750TRPBF	IR	SMD 129-8564 RL	2.36	1.74	1.50	1.26
IRF7751TRPBF	IR	SMD 129-8565 RL	2.52	1.84	1.53	1.23
IRF7754TRPBF	IR	SMD 129-8566 RL	1.76	1.15	0.88	0.71
IRF7756TRPBF	IR	SMD 129-8568 RL	1.05	0.79	0.64	0.53
ZXMN3A06DN8TA	ZET	SMD 147-1153	1.04	0.73	0.62	0.59
ZXMC3A17DN8TA	ZET	SMD 147-1154	0.87	0.62	0.52	0.50
NTLJD3119CTAG	ON	SMD 145-3624	0.72	0.52	0.39	0.31

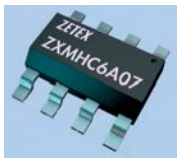
20V - 100V, Low Voltage MOSFETs

ZETEX SEMICONDUCTORS

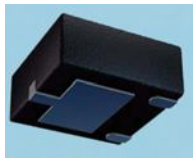


SOT-23 MSOP8 SOT-23-8


SOT-223



SM-8


DFN322

This new generation of trench MOSFETs from Zetex utilizes a unique structure that combines the benefits of low on-resistance with fast switching speed. This makes them ideal for high efficiency, low voltage, power management applications.

RL Re-reeling available

Power MOSFETs - continued

20V - 100V, Low Voltage MOSFETs - continued

U-MOS Trench Technology

V_{DS} V	$R_{DS(on)}$ max. Ω	@ V_{GS} V	$I_{D\ cont.}$ @ 25°C A	$V_{GS(th)}$ min V	Case Style	Mftrs. List No.
N-Channel						
20	0.04	4.5	5.4	0.7	MSOP8	ZXM64N02X
20	0.055	4.5	4.5	0.7	SOT-23-6	ZXMN2A03E6
20	0.12	4.5	2.2	0.7	SOT-23	ZXMN2A01F
20	0.18	4.5	1.7	0.7	SOT-23	ZXM61N02F
20	0.045	4.5	4.9	0.6	SOT-23	ZXMN2F30FHTA
20	0.06	4.5	4	0.5	SOT-23	ZXMN2F34FHTA
20	0.06	4.5	5.1	0.5	DFN322	ZXMN2F34MATA
30	0.05	10	4.6	1	SOT-23	ZXMN3A03E6
30	0.12	10	2	1	SOT-23	ZXMN3A01F
30	0.22	10	1.4	1	SOT-23	ZXM61N03F
30	0.047	10	4.6	1	SOT-23	ZXMN3F30FHTA
40	0.05	10	7	1	SOT-223	ZXMN4A06G
60	0.045	10	6.9	1	SOT-223	ZXMN6A09G
60	0.1	10	3	1	SOT-23	ZXMN6A08E6
60	0.14	10	3.8	1	SOT-223	ZXMN6A11G
60	0.4	10	1	1	SOT-23	ZXMN6A07F
100	0.4	10	1.5	2	SOT-23	ZXMN10A08E6
100	0.6	10	1.8	2	SOT-223	ZXMN10A11G
100	1.0	10	0.64	2	SOT-23	ZXMN10A07F
P-Channel						
20	0.6	4.5	0.9	-0.7	SOT-23	ZXM61P02F
20	0.2	4.5	2.3	-0.7	SOT-23	ZXM62P02E6
30	0.35	10	1.1	-1	SOT-23	ZXM61P03F
30	0.15	10	2.6	-1	SOT-23	ZXM62P03E6
30	0.075	10	3.8	-1	MSOP8	ZXM64P03X
30	0.07	10	4	-0.8	SOT-23	ZXMP3A17E6
30	0.21	10	1.6	-1	SOT-23	ZXMP3A13F
40	0.06	10	6.4	-1	SOT-223	ZXMP4A16G
200	28	10	0.122	-1.5	SOT-23	ZXMP2120E5
N and P Channel complement						
30	0.13(N), 0.27(P)	4.5	2.4	0.7	MSOP8	ZXMD63C02X
30	0.135(N), 0.185(P)	10	2.3	1	MSOP8	ZXMD63C03X
30	0.035(N), 0.048(P)	10	6.4	1	SOIC	ZXMC3A16DN8
N-Channel Dual						
20	0.13	4.5	2.4	0.7	MSOP8	ZXMD63N02X
30	0.025	10	7.6	1	SOIC	ZXMN3A04DN8
30	0.028	10	7.1	1	SOIC	ZXMN3G32DN8TA
60	0.045	10	5.2	1	SOIC	ZXMN6A09DN8
P-Channel Dual						
20	0.27	4.5	1.7	-0.7	MSOP8	ZXMD63P02X
N and P, H-Bridge						
60	1.8(N), 1.5(P)	10	1.8	1	SM-8	ZXMHC6A07T8

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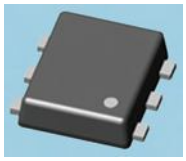
Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	Price Each 100+	250+	1K+
ZXM61N02F	SMD 952-5270● RL	0.230	0.210	0.178	0.160	0.144
ZXM61N03F	SMD 952-5289● RL	0.230	0.210	0.178	0.160	0.144
ZXM61P02F	SMD 952-5297● RL	0.280	0.230	0.200	0.128	0.127
ZXM61P03F	SMD 952-5300● RL	0.280	0.230	0.200	0.128	0.127
ZXM62P02E6	SMD 952-5319● RL	0.460	0.400	0.340	0.280	0.220
ZXM62P03E6	SMD 952-5327● RL	0.440	0.370	0.320	0.280	0.240
ZXM64N02X	SMD 952-5335● RL	1.040	0.880	0.780	0.490	0.480
ZXM64P03X	SMD 952-5343● RL	1.110	0.950	0.820	0.510	0.500
ZXMD63C02X	SMD 952-5351● RL	1.290	1.100	0.960	0.630	0.590
ZXMD63C03X	SMD 952-5360● RL	0.980	0.840	0.720	0.550	0.510
ZXMD63N02X	SMD 952-5378● RL	1.300	1.150	0.960	0.620	0.600
ZXMD63P02X	SMD 952-5386● RL	1.450	1.260	1.060	0.790	0.740
ZXMC3A16DN8	SMD 756-4953● RL	1.200	1.000	0.690	0.530	0.510
ZXMHC6A07T8	SMD 756-5020● RL	2.020	1.680	1.150	0.900	0.850
ZXMN10A07F	SMD 952-5700● RL	0.350	0.290	0.200	0.137	0.121
ZXMN10A08E6	SMD 952-5718● RL	0.460	0.360	0.260	0.168	0.167
ZXMN10A11G	SMD 952-5726● RL	0.710	0.560	0.390	0.270	0.260
ZXMN2A01F	SMD 756-4880● RL	0.280	0.240	0.161	0.131	0.121
ZXMN2A03E6	SMD 756-4856● RL	0.590	0.490	0.340	0.270	0.250
ZXMN3A01F	SMD 952-5734● RL	0.320	0.260	0.173	0.117	0.115
ZXMN3A03E6	SMD 952-5742● RL	0.550	0.460	0.320	0.220	0.210
ZXMN3A04DN8	SMD 952-5750● RL	1.750	1.470	1.190	0.910	0.630
ZXMN4A06G	SMD 756-4910● RL	1.010	0.830	0.590	0.460	0.440
ZXMN6A07F	SMD 952-5769● RL	0.340	0.280	0.185	0.126	0.124
ZXMN6A08E6	SMD 952-5777● RL	0.560	0.440	0.320	0.220	0.210
ZXMN6A09DN8	SMD 952-5785● RL	1.530	1.290	1.050	0.810	0.570
ZXMN6A09G	SMD 756-4988● RL	1.240	1.010	0.730	0.560	0.540
ZXMN6A11G	SMD 952-5793● RL	0.710	0.560	0.390	0.270	0.260
ZXMP3A13F	SMD 756-4937● RL	0.490	0.400	0.290	0.210	0.200
ZXMP3A17E6	SMD 756-4929● RL	0.820	0.680	0.450	0.350	0.340
ZXMP2120E5	SMD 125-1233● RL	0.560	0.440	0.290	0.240	0.220
ZXMP4A16G	SMD 756-4945● RL	1.240	1.010	0.730	0.560	0.540
ZXMN3G32DN8TA	NEW SMD 158-3671●	0.510	0.340	0.290	0.270	0.240
ZXMN2F30FHTA	NEW SMD 158-3664●	1.280	0.850	0.740	0.670	0.620
ZXMN2F34FHTA	NEW SMD 158-3665●	0.174	0.116	0.100	0.090	0.084
ZXMN2F34MATA	NEW SMD 158-3666●	0.240	0.163	0.140	0.127	0.118
ZXMN3F30FHTA	NEW SMD 158-3667●	0.191	0.127	0.111	0.099	0.093

Mftrs. List No.		Order Code	Price Per Reel 1+	3+
ZXMP4A16G	REEL 1000	NEW SMD 156-2504●	485.10	436.59
ZXM61N02FTA	REEL 3000	NEW SMD 156-2529●	389.86	
ZXM61N03FTA	REEL 3000	NEW SMD 156-2530●	389.86	
ZXM61P02FTA	REEL 3000	NEW SMD 156-2531●	361.42	
ZXM61P03FTA	REEL 3000	NEW SMD 156-2532●	361.42	
ZXMN3A01FTA	REEL 3000	NEW SMD 156-2533●	308.49	
ZXMN6A07FTA	REEL 3000	NEW SMD 156-2534●	354.27	

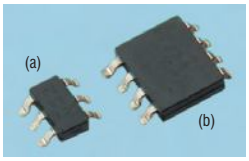
SuperSOT-6 and SuperSOT-8

FAIRCHILD SEMICONDUCTOR™

SMD



SuperSOT-6 FLMP



(a) SuperSOT-6: H=1.22, W=3.0, D=3.0
(b) SuperSOT-8: H=1.02, W=4.55, D=4.06

- High power dissipation
- High cell density
- 3V logic-level drive options
- Low $R_{DS(on)}$

V_{DS} V	N/P Channel	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @25°C A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftrs. List No.
SuperSOT-6, Single Package						
30	N	0.026	5.5	2	1.6	FDC645N
30	N	0.027	6.3	3	1.6	FDC655AN
60	N	0.055	4.3	4	1.6	FDC5612
20	P	0.2	2.7	-2.7	1.8	NDC632P
30	P	0.05	4	-3	1.6	FDC658P
-12	P	0.026	6	-1.5	1.6	FDC606P
-20	P	0.035	5.5	-1.5	1.6	FDC602P
20	P	0.033	5.5	-1.5	1.6	FDC604P
-20	P	0.03	5.8	-1.5	1.6	FDC608PZ
-20	P	0.043	4.5	-1.5	1.6	FDC638APZ
20	P	0.045	4.5	-1.5	1.6	FDC638P
20	P	0.13	2.8	-1	1.6	FDC636P
-30	P	0.05	4	-3	1.6	FDC658AP
SuperSOT-6, Dual Package						
20	NN	0.08	2.7	1.5	0.96	FDC6305N
30	NN	0.095	2.5	3	0.96	FDC6561AN
20	PP	0.17	1.9	-1.5	0.96	FDC6306P
30	PP	0.17	3	-3	0.96	FDC6506P
50	PP	2	0.51	10	0.7	NDC7002N
20	N	0.08	2.7	1.5	0.96	FDC6327C
	P	0.17	1.6	1.5	0.96	
25	N	0.68	2.7	1.5	0.9	FDC6321C
	P	0.45	1.6	1.5	0.9	
50	N	2.0	0.34	2.5	0.7	NDC7001C
SuperSOT-6 FLMP, Single Package						
-20	P	0.02	8	-1.5	2	FDC697P
SuperSOT-6 FLMP, Dual Package						
20	NN	0.02	7.3	1.5	1.6	FDC6000NZ
20	N	0.027	5.9	1.5	1.6	FDC6020C
	P	0.055	4.2	1.5	1.6	

V_{IN} V Min	V_{IN} V Max	$V_{ON/OFF}$ V	$R_{DS\ (ON)}$ Ω	I_{LOAD} A	$I_{LOAD,\ pulsed}$ A	V_{drop} @ V_{in}=12V V	P_D@25°C W	Mftrs. List No.
3	20	1.5 - 8	0.08	2.3	10	0.2	0.7	FDC6330L

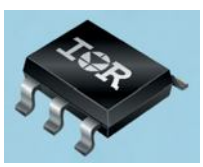
211256

Mftrs. List No.	Order Code	1+	25+	Price Each 100+	250+	1K+
FDC5612	SMD 984-5445● RL	0.670	0.460	0.330	0.200	0.196
FDC6000NZ	NEW SMD 149-5230●	0.530	0.420	0.350	0.320	0.310
FDC6020C	NEW SMD 149-5231●	0.620	0.510	0.420	0.380	0.360
FDC602P	NEW SMD 149-5223●	0.570	0.370	0.280	0.250	0.230
FDC604P	SMD 984-6417● RL	0.430	0.280	0.200	0.119	0.099
FDC606P	NEW SMD 149-5224●	0.790	0.520	0.380	0.350	0.330
FDC608PZ	NEW SMD 149-5225●	0.280	0.182	0.140	0.126	0.119
FDC6305N	SMD 984-4805● RL	0.460	0.310	0.220	0.104	0.091
FDC6306P	SMD 984-4929● RL	0.410	0.270	0.196	0.091	0.071
FDC6321C	SMD 984-4848● RL	0.320	0.230	0.195	0.159	0.131
FDC6327C	SMD 984-4856● RL	0.480	0.380	0.280	0.190	0.159
FDC6330L	SMD 984-4864● RL	0.570	0.370	0.280	0.199	0.161
FDC636P	SMD 984-6425● RL	0.440	0.340	0.240	0.172	0.144
FDC638APZ	NEW SMD 149-5226●	0.380	0.260	0.183	0.128	0.097
FDC645N	SMD 984-5453● RL	0.750	0.600	0.420	0.300	0.250
FDC6506P	SMD 984-4937● RL	0.490	0.330	0.230	0.150	0.130
FDC655AN	SMD 984-5461● RL	0.470	0.360	0.250	0.182	0.152
FDC6561AN	SMD 984-4813● RL	0.430	0.290	0.200	0.159	0.154
FDC658P	SMD 984-6441● RL	0.470	0.360	0.260	0.182	0.152
FDC658AP	NEW SMD 149-5228●	0.390	0.280	0.210	0.198	0.176
FDC697P	NEW SMD 149-5232●	1.190	0.810	0.580	0.500	0.490
NDC632P	SMD 984-6450● RL	0.550	0.460	0.310	0.220	0.181
NDC7001C	SMD 984-4872● RL	0.490	0.320	0.230	0.135	0.114
NDC7002N	SMD 984-4821● RL	0.390	0.260	0.191	0.108	0.094
FDC638P	SMD 984-6433● RL	0.470	0.320	0.230	0.107	0.089

TSOP6/Micro-6™

International IOR Rectifier

VISHAY



SMD

Overall H=1.1, W=2.75, D=3.1
Lead pitch 1.0mm

RL Re-reeling available

Farnell

V_{DS} V	$R_{DS(on)}$ max. Ω @ V_{GS}=4.5V	V_{GS}=2.5V	I_D A	$I_{DM\ pulsed}$ A	$V_{GS(th)}$ max. (*min.), V	Typ. Q_g nC	P_{tot} W	Mftr	Mftrs List No.
N-Channel									
20	0.1	—	3.2	18	0.7*	4.7	1.7	IR	IRLMS1902PBF
20	0.03	0.045	6.5	20	0.6*	15	2.0	IR	IRLMS2002PBF
P-Channel									
12	0.04	0.053	4.5	20	-0.45*	—	1.1	SLX	SI3447BDV-T1-E3
-20	0.2		2.4	13	0.7*	5.8	1.7	IR	IRLMS6702TRPBF
20	0.09	0.13	2.45	16	-0.45*	—	0.86	SLX	SI3441BDV-T1-E3
-20	0.05	0.1	5.6	45	-1.2	11	2	IR	IRLMS6802TRPBF

241449

Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
		Price Each				
IRLMS1902PBF	SMD 910-2582● RL	0.860	0.540	0.400	0.330	0.300
IRLMS2002PBF	SMD 910-2590● RL	0.940	0.590	0.460	0.380	0.330
IRLMS6702TRPBF	SMD 101-3479● RL	0.710	0.410	0.300	0.250	0.240
IRLMS6802TRPBF	SMD 910-3333● RL	1.010	0.500	0.320	0.260	0.210
SI3441BDV-T1-E3	SMD 121-3157● RL	0.330	0.185	0.118	0.098	0.083
SI3447BDV-T1-E3	SMD 121-3158● RL	0.550	0.300	0.195	0.154	0.145

SC-70



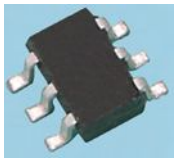
V_{DS} V	$R_{DS(on)}$ Ω @ 10V	$R_{DS(on)}$ Ω @ 4.5V	$R_{DS(on)}$ Ω @ 2.5V	I_D cont. @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftr.	Mftrs List No.
N Channel									
8	—	0.047	0.051	4	18	1	2.78	SLX	SI1450DH-T1-E3
30	—	0.066	0.095	4	12	1.6	2.8	SLX	SI1470DH-T1-E3
Dual N Channel									
20	—	0.205	0.34	1.3	4	1.6	1.25	SLX	SI1958DH-T1-E3
30	—	0.225	0.345	1.3	4	1.6	1.25	SLX	SI1970DH-T1-E3
P Channel									
20	0.08	0.1	0.155	1.6	6.5	-1.5	2.78	SLX	SI1469DH-T1-E3
30	0.1	0.12	0.175	1.6	6.5	-1.6	2.78	SLX	SI1471DH-T1-E3

495901

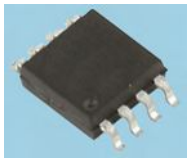
Mftrs. List No.	Order Code	1+	25+	100+	250+
		Price Each			
SI1450DH-T1-E3	SMD 149-7597●	0.350	0.280	0.240	0.220
SI1469DH-T1-E3	SMD 149-7598●	0.290	0.220	0.189	0.179
SI1470DH-T1-E3	SMD 149-7599●	0.290	0.220	0.189	0.179
SI1471DH-T1-E3	SMD 149-7600●	0.290	0.220	0.189	0.179
SI1958DH-T1-E3	SMD 149-7604●	0.290	0.220	0.189	0.179
SI1970DH-T1-E3	SMD 149-7605●	0.290	0.220	0.189	0.179

TSOP-6 and TSOP-8

Single and Dual MOS



TSOP-6



TSOP-8

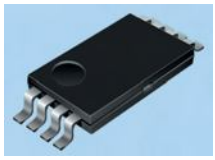
V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	I_D pulsed A	P_D @ 25°C W	Package	Mftrs. list No.
Single N Channel						
2.5	0.07	3	20	0.86	TSOP	SI3442BDV-T1-E3
20	0.033	6.7	20	2	TSOP	SI3460BDV-T1-E3
150	1.2	0.9	7	2	TSOP-6	IRF5802TRPBF
200	2.2	0.6	4.8	2	TSOP-6	IRF5801TRPBF
Single P Channel						
12	0.014	8	70	1.5	TSSOP-8	IRF7702TRPBF
20	0.065	4.4	20	2	TSOP-6	SI3443DVTRPBF
20	0.08	3.6	20	1.1	TSOP	SI3443BDV-T1-E3
20	0.086	4	16.5	2	TSOP-6	IRF5806TRPBF
30	0.018	8	30	1.5	TSSOP-8	IRF7705TRPBF
40	0.028	6	24	1.5	TSSOP-8	IRF7703TRPBF
40	0.046	4.6	19	1.5	TSSOP-8	IRF7704TRPBF
30	0.085	4	32	2	TSOP-6	IRF5800TRPBF
30	0.098	3.8	15	2	TSOP-6	IRF5805TRPBF
40	0.112	3.4	27	2	TSOP-6	IRF5803TRPBF
40	0.198	2.5	10	2	TSOP-6	IRF5804TRPBF
150	0.64	1.1	5	2	TSOP	SI3437DV-T1-E3
Dual N-Channel						
20	0.09	2.7	11	0.96	TSOP-6	IRF5852TRPBF
20	0.035	4.8	19	1.2	TSSOP-8	IRF7757TRPBF

V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	I_D pulsed A	P_D @ 25°C W	Package	Mftrs. list No.
Dual N-Channel						
30	0.03	4.6	37	1	TSSOP-8	IRF7752TRPBF
Dual P-Channel						
12	0.025	5.4	22	1	TSSOP-8	IRF7754TRPBF
12	0.04	4.3	17	1	TSSOP-8	IRF7756TRPBF
20	0.03	4.7	38	1	TSSOP-8	IRF7750TRPBF
20	0.051	3.9	15	1	TSSOP-8	IRF7755TRPBF
20	0.09	2.9	11	0.96	TSOP-6	IRF5810TRPBF
20	0.135	2.2	9	0.96	TSOP-6	IRF5850TRPBF
30	0.035	4.5	18	1	TSSOP-8	IRF7751TRPBF
N and P Channel						
20	0.09(N), 0.09(P)	2.7(N), 2.2(P)	11(N), 9(P)	0.96(N&P)	TSOP-6	IRF5851TRPBF

451491

Mftrs. List No.	Order Code	1+	25+	100+	250+
		Price Each			
TSOP-6, N-Channel					
IRF5801TRPBF	SMD 129-8504● RL	0.570	0.440	0.340	0.280
IRF5802TRPBF	SMD 129-8505● RL	0.560	0.420	0.330	0.260
IRF5800TRPBF	SMD 129-8519● RL	0.540	0.400	0.320	0.250
IRF5803TRPBF	SMD 129-8520● RL	0.650	0.470	0.400	0.320
IRF5804TRPBF	SMD 129-8521● RL	1.070	0.780	0.660	0.590
IRF5805TRPBF	SMD 129-8522● RL	0.370	0.330	0.290	0.250
IRF5806TRPBF	SMD 129-8523● RL	0.830	0.610	0.530	0.470
SI3442BDV-T1-E3	SMD 149-7610●	0.280	0.210	0.179	0.169
SI3443DVTRPBF	SMD 129-8524● RL	0.780	0.530	0.390	0.320
SI3460BDV-T1-E3	SMD 149-7612●	0.350	0.280	0.240	0.220
TSOP-6, P-Channel					
SI3437DV-T1-E3	SMD 149-7609●	0.520	0.400	0.350	0.330
SI3443BDV-T1-E3	SMD 149-7611●	0.240	0.179	0.158	0.147
TSOP-6, Dual N-Channel					
IRF5852TRPBF	SMD 129-8559● RL	1.190	0.870	0.750	0.640
TSOP-6, Dual P-Channel					
IRF5810TRPBF	SMD 129-8560● RL	0.660	0.480	0.410	0.370
IRF5850TRPBF	SMD 129-8561● RL	0.710	0.490	0.450	0.390
TSOP-6, Dual N/P Channel					
IRF5851TRPBF	SMD 129-8563● RL	0.860	0.550	0.420	0.340
TSSOP-8, P-Channel					
IRF7702TRPBF	SMD 129-8530● RL	2.310	1.700	1.410	1.140
IRF7703TRPBF	SMD 129-8531● RL	1.510	1.120	0.950	0.850
IRF7704TRPBF	SMD 129-8532● RL	1.270	0.940	0.770	0.620
IRF7705TRPBF	SMD 129-8533● RL	1.030	0.770	0.660	0.580
TSSOP-8, Dual N-Channel					
IRF7752TRPBF	SMD 129-8557● RL	1.570	1.030	0.790	0.640
IRF7757TRPBF	SMD 129-8558● RL	0.940	0.700	0.590	0.530
TSSOP-8, Dual P-Channel					
IRF7750TRPBF	SMD 129-8564● RL	2.360	1.740	1.500	1.260
IRF7751TRPBF	SMD 129-8565● RL	2.520	1.840	1.530	1.230
IRF7754TRPBF	SMD 129-8566● RL	1.760	1.150	0.880	0.710
IRF7755TRPBF	SMD 129-8567● RL	1.340	0.910	0.740	0.620
IRF7756TRPBF	SMD 129-8568● RL	1.050	0.790	0.640	0.530

TSSOP-8



- Single or dual transistor configurations
- Low input capacitance
- Low on resistance

V_{DS} V	$R_{DS(on)}$ Ω	I_D cont A	I_D pulsed A	$V_{GS(th)}$ typ. (*min) V	Marking SMD	P_D @ 25°C W	Input Capacitance pf	Mftrs List No.
Single P Channel								
20	0.012	9.2	50	0.6	254P	1.3	5878	FDW254P
30	0.0135	8	50	1.7	256P	1.3	2267	FDW256P
Dual P Channel								
12	0.018	6	30	0.5	2508P	1.3	2644	FDW2508P
Dual N Channel								
20	0.018	6	30	0.9	2501N	1	1290	FDW2501N
20	0.0185	11.6	46.4	0.45	15UN	4.2	1450	PMWD15UN
20	0.02	7.1	—	0.8	2511NZ	1.6	1000	FDW2511NZ
N and P Channel								
20	0.021(N),0.043(P)	5.5(N), 3.8(P)	30(N), 30(P)	0.6*(N), -0.6*(P)	2521C	1	1082(N), 1030(P)	FDW2521C

424409

Mftrs. List No.	Mftr.		Order Code	1+	25+	100+	250+
				Price Each			
FDW2501N	FCH		SMD 149-5297●	0.660	0.530	0.440	0.400
FDW2508P	FCH	NEW	SMD 149-5304●	0.880	0.710	0.590	0.540
FDW2511NZ	FCH	NEW	SMD 149-5305●	0.320	0.250	0.210	0.198
FDW2521C	FCH	NEW	SMD 149-5308●	0.730	0.580	0.490	0.440
FDW254P	FCH	NEW	SMD 149-5311●	0.880	0.710	0.590	0.540
FDW256P	FCH	NEW	SMD 149-5312●	1.320	1.070	0.890	0.820
PMWD15UN	NXP		SMD 109-7305● RL	0.570	0.380	0.320	0.250

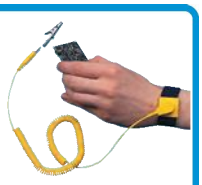
RL Re-reeling available

Power MOSFETs - continued

For **Static Protection** and **Clean-room Products** see page 1052

Heatsinks see page 778

Transistor Insulation Kits see page 762



TSSOP-8

International IOR Rectifier



SMD

Overall H=1.2, W=6.4, D=3.1

V_{DS} V	$R_{DS(on)}$ Ω @ V_{GS}=10V	V_{GS}=4.5V	V_{GS}=2.5V	I_D A	$I_{DM\ pulsed}$ A	$V_{GS(th)}$ max., V	Typ. Q_g nC	P_{tot} W	Mftr.	Mftrs. List No.
Single P-Channel										
20	—	0.022	0.033	7	28	-1.2	31	1.0	IR	IRF7707PBF
20	—	0.015	0.024	8.6	68	-1.2	59	1.5	IR	IRF7700PBF

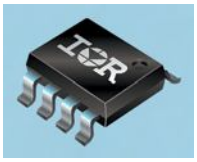
241437

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
IRF7700PBF	SMD 910-3619● RL	1.41	0.88	0.67	– –	– –
IRF7707PBF	SMD 910-3635● RL	0.95	0.61	0.46	– –	– –

Micro8™

International IOR Rectifier

SMD



Pin Configurations

	1	2	3	4	5	6	7	8
a	S	S	S	G	D	D	D	D
b	S1	G1	S2	G2	D2	D2	D1	D1

H=1.11, W=5.03, D=3.05

- Generation V technology
- Ultra-low on-resistance
- Dual N-Channel MOSFET
- Very small SOIC package
- Low profile (<1.1mm)
- Fast switching

V_{DS} V	$R_{DS(on)}$ Ω	@ V_{GS} V	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ min. V	P_D @ 25°C W	Pin Config.	Mftrs. List No.
Single N-Channel								
20	0.035	4.5	5.7	30	0.7	1.8	a	IRF7601PBF
30	0.135	10	5.6	30	1	1.8	a	IRF7603PBF
Single P-Channel								
	0.09	4.5	3.6	19	-0.7	1.8	a	IRF7604PBF
20	0.02	4.5	8.2	66	-0.6	1.8	a	IRF7663PBF
30	0.09	10	3.6	19	-1	1.8	a	IRF7606PBF
Dual N-Channel								
20	0.135	4.5	2.4	19	0.7	1.25	b	IRF7501PBF
30	0.135	10	2.4	14	1	1.25	b	IRF7503PBF
Dual P-Channel								
20	0.055	4.5	4.3	34	-0.6	1.25	b	IRF7555PBF

234891

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
IRF7501PBF	SMD 910-2078● RL	1.81	1.14	0.87	0.70	0.64
IRF7503PBF	SMD 910-2086● RL	1.31	0.82	0.63	0.49	0.48
IRF7555PBF	SMD 910-2248● RL	1.35	0.85	0.65	0.54	0.53
IRF7601PBF	SMD 910-2795● RL	1.47	0.94	0.71	0.57	0.54
IRF7603PBF	SMD 910-2809● RL	2.50	1.58	1.21	0.98	0.89
IRF7604PBF	SMD 910-3414● RL	1.52	0.96	0.73	0.61	0.60
IRF7606PBF	SMD 910-3422● RL	1.26	0.80	0.61	0.54	0.53
IRF7663PBF	SMD 910-3430● RL	1.86	1.18	0.90	0.72	0.66

SO-8, Little Foot

VISHAY

SMD



V_{DS} V	$R_{DS(on)}$Ω@ V_{GS}=10V	V_{GS}=4.5V	V_{GS}2.5V	I_D A	Typ.Q_g nC	Configuration	Mftrs List No
Single N-Channel, Low Gate Threshhold Vgs=2.5V							
20	-	0.009	0.013	13.2	50	Single	SI4466DY
20	-	0.0035	0.0035	17	47	Single	SI4864DY
Dual N-Channel, Low Gate Threshold Vgs=2.5V							
20	-	0.025	0.035	7.2	25	Dual	SI4966DY
20	-	0.02	0.03	6.2	11	Dual	SI9926BDY
30	-	0.028	0.042	-	7	19.5	Single	SI4412ADY
30	-	0.024	0.033	-	6.2	15	Single	SI9410BDY
30	-	0.0185	0.03	-	6.5	8.7	Single	SI4800BDY
30	-	0.0135	0.02	-	7.5	13	Single	SI4410BDY
30	-	0.01	0.0135	-	9.5	14.5	Single	SI4886DY
30	-	0.009	0.013	-	12.5	70	Single	SI4420DY
30	-	0.0085	0.011	-	13.5	16	Single	SI4420BDY-T1-E3
40	-	0.0075	0.0095	-	10.4	28	Single	SI7848DP
40	-	0.009	0.012	-	14	18.5	Single	SI4840DY
60	-	0.024	0.030	-	7.5	31	Single	SI4450DY
60	-	0.022	0.031	-	6	18	Single	SI4850EY
80	-	0.035	—	-	6.2	30		SI4480EY/
100	-	0.060	0.08	-	4.6	30	Single	SI4482DY
100	-	0.034	—	-	6.9	—	Single	SI4484EY
Dual N Channel, 30V to 100V								
30	-	0.036	0.053	-	4.4	13	Dual	SI4936ADY
30	-	0.035	0.052	-	4.5	8.6	Dual	SI9936BDY
30	-	0.025	0.035	-	6.9	30	Dual	SI4920DY
30	-	0.022	0.03	-	7.5	7	Dual	SI4804BDY
30	-	0.016	0.018	0.024	8	19	Dual	SI4922BDY-T1-E3
30	-	0.035	0.051	-	6.8	4.5	Dual	SI4936BDY-T1-E3
60	-	0.041	0.052	-	6.5	9.2	Dual	SI4946BEY-T1-E3
60	-	0.055	0.075	-	4.5	19	Dual	SI4946EY
Single P-Channel, Low Gate Threshold Vgs=2.5V								
20	-	-	0.017	0.023	-7.3	—	Single	SI4403BDY
Dual P-Channel, Low Gate Threshold Vgs=2.5V								
12	-	-	0.035	0.056	-4.8	13	Dual	SI9934BDY
20	-	-	0.06	0.1	-3.6	6	Dual	SI9933BDY
20	-	-	0.032	0.05	-4.9	14	Dual	SI4963BDY
Single P-Channel, -20V to -60V								
20	0.011	0.014	0.02	-9.8	—	Single	SI4463BDY-T1-E3
20	-	0.04	-	-4.5	8.8	Single	SI9433BDY
20	-	0.025	-	-5.6	24	Single	SI9424BDY
30	0.042	0.07	-	-4.1	16	Single	SI9435BDY
30	0.012	0.019	-	-8.8	64	Single	SI4425BDY
30	0.0105	0.0125	-	-9.7	47.2	Single	SI4427BDY
Dual P-Channel, -20V to -60V								
30	0.025	0.041	-	-5.3	33	Dual	SI4925BDY
60	0.170	0.260	-	-2.6	10	Dual	SI9948AEY
60	0.12	0.15	-	-2.4	14.5	Dual	SI4948BEY
Dual N/P-Channel, Low Gate Threshold Vgs=2.5V								
20	-	0.02	0.02	9.1	11	N-Channel	SI4500BDY
20	-	0.1	0.048	3.8	6	P-Channel	
20	-	0.025	0.035	7.1	25	N-Channel	SI4562DY
Dual N/P-Channel, 25V to 60V								
30	0.053	0.075	-	4.9	8	N-Channel	SI4532ADY.
30	0.08	0.135	-	3	10	P-Channel	
30	0.036	0.053	-	5.9	13	N-Channel	SI4539ADY.
30	0.053	0.09	-	3.7	15	P-Channel	
30	0.025	0.035	-	6.9	30	N-Channel	SI4542DY
60	0.055	0.075	-	4.5	19	N-Channel	SI4559EY
60	0.12	0.15	-	3.1	16	P-Channel	

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
SI4403BDY	SMD 815-6336● RL	0.80	0.64	0.55	0.42	0.38
SI4410BDY	SMD 815-6743● RL	0.56	0.43	0.37	0.30	0.27
SI4412ADY	SMD 105-7875●	1.10	0.62	0.43	0.34	0.31
SI4420BDY-T1-E3	SMD 149-7615●	0.60	0.52	0.45	0.42	0.40
SI4420DY	SMD 955-0534●	1.98	1.00	0.66	0.49	0.45
SI4425BDY	SMD 815-6344● RL	1.08	0.88	0.73	0.56	0.52
SI4427BDY	SMD 815-6751● RL	1.27	1.02	0.87	0.67	0.60
SI4450DY	SMD 955-0550●	2.93	1.47	0.99	0.75	0.67
SI4463BDY-T1-E3	SMD 149-7616●	0.90	0.69	0.60	0.57	0.54
SI4466DY	SMD 955-0577● RL	2.47	1.24	0.82	0.61	0.57
SI4480EY/	SMD 815-6352● RL	0.94	0.76	0.63	0.51	0.45
SI7848DP	SMD 105-7874● RL	2.12	1.69	1.39	1.07	0.92
SI4482DY	SMD 955-0585●	2.37	1.17	0.79	0.59	0.55
SI4484EY	SMD 815-6360● RL	1.64	1.32	1.10	0.87	0.77
SI4500BDY	SMD 815-6379● RL	0.78	0.63	0.53	0.41	0.37
SI4532ADY.	SMD 815-6387● RL	0.64	0.52	0.43	0.35	0.31
SI4539ADY.	SMD 815-6395● RL	0.91	0.72	0.61	0.46	0.43
SI4542DY	SMD 955-0593● RL	2.23	1.12	0.75	0.57	0.52
SI4559EY	SMD 105-7876● RL	2.71	1.40	0.93	0.69	0.64
SI4562DY	SMD 955-0607● RL	3.17	1.59	1.06	0.79	0.73
SI4800BDY	SMD 815-6409● RL	0.50	0.41	0.36	0.28	0.27
SI4804BDY	SMD 815-6417● RL	1.00	0.80	0.67	0.53	0.46
SI4840DY	SMD 815-6425● RL	1.44	1.15	0.98	0.76	0.68
SI4850EY	SMD 815-6433● RL	0.84	0.67	0.58	0.44	0.40
SI4864DY	SMD 815-6441● RL	1.47	1.20	1.01	0.78	0.70
SI4886DY	SMD 815-6450● RL	0.85	0.69	0.58	0.44	0.41
SI4920DY	SMD 955-0615●	3.14	1.58	1.05	0.78	0.72
SI4922BDY-T1-E3	SMD 149-7617●	0.98	0.77	0.66	0.62	0.59
SI4925BDY	SMD 815-6468● RL	1.11	0.90	0.76	0.59	0.53
SI4936ADY	SMD 815-6476● RL	0.91	0.72	0.61	0.46	0.43
SI4936BDY-T1-E3	SMD 149-7618●	0.33	0.26	0.22	0.21	0.20
SI4946BEY-T1-E3	SMD 149-7619●	0.77	0.60	0.52	0.49	0.46
SI4946EY	SMD 955-0631●	2.40	1.66	1.53	1.11	0.80
SI4948BEY	SMD 815-6484● RL	0.95	0.76	0.64	0.50	0.44
SI4963BDY	SMD 815-6492● RL	1.06	0.85	0.72	0.56	0.51
SI4966DY	SMD 955-0658● RL	3.78	1.26	0.99	0.56	0.48
SI9410BDY	SMD 815-6549● RL	0.69	0.56	0.46	0.37	0.34
SI9424BDY	SMD 815-6557● RL	0.86	0.69	0.58	0.44	0.41
SI9433BDY	SMD 815-6565● RL	0.72	0.59	0.48	0.38	0.35
SI9435BDY	SMD 815-6573● RL	0.67	0.54	0.44	0.36	0.33
SI9926BDY	SMD 815-6581● RL	0.78	0.62	0.53	0.42	0.36
SI9933BDY	SMD 815-6590● RL	0.88	0.70	0.60	0.45	0.41
SI9934BDY	SMD 815-6840● RL	1.00	0.80	0.67	0.53	0.46
SI9936BDY	SMD 815-6603● RL	1.00	0.80	0.67	0.53	0.46
SI9948AEY	SMD 955-0755●	1.48	0.73	0.50	0.36	0.34

RL Re-reeling available

211318

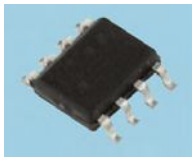
Reels of 2500 Mftrs. List No.	Order Code	Price Per Reel 1+
SI4425BDY-T1-E3	NEW SMD 156-2473●	1,045.93
SI4500BDY-T1-E3	NEW SMD 156-2474●	827.35
SI4539ADY-T1-E3	NEW SMD 156-2475●	969.18
SI4804BDY-T1-E3	NEW SMD 156-2476●	1,040.09
SI4840DY-T1-E3	NEW SMD 156-2477●	1,396.47
SI4850EY-T1-E3	NEW SMD 156-2478●	898.26
SI9410BDY-T1-E3	NEW SMD 156-2479●	756.43
SI9435BDY-T1-E3	NEW SMD 156-2480●	732.80
SI9933BDY-T1-E3	NEW SMD 156-2481●	921.91
SI4562DY-T1-E3	NEW SMD 156-2482●	1,196.97
SI4966DY-T1-E3	NEW SMD 156-2483●	1,219.77
SI4450DY-T1-E3.	NEW SMD 156-2581●	1,596.91

MOSFET, Vishay

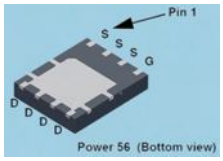
Vds, 8 to 150V

New

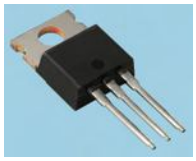
VISHAY



SO-8



PowerPak



TO-220

V_{DS} V	$R_{DS(on)}$ Ω	Voltage, Vgs Rds on V	$I_{D\ cont}$ @ 25°C A	$V_{GS(th)}$ min. V	$V_{GS(th)}$ max. V	P_D @ 25°C W	Case Style	Mftrs. List No.
N Channel								
8	0.026	4.5	9	0.35	1	13	SC-75	SIB414DK-T1-GE3
20	0.057	4.5	2.9	0.4	0.85	0.71	SOT-23	SI2302CDS-T1-GE3
20	0.0029	10	50	1	2.6	50	PowerPAK	SIR890DP-T1-GE3
20	0.0062	4.5	19.5	0.6	1.5	1.5	PowerPAK	SI7106DN-T1-GE3
20	0.034	4.5	9	0.35	1	13	SC-75	SIB412DK-T1-GE3
20	0.031	4.5	5	0.45	0.85	0.75	SOT-23	SI2312BDS-T1-GE3
20	0.0029	10	50	1	2.6	50	PowerPAK	SIR890DP-T1-E3
25	0.0032	10	50	1	2.6	50	PowerPAK	SIR892DP-T1-E3
25	0.0086	10	18	0.6	1.4	5	SO-8	SI4116DY-T1-E3
30	0.011	10	12	1	3	1.4	SO-8	SI4894BDY-T1-E3
30	0.022	10	7.5	0.8	3	1.1	SOIC	SI4834DY-T1-E3
30	0.016	10	15	1	3	40.8	TO-252	SUD50N03-16P-E3
30	0.0019	10	60	1	2.5	104	PowerPAK	SI7192DP-T1-GE3
30	0.00375	10	34	1.5	3	7.8	SO-8	SI4642DY-T1-E3
30	0.003	10	30	1	3	5.4	PowerPAK	SI7336ADP-T1-GE3
30	0.006	10	35	1	3	36	PowerPAK	SIR402DP-T1-E3
30	0.007	10	44.5	1	3	25	PolarPAK	SIE844DF-T1-E3
40	0.009	10	19	1	3	6	SO-8	SI4840BDY-T1-E3
40	0.009	10	47	1	3	36	PowerPAK	SI7848BDP-T1-E3
40	0.0027	10	110	3.4	4.5	375	TO-263	SUM110N04-2M3L-E3
60	0.0096	10	18	1	3	1.9	PowerPAK	SI7460DP-T1-GE3
60	0.019	10	10	1.5	3.5	1.5	PowerPAK	SI7120DN-T1-GE3
60	0.005	10	90	2.5	4.5	300	TO-220AB	SUP90N06-5M0P-E3
60	0.006	10	90	2.5	4.5	272	TO-220AB	SUP90N06-6M0P-E3
75	0.011	10	28	1.5	2.5	96	PowerPAK	SI7148DP-T1-E3
75	0.007	10	60	2.5	4.5	104	PowerPAK	SI7174DP-T1-GE3
75	0.0068	10	90	2.5	4.5	272	TO-220AB	SUP90N08-6M8P-E3
75	0.0082	10	90	2.8	4.8	150	TO-220AB	SUP90N08-8M2P-E3
80	0.0125	10	32	2.5	4.5	64	PowerPAK	SI7186DP-T1-E3
80	0.017	10	30	2.5	4.5	62.5	PowerPAK	SI7852ADP-T1-E3
100	0.0088	10	90	2.5	4.5	300	TO-220AB	SUP90N10-8M8P-E3
100	0.014	10	60	2.5	4.5	104	PowerPAK	SI7178DP-T1-GE3
100	0.0142	10	64	2.5	4.4	125	PolarPAK	SIE854DF-T1-E3
150	0.018	10	90	2.5	4.5	375	TO-220AB	SUP90N15-18P-E3
150	0.018	10	75	2.5	4.5	312.5	TO-263	SUM75N15-18P-E3
P Channel								
8	0.052	4.5	9	0.35	1	13	SC-75	SIB417DK-T1-GE3
12	0.036	4.5	7.8	0.4	1	3	TSOP-6	SI3447CDV-T1-E3
12	0.06	4.5	9	0.4	1	13.1	SC-75	SIB419DK-T1-GE3
20	0.066	4.5	9	0.4	1	13	SC-75	SIB411DK-T1-GE3
20	0.075	4.5	9	0.6	1.5	13	SC-75	SIB413DK-T1-GE3
30	0.087	10	9	1	3	13	SC-75	SIB415DK-T1-GE3
30	0.018	10	16	1	3	52	PowerPAK	SI7121DN-T1-GE3
30	0.078	10	3.2	1	3	0.75	SOT-23	SI2307BDS-T1-GE3
40	0.0092	10	18.6	1	3	1.9	PowerPAK	SI7463DP-T1-E3
60	0.0093	10	90	1	3	250	TO-220AB	SUP90P06-09L-E3
60	0.064	10	5	1	3	1.5	PowerPAK	SI7465DP-T1-E3
60	0.0195	10	53	1	3	104.2	TO-220AB	SUP53P06-20-E3
100	0.041	10	28	1	3	83	PowerPAK	SI7489DP-T1-E3
Dual N Channel								
20	0.018	4.5	8	0.6	1.5	3.1	SO-8	SI9926CDY-T1-E3
100	0.049	10	5.9	2	4	1.4	SO-8	SI7942DP-T1-E3
Dual P Channel								
20	0.295	4.5	2.6	0.4	1	3.1	SC-75	SIB911DK-T1-GE3
30	0.025	10	7.1	1	3	1.1	SO-8	SI4925BDY-T1-E3
N/P Channel								
40	0.06 (N) 0.085 (P)	10	5 (N) 4.4 (P)	0.8 (N) 0.8 (P)	— 2.2 (P)	2.75 (N) 2.95 (P)	SO-8	SI4567DY-T1-E3
60	0.058 (N) 0.12 (P)	10	5.3 (N) 3.9 (P)	1 (N) 1 (P)	— 3 (P)	3.1 (N) 3.4 (P)	SO-8	SI4559ADY-T1-E3
40	0.04 (N) 0.054 (P)	10	5.2 (N) 4.5 (P)	0.6 (N) 0.8 (P)	— 2.2 (P)	1.1 (N) 1.1 (P)	SO-8	SI4565DY-T1-E3

527676

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
N Channel						
SI2302CDS-T1-GE3	SMD 168-4049●	0.33	0.23	0.18	0.15	0.13
SI4894BDY-T1-E3	SMD 168-4052●	0.59	0.41	0.32	0.26	0.24
SI4116DY-T1-E3	SMD 168-4053●	0.82	0.58	0.45	0.37	0.34
SI4840BDY-T1-E3	SMD 168-4057●	0.82	0.58	0.45	0.37	0.34
SI4834DY-T1-E3	SMD 168-4058▲	1.08	0.76	0.59	0.48	0.44
SIR890DP-T1-GE3	SMD 168-4063●	1.86	1.31	1.02	0.84	0.77
SI7848BDP-T1-E3	SMD 168-4064●	1.79	1.27	0.99	0.81	0.74
SI7852ADP-T1-E3	SMD 168-4065●	2.12	1.50	1.16	0.95	0.87
SUD50N03-16P-E3	SMD 168-4066●	0.82	0.58	0.45	0.37	0.34
SUM110N04-2M3L-E3	SMD 168-4067●	3.26	2.30	1.79	1.47	1.34
SUM75N15-18P-E3	SMD 168-4068●	4.05	2.86	2.22	1.82	1.67
SI7192DP-T1-GE3	SMD 168-4070●	2.68	1.89	1.47	1.20	1.10
SI4642DY-T1-E3	SMD 168-4071●	1.79	1.27	0.99	0.81	0.74
SI7106DN-T1-GE3	SMD 168-4072●	1.44	1.01	0.79	0.64	0.59
SI7336ADP-T1-GE3	SMD 168-4074●	2.56	1.81	1.41	1.15	1.05
SI7460DP-T1-GE3	SMD 168-4075●	1.90	1.34	1.04	0.85	0.78
SI7148DP-T1-E3	SMD 168-4080●	2.19	1.54	1.20	0.98	0.90
SI7120DN-T1-GE3	SMD 168-4082●	1.63	1.15	0.90	0.73	0.67
SI2312BDS-T1-GE3	SMD 168-4084●	0.36	0.25	0.20	0.16	0.15
SIR402DP-T1-E3	SMD 168-4086●	1.40	0.99	0.77	0.63	0.58
SIR890DP-T1-E3	SMD 168-4087●	2.06	1.45	1.13	0.92	0.85
SIR892DP-T1-E3	SMD 168-4088●	2.06	1.45	1.13	0.92	0.85
SIE844DF-T1-E3	SMD 168-4089●	1.63	1.15	0.90	0.73	0.67
SIE854DF-T1-E3	SMD 168-4090●	3.07	2.16	1.68	1.38	1.26
SI7174DP-T1-GE3	SMD 168-4091●	2.45	1.73	1.34	1.10	1.01
SI7186DP-T1-E3	SMD 168-4093●	3.07	2.16	1.68	1.38	1.26
SI7178DP-T1-GE3	SMD 168-4094●	2.45	1.73	1.34	1.10	1.01
SUP90N06-5M0P-E3	168-4095●	3.59	2.53	1.97	1.61	1.48
SUP90N06-6M0P-E3	168-4096●	3.20	2.26	1.76	1.44	1.32
SUP90N08-6M8P-E3	168-4098●	3.17	2.23	1.74	1.42	1.30
SUP90N08-8M2P-E3	168-4099●	2.61	1.84	1.43	1.17	1.07
SUP90N10-8M8P-E3	168-4100●	3.75	2.65	2.06	1.69	1.54
SUP90N15-18P-E3	168-4101●	3.75	2.65	2.06	1.69	1.54
SIB412DK-T1-GE3	SMD 168-4105●	0.52	0.37	0.29	0.23	0.21
SIB414DK-T1-GE3	SMD 168-4107●	0.72	0.51	0.39	0.32	0.30
P Channel						
SI3447CDV-T1-E3	SMD 168-4051●	0.33	0.23	0.18	0.15	0.13
SI7121DN-T1-GE3	SMD 168-4060●	0.91	0.64	0.50	0.41	0.38
SUP90P06-09L-E3	168-4069●	3.59	2.53	1.97	1.61	1.48
SI7489DP-T1-E3	SMD 168-4076●	2.12	1.50	1.16	0.95	0.87
SI7465DP-T1-E3	SMD 168-4077●	1.01	0.71	0.56	0.45	0.42
SI7463DP-T1-E3	SMD 168-4081●	2.50	1.76	1.37	1.12	1.03
SI2307BDS-T1-GE3	SMD 168-4083●	0.39	0.28	0.21	0.18	0.16
SUP53P06-20-E3	168-4102●	2.22	1.57	1.22	1.00	0.91
SIB411DK-T1-GE3	SMD 168-4104●	0.52	0.37	0.29	0.23	0.21
SIB413DK-T1-GE3	SMD 168-4106●	0.72	0.51	0.39	0.32	0.30
SIB415DK-T1-GE3	SMD 168-4108●	0.62	0.44	0.34	0.28	0.26
SIB417DK-T1-GE3	SMD 168-4109●	0.62	0.44	0.34	0.28	0.26
SIB419DK-T1-GE3	SMD 168-4110●	0.72	0.51	0.39	0.32	0.30
Dual N						
SI9926CDY-T1-E3	SMD 168-4059●	0.85	0.60	0.47	0.38	0.35
SI7942DP-T1-E3	SMD 168-4079●	2.15	1.52	1.18	0.97	0.89
Dual P						
SI4925BDY-T1-E3	SMD 168-4078●	1.21	0.85	0.66	0.54	0.50
SIB911DK-T1-GE3	SMD 168-4111●	0.62	0.44	0.34	0.28	0.26
N/P Channel						
SI4567DY-T1-E3	SMD 168-4054●	0.69	0.48	0.38	0.31	0.28
SI4559ADY-T1-E3	SMD 168-4055●	1.04	0.74	0.57	0.47	0.43
SI4565DY-T1-E3	SMD 168-4056●	0.98	0.69	0.54	0.44	0.40

SO-8 Standard Gate Drive

International IOR Rectifier



SMD

V_{DS} V	$R_{DS(on)}$ @ 10V Ω	$I_{D\ cont.}$ @ 25°C A	V_{GS} max. V	P_{tot} @25°C W	Mftrs. List No.
Single N Channel					
100	0.022	7.3	20	2.5	IRF7495PBF
150	0.09	3.6	30	2.5	IRF7451PBF
150	0.28	1.9	30	2.5	IRF7465PBF
200	0.17	2.5	30	2.5	IRF7450PBF
200	0.73	1.2	30	2.5	IRF7464PBF
200	0.73	1.2	30	2.5	IRF7493PBF
250	0.23	2.2	30	2.5	IRF7453PBF
Dual N-Channel					
12	0.015 & 0.015	10 & 10	12	2	IRF7910PBF
80	0.073 & 0.073	3.6 & 3.6	20	2	IRF7380PBF
N and P Channel					
100	0.21 & 0.48	2.1 & 1.5	20	2	IRF7350PBF

425133

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
IRF7380PBF	SMD 101-3365●	1.83	1.21	0.93	0.77
IRF7910PBF	SMD 101-3366●	0.81	0.54	0.41	0.34
IRF7350PBF	SMD 101-3368●	1.27	0.80	0.62	0.50
IRF7450PBF	SMD 101-3459●	1.81	1.18	0.89	0.72
IRF7451PBF	SMD 101-3460●	1.45	0.95	0.73	0.59
IRF7453PBF	SMD 101-3461●	1.55	0.98	0.76	0.60
IRF7464PBF	SMD 101-3462●	1.36	0.91	0.70	0.57
IRF7465PBF	SMD 101-3463●	1.23	0.82	0.62	0.51
IRF7493PBF	SMD 101-3466●	1.70	1.18	0.93	0.75
IRF7495PBF	SMD 101-3467●	2.05	1.13	0.84	0.70

RL Re-reeling available

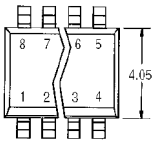
Farnell

Power MOSFETs - continued

SO-8



H=1.75, W=6.3, D=5.2



Single or dual high performance MOSFETs in a space efficient, small outline package.

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. List No.
Single N-Channel						
12	0.007	13	65	2.5	IR	IRF7410TRPBF
12	0.015	10	79	2	IR	IRF7910PBF
12	8	15	120	2.5	IR	IRF7476PBF
14	0.007	16	100	2.5	IR	IRF7210PBF
20	20mohm	10.9	44	4.17	NXP	PHKD6N02LT
20	0.029	6.6	26	2	IR	IRF7311PBF
20	0.0044	20	160	2.5	IR	IRF3717PBF
20	0.007	15	120	2.5	IR	IRF7457PBF
20	0.0082	15	60	2.5	IR	IRF7425PBF
20	0.012	11.4	100	2.5	IR	IRF7811APBF
20	0.022	8.7	35	2.5	IR	IRF7401PBF
20	0.045	6	24	2.5	ST	STS6NF20V
20	0.035	6.8	54	2.5	IR	IRF7402PBF
20	0.05	4.3	17	1.4	IR	IRF7301PBF
20	0.085	4	17	2.5	IR	IRF1902PBF
20	0.1	3.5	14	2	IR	IRF7101PBF
20	9	10	100	2.5	IR	IRF7459TRPBF
20	0.04	6.7	27	2.5	IR	IRF7404QPBF
30	0.0036	21	170	2.5	IR	IRF7831PBF
30	0.0036	21	106	2.5	FCH	FDS6699S
30	0.0037	21	105	2.5	FCH	FDS8670
30	3.8	21	160	2.5	IR	IRF7832ZPBF
30	0.004	20	160	2.5	IR	IRF7832PBF
30	0.0042	18	90	2.5	FCH	FDS8870
30	0.005	18	150	3.1	IR	IRF7822.PBF
30	0.0055	16	80	2.5	FCH	FDS8874
30	0.0055	17	68	3.2	ST	STS17NF3LL
30	0.0056	17.2	135	2.5	IR	IRF8113PBF
30	6.5mohm	23.7	60	6.25	NXP	PHK28NQ03LT
30	0.0075	14	50	2.5	FCH	FDS6682
30	0.0078	13	52	2.5	INF	BSO4420
30	8mohm	14	110	2.5	IR	IRF7463PBF
30	0.0085	14.5	100	2.5	IR	IRF7809AVPBF
30	0.0085	14	110	2.5	IR	IRF7477PBF
30	0.009	12.5	50	2.5	IR	SI4420DYPBF
30	0.009	14	109	3.1	IR	IRF7811WPBF
30	0.0091	13.6	100	2.5	IR	IRF7821PBF
30	0.0095	13.6	100	2.5	IR	IRF7828PBF
30	0.009	12	48	2.5	ST	STS12NF30L
30	0.01	12	58	2.5	IR	IRF7413PBF
30	0.01	11.5	50	2.5	FCH	FDS6680AS
30	0.0105	11	44	2.5	ST	STS11NF30L
30	0.011	10.8	10.8	2.5	IR	IRF7811AVPBF
30	0.011	13	100	2.5	IR	IRF7805APBF
30	0.019	9	36	2.5	ST	STS9NF3LL
30	0.021	7	28	2.5	ST	STS7PF30L
30	0.022	6.7	27	1.6	IR	IRF7403PBF
30	0.025	8.3	66	2.5	IR	IRF7807APBF
30	0.068	16	120	2.5	IR	IRF7805ZPBF
30	0.01	13	100	2.5	IR	IRF7413ZPBF
30	0.011	13	100	2.5	IR	IRF7805PBF
30	0.0138	11	88	2.5	IR	IRF7807ZPBF
30	0.02	10	45	2.5	IR	IRF7416TRPBF
30	0.025	8.3	66	2.5	IR	IRF7807PBF
30	0.03	7	37	2.5	IR	IRF9410PBF
30	0.03	7.3	58	2.5	IR	IRF7201PBF
30	0.03	6	24	2.5	ST	STS6PF30L
30	0.03	6.7	15	2	FCH	NDS8936
30	0.05	4.9	20	2	IR	IRF7303PBF
30	0.05	4.9	20	2.0	IR	IRF7303QPBF
30	0.08	5	20	2.5	ST	STS5PF30L
30	0.08	3.7	15	2	FCH	NDS9956A
30	0.1	3.5	16	2	IR	IRF9956PBF
30	14	11.8	35.3	2.5	NXP	PHK12NQ03LT
30	4.4	20	60	3.5	NXP	PSMN005-30K
30	0.0037	21	170	2.5	IR	IRF7862PBF
30	0.0119	11	88	2.5	IR	IRF8707PBF
30	0.0087	14	110	2.5	IR	IRF8714PBF
30	0.0085	14	110	2.5	IR	IRF8721PBF
30	0.0048	18	144	2.5	IR	IRF8736PBF
30	0.011	13	58	2.5	IR	IRF7413QPBF
30	0.011	13	100	2.5	IR	IRF7805QPBF
40	0.005	18	140	140	IR	IRF7842PBF
40	7.7mohm	21.2	60	6.25	NXP	PHK24NQ04LT
40	0.0105ohm	12.8	50	2.5	FCH	FDS8447
40	0.013	10	83	2.5	IR	IRF7471PBF
40	0.013	10	85	2.5	IR	IRF7470.PBF
40	0.0155	9.4	75	2.5	IR	IRF7468PBF
40	0.017	9	73	2.5	IR	IRF7469PBF
40	0.015	10.5	43	2.5	IR	IRF7240PBF
40	0.112	3.4	27	2	IR	IRF5803D2TRPBF
50	0.13	3	10	2	IR	IRF7103PBF
55	0.05	4.7	38	2	IR	IRF7341PBF
60	0.0094	12	97	97	IR	IRF7855PBF

V_{DS}	$R_{DS(on)}$	$I_{D\ cont}$ @ 25°C	I_D pulsed	P_D @ 25°C		Mftrs.
Single N-Channel						
60	0.026	4.2	56	2.5	IR	IRF7478PBF
60	0.055	4	16	2.5	ST	STS4DNF60L
60	0.026	7.6	56	2.5	IR	IRF7478QPBF
80	0.0134	10	79	79	IR	IRF7854PBF
80	0.029	6.3	50	2.5	IR	IRF7488PBF
80	0.073	3.6	29	2	IR	IRF7380PBF
100	18	8.3	66	2.5	IR	IRF7853PBF
100	0.019	7.5		2.5	FCH	FDS3672
100	0.022	7.3	58	2.5	IR	IRF7495PBF
100	0.026	6.9	55	2.5	IR	IRF7473.PBF
100	28mohm	11.6	48	8.9	NXP	PHK12NQ10T
100	0.039	5.4	43	2.5	IR	IRF7490PBF
100	0.063	4.5	36	2.5	IR	IRF7474PBF
100	0.06	4.5	36	2.5	IR	IRF7452QPBF
150	0.28	1.9	15	2.5	IR	IRF7465PBF
150	44	5.2	42	3	IR	IRF7494PBF
150	75mohm	5	20	6.25	NXP	PHK5NQ15T
150	0.09	3.6	29	2.5	IR	IRF7451PBF
150	0.24	2.2	19	2.5	IR	IRF6216PBF
200	0.079	3.7	30	2.5	IR	IRF7492PBF
200	0.17	2.5	20	2.5	IR	IRF7450PBF
200	0.73	1.2	10	2.5	IR	IRF7493PBF
200	0.73	1.2	10	2.5	IR	IRF7464PBF
250	0.23	2.2	17	2.5	IR	IRF7453PBF
300	0.4	1.6	13	2.5	IR	IRF3000PBF
Single P-Channel						
12	0.007	16	65	2.5	IR	IRF7410PBF
12	0.014	11.5	46	2.5	IR	IRF7420PBF
12	0.024	8.7	36	2.5	IR	IRF7433.PBF
20	0.06	5.3	21	2.5	IR	IRF7204PBF
20	0.06	5.4	43	2.5	IR	IRF7207PBF
20	0.04	5.3	21	1.6	IR	IRF7404PBF
20	0.03	7	28	2	IR	IRF7331PBF
30	0.07	4.6	15	2.5	IR	IRF7205PBF
30	0.0135	11	47	2.5	IR	IRF7424.PBF
30	0.015	8	50	2.5	IR	SI4435DYPBF
30	0.02	8.8	45	2.5	IR	IRF7416PBF
30	0.25	2.5	10	2.5	FCH	NDS9400A
30	0.045	5.2	20	1.6	IR	IRF7406PBF
30	0.05	5.3	15	2.5	FCH	NDS9435A
30	0.02	10	45	2.5	IR	IRF7416QPBF
40	0.041	6.2	25	2.5	IR	IRF7241PBF
Dual N-Channel						
30	0.028,0.0135	8.6,6.3	30,20	2	FCH	FDS6982AS
30	0.022,0.027	8.2,6.9	30,20	2	FCH	FDS6900AS
30	0.05	4.9	20	2.0	IR	IRF7303QPBF
30	0.041	6.2	30	2.0	IR	IRF7313QPBF
50	130	3	25	2.4	IR	IRF7103QPBF
55	0.043	5.1	42	1.7	IR	IRF7341QPBF
80	61	3.6	29	2.0	IR	IRF7380QPBF
Dual P-Channel						
12	0.024	7.8	39	2	IR	IRF7325PBF
12	0.017	9.2	37	2	IR	IRF7329PBF
20	0.018	9	71	2	IR	IRF7324PBF
20	0.025	2.3	10	2.0	IR	IRF7104PBF
20	0.053	4.2	23	1.4	IR	IRF7314PBF
20	0.09	4.3	17	2	IR	IRF7304PBF
20	0.09	4.3	17	2.0	IR	IRF7304QPBF
20	0.049	5.2	43	2.4	IR	IRF7314QPBF
30	0.013	11	55	2.5	FCH	FDS6675BZ
30	0.058	4.9	30	2	IR	IRF7316PBF
30	0.1	3	12	1.4	IR	IRF7306PBF
30	0.1	4	—	2	FCH	NDS8947
30	0.017	8	32	2	IR	IRF7328PBF
30	0.2	2.9	10	2	FCH	NDS9953A
30	0.25	2.3	10	2	IR	IRF9953PBF
30	0.029	6.5	30	2	IR	IRF7313PBF
30	0.1	3.6	14	2.0	IR	IRF7306QPBF
30	0.042	4.9	30	2.0	IR	IRF7316QPBF
55	0.105	3.4	27	2	IR	IRF7342PBF
55	0.095	3.4	27	1.3	IR	IRF7342QPBF
Dual N/P Channel						
20	0.1(N), 0.058(P)	6.6(N), 5.3(P)	26(N), 21(P)	2	IR	IRF7317PBF
20	0.05(N), 0.09(P)	5.2(N), 4.3(P)	21(N), 17(P)	2	IR	IRF7307PBF
20	0.1(N), 0.058(P)	5.2(N), 4.3(P)	21(N), 17(P)	2.0	IR	IRF7307QPBF
25	0.1(N), 0.25(P)	3.5(N), 2.3(P)	14(N), 10(P)	2	IR	IRF7105PBF
25	0.10(N), 0.25(P)	3.5(N), 2.3(P)	21(N), 17(P)	2.0	IR	IRF7105QPBF
30	0.017(N), 0.0205(P)	8.6(N), 7.3(P)	20(N), 20(P)	2	FCH	FDS8858CZ
30	0.029(N), 0.058(P)	6.5(N), 4.9(P)	30(N), 30(P)	2	IR	IRF7319PBF
30	0.05(N), 0.1(P)	4(N), 3(P)	16(N), 12(P)	1.4	IR	IRF7309PBF
30	0.09(N&P)	4.3(N&P)	46(N), 34(P)	2.5	IR	IRF7379PBF
30	0.1(N), 0.25(P)	3.5(N), 2.3(P)	16(N), 10(P)	2	IR	IRF9952PBF
30	0.045(N), 0.09(P)	5.8(N), 4.3(P)	46(N), 34(P)	2.5	IR	IRF7379QPBF
30	0.10(N), 0.25(P)	3.5(N), 2.3(P)	16(N), 10(P)	2.0	IR	IRF9952QPBF
35	0.024(N), 0.024(P)	7(N), 5(P)	20(N&P)	2	FCH	FDS8960C
40	0.022(N), 0.022(P)	7.5(N), 6(P)	(N&P)	2	FCH	FDS4885C
55	0.05(N), 0.105(P)	4.7(N), 3.4(P)	38(N), 27(P)	2	IR	IRF7343PBF
55	0.05(N), 0.105(P)	4.7(N), 3.4(P)	38(N), 27(P)	2.0	IR	IRF7343QPBF
100(N&P)	0.21(N), 0.48(P)	2.1(N), 1.5(P)	(N), 6(P)	2	IR	IRF7350PBF

RL Re-reeling available

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+	1K+
Single N-Channel							
BSO4420	INF	SMD 115-6432 RL	1.370	0.900	0.720	0.600	0.560
FDS3672	FCH	NEW SMD 149-5207	1.230	0.870	0.670	0.530	0.510
FDS4885C	FCH	NEW SMD 149-5208	0.670	0.540	0.460	0.420	0.390
FDS6680AS	FCH	NEW SMD 149-5210	0.480	0.370	0.320	0.290	0.280
FDS6682	FCH	NEW SMD 149-5211	1.010	0.820	0.680	0.610	0.570
FDS6699S	FCH	NEW SMD 149-5213	0.820	0.660	0.550	0.510	0.480
FDS6900AS	FCH	NEW SMD 149-5214	0.780	0.620	0.530	0.490	0.460
FDS6982AS	FCH	NEW SMD 149-5216	0.560	0.460	0.380	0.350	0.330
FDS8447	FCH	NEW SMD 149-5221	0.510	0.420	0.350	0.340	0.310
FDS8858CZ	FCH	NEW SMD 149-8963	0.660	0.530	0.460	0.420	0.370
IRF1902PBF	IR	SMD 101-3428	0.540	0.460	0.380	0.300	0.220
IRF3717PBF	IR	SMD 101-3429	1.580	1.010	0.770	0.630	0.570
IRF5803D2TRPBF	IR	SMD 129-8542 RL	0.700	0.500	0.410	0.330	0.300
IRF6216PBF	IR	SMD 129-8488	1.270	0.830	0.710	0.630	0.590
IRF7201PBF	IR	SMD 910-2663	2.090	1.310	1.020	0.790	0.730
IRF7210PBF	IR	SMD 129-8512	4.800	3.510	3.030	2.670	2.520
IRF7240PBF	IR	SMD 129-8500	4.640	3.410	2.900	2.570	2.460
IRF7401PBF	IR	SMD 910-2604	3.360	3.160	2.980	1.030	0.990
IRF7402PBF	IR	SMD 910-2850	1.730	1.100	0.830	0.670	0.620
IRF7403PBF	IR	SMD 910-2671	2.090	1.260	1.180	0.720	0.660
IRF7410TRPBF	IR	SMD 129-8514 RL	1.460	1.070	0.880	0.720	0.650
IRF7413PBF	IR	SMD 910-2680	4.380	2.570	2.470	1.540	1.420
IRF7413ZPBF	IR	SMD 101-3430	1.530	1.010	0.780	0.630	0.570
IRF7416TRPBF	IR	SMD 129-8502 RL	2.330	1.710	1.470	1.290	1.230
IRF7425PBF	IR	SMD 129-8554	1.640	1.180	0.900	0.720	0.650
IRF7450PBF	IR	SMD 101-3459	1.810	1.180	0.890	0.720	0.660
IRF7451PBF	IR	SMD 101-3460	1.450	0.950	0.730	0.590	0.540
IRF7453PBF	IR	SMD 101-3461	1.550	0.980	0.760	0.600	0.550
IRF7457PBF	IR	SMD 101-3431	1.420	0.940	0.710	0.580	0.530
IRF7459TRPBF	IR	SMD 129-8507 RL	1.520	1.120	0.910	0.740	0.670
IRF7463PBF	IR	SMD 101-3469	1.070	0.750	0.570	0.470	0.440
IRF7464PBF	IR	SMD 101-3462	1.360	0.910	0.700	0.570	0.510
IRF7465PBF	IR	SMD 101-3463	1.230	0.820	0.620	0.510	0.460
IRF7468PBF	IR	SMD 101-3433	1.370	0.920	0.700	0.620	0.600
IRF7469PBF	IR	SMD 101-3434	1.390	0.910	0.700	0.570	0.510
IRF7476PBF	IR	SMD 129-8486	1.220	0.900	0.780	0.670	0.640
IRF7470.PBF	IR	SMD 910-2868	1.500	1.120	0.850	0.690	0.630
IRF7471PBF	IR	SMD 101-3436	1.200	0.820	0.630	0.560	0.550
IRF7473.PBF	IR	SMD 910-2884	1.700	1.090	0.840	0.690	0.620
IRF7474PBF	IR	SMD 910-2892	1.250	0.800	0.630	0.510	0.470
IRF7477PBF	IR	SMD 910-2906	1.530	1.010	0.770	0.630	0.570
IRF7478PBF	IR	SMD 101-3437	1.700	1.070	0.830	0.670	0.620
IRF7488PBF	IR	SMD 910-2914	1.630	1.010	0.810	0.780	0.690
IRF7490PBF	IR	SMD 910-2922	1.200	0.720	0.590	0.470	0.410
IRF7492PBF	IR	SMD 926-4353	2.440	1.540	1.260	1.010	0.930
IRF7493PBF	IR	SMD 101-3466	1.700	1.180	0.930	0.750	0.690
IRF7494PBF	IR	SMD 129-8546	1.820	1.330	1.120	0.910	0.840
IRF7495PBF	IR	SMD 101-3467	2.050	1.130	0.840	0.700	0.650
IRF7805PBF	IR	SMD 101-3438	2.110	1.440	1.190	0.860	– –
IRF7805APBF	IR	SMD 926-4361	1.210	1.010	0.870	0.730	0.670
IRF7805ZPBF	IR	SMD 101-3441	1.410	0.940	0.710	0.580	0.530
IRF7807PBF	IR	SMD 101-3442	1.110	0.740	0.540	0.440	0.400
IRF7807APBF	IR	SMD 910-2930	0.990	0.730	0.570	0.480	0.420
IRF7807ZPBF	IR	SMD 101-3444	0.690	0.420	0.330	0.270	0.240
IRF7809AVPBF	IR	SMD 910-2833	1.360	0.870	0.650	0.550	0.490
IRF7811APBF	IR	SMD 910-2841	2.850	1.810	1.380	1.120	1.020
IRF7811AVPBF	IR	SMD 101-3445	1.130	0.720	0.570	0.470	0.410
IRF7811WPBF	IR	SMD 910-2949	0.810	0.510	0.390	0.320	0.300
IRF7821PBF	IR	SMD 101-3495	1.040	0.690	0.530	0.420	0.390
IRF7822.PBF	IR	SMD 910-2957	1.790	1.330	1.030	0.850	0.790
IRF7828PBF	IR	SMD 101-3447	0.660	0.450	0.340	0.320	0.310
IRF7831PBF	IR	SMD 101-3448	2.380	1.570	1.200	0.970	0.880
IRF7832PBF	IR	SMD 101-3449	2.480	1.650	1.260	1.020	0.930
IRF7832ZPBF	IR	SMD 129-8543	1.490	0.990	0.840	0.730	0.650
IRF7842PBF	IR	SMD 143-6945	1.720	1.320	1.130	1.100	1.060
IRF7854PBF	IR	SMD 143-6947	2.050	1.460	1.280	1.140	1.030
IRF7855PBF	IR	SMD 143-6948	2.070	1.490	1.300	1.170	1.050
IRF7853PBF	IR	SMD 129-8555	1.670	1.210	0.930	0.770	0.690
IRF8113PBF	IR	SMD 101-3450	1.020	0.690	0.530	0.450	0.440
IRF9410PBF	IR	SMD 910-2698	2.850	1.650	1.580	0.940	0.890
IRF7862PBF	IR	NEW SMD 155-1898	0.890	0.620	0.540	0.480	0.470
IRF8707PBF	IR	NEW SMD 155-1900	0.310	0.270	0.240	0.200	0.166
IRF8714PBF	IR	NEW SMD 155-1901	0.340	0.240	0.210	0.189	0.178
IRF8721PBF	IR	NEW SMD 155-1902	0.370	0.260	0.230	0.200	0.197
IRF8736PBF	IR	NEW SMD 155-1903	0.500	0.350	0.300	0.270	0.260
IRF7404QPBF	IR	NEW SMD 155-1933	0.650	0.460	0.390	0.350	0.330
IRF7413QPBF	IR	NEW SMD 155-1934	0.700	0.500	0.420	0.380	0.370
IRF7452QPBF	IR	NEW SMD 155-1936	0.900	0.630	0.550	0.490	0.470
IRF7478QPBF	IR	NEW SMD 155-1937	0.690	0.480	0.410	0.370	0.350
IRF7805QPBF	IR	NEW SMD 155-1938	0.890	0.630	0.550	0.490	0.470
PHK5NQ15T	NXP	SMD 109-7169 RL	1.590	1.010	0.800	0.590	0.560
PHK12NQ03LT	NXP	SMD 109-7163 RL	0.670	0.430	0.350	0.260	0.240
PHK12NQ10T	NXP	SMD 109-7164 RL	1.280	0.810	0.630	0.470	0.450
PHK24NQ04LT	NXP	SMD 109-7165 RL	1.280	0.830	0.640	0.480	0.470
PHK28NQ03LT	NXP	SMD 109-7166 RL	1.360	0.880	0.690	0.520	0.470
PHKD6N02LT	NXP	SMD 109-7170 RL	0.750	0.480	0.390	0.290	0.280
PSMN005-30K	NXP	SMD 109-7171 RL	1.390	0.900	0.700	0.520	0.490
SI4420DYPBF	IR	SMD 101-3451	4.780	3.150	2.410	1.950	1.780
STS4DNF60L	ST	SMD 993-5738 RL	1.420	1.090	0.910	0.730	0.620
STS5PF30L	ST	SMD 993-5754 RL	1.000	0.780	0.620	0.500	0.410
STS6NF20V	ST	SMD 993-5762 RL	0.530	0.390	0.330	0.270	0.220
STS6PF30L	ST	SMD 993-5770 RL	0.910	0.680	0.530	0.460	0.410
STS7PF30L	ST	SMD 993-5789 RL	1.060	0.810	0.630	0.550	0.460
STS9NF3LL	ST	SMD 993-5797 RL	0.930	0.710	0.580	0.490	0.440
STS11NF30L	ST	SMD 993-5711 RL	0.870	0.660	0.500	0.430	– –
STS12NF30L	ST	SMD 994-6381 RL	1.110	0.850	0.500	0.410	0.390
STS17NF3LL	ST	SMD 993-5720 RL	1.020	0.850	0.660	0.480	– –
			1+	25+	100+	250+	1K+
FDS8670	FCH	SMD 122-8335	0.680	0.480	0.400	0.360	0.350
FDS8870	FCH	SMD 122-8336	0.900	0.640	0.540	0.490	0.470
FDS8874	FCH	SMD 122-8337	0.580	0.420	0.350	0.310	0.300
FDS8960C	FCH	SMD 122-8338	0.750	0.530	0.460	0.390	0.370

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+	1K+
Single P-Channel							
FDS6675BZ	FCH	NEW SMD 149-5209	0.560	0.460	0.380	0.350	0.330
IRF7204PBF	IR	SMD 910-3350	2.820	1.780	1.350	1.110	1.010
IRF7205PBF	IR	SMD 910-3368	2.350	1.490	1.140	0.870	0.820
IRF7207PBF	IR	SMD 101-3473	1.370	0.900	0.680	0.600	0.590
IRF7241PBF	IR	SMD 910-3457	2.220	1.430	1.100	0.880	0.810
IRF7331PBF	IR	SMD 910-3465	1.170	0.870	0.850	0.820	0.800
IRF7404PBF	IR	SMD 910-3384	4.080	2.270	1.610	1.190	1.090
IRF7406PBF	IR	SMD 910-3376	3.520	2.050	1.980	1.230	1.130
IRF7410PBF	IR	SMD 910-3449	3.040	1.910	1.460	1.190	1.090
IRF7416PBF	IR	SMD 910-3392	4.560	3.120	3.000	1.840	1.670
IRF7420PBF	IR	SMD 910-3473	1.730	1.120	0.860	0.700	0.630
IRF7424.PBF	IR	SMD 910-3481	1.820	1.190	0.910	0.740	0.670
IRF7433.PBF	IR	SMD 910-3490	1.590	1.170	0.900	0.720	0.660
NDS9400A	FCH	SMD 101-7728 RL	0.880	0.620	0.470	0.310	0.240
NDS9435A	FCH	SMD 984-6182 RL	0.650	0.430	0.310	0.199	0.182
SI4435DYPBF	IR	SMD 101-3478	3.050	2.010	1.500	0.930	– –
IRF7416QPBF	IR	NEW SMD 155-1935	0.740	0.530	0.460	0.400	0.390
Dual N-Channel							
IRF7101PBF	IR	SMD 910-2043	2.020	1.280	0.970	0.800	0.710
IRF7103PBF	IR	SMD 910-2027	1.290	0.810	0.620	0.540	0.530
IRF7303PBF	IR	SMD 910-2019	2.890	1.640	1.270	0.990	0.900
IRF7301PBF	IR	SMD 910-2051	4.040	2.210	1.580	1.070	0.990
IRF7311PBF	IR	SMD 101-3364	2.980	1.970	1.520	1.210	1.120
IRF7341PBF	IR	SMD 910-2035	1.980	1.260	0.950	0.780	0.700
IRF7380PBF	IR	SMD 101-3365	1.830	1.210	0.930	0.770	0.690
IRF7910PBF	IR	SMD 101-3366	0.810	0.540	0.410	0.340	0.310
IRF9956PBF	IR	SMD 910-2060	2.320	1.350	1.280	0.820	0.740
NDS8936	FCH	SMD 984-4724 RL	0.870	0.670	0.510	0.320	0.290
NDS9956A	FCH	SMD 101-7730 RL	0.860	0.570	0.410	0.240	0.200
IRF7103QPBF	IR	NEW SMD 155-1916	0.550	0.380	0.320	0.300	0.270
IRF7303QPBF	IR	NEW SMD 155-1919	0.630	0.440	0.380	0.340	0.320
IRF7313QPBF	IR	NEW SMD 155-1923	0.700	0.490	0.420	0.380	0.350
IRF7341QPBF	IR	NEW SMD 155-1926	0.700	0.500	0.420	0.380	0.370
IRF7380QPBF	IR	NEW SMD 155-1932	0.770	0.540	0.470	0.410	0.390
Dual P-Channel							
IRF7104PBF	IR	SMD 101-3369	2.060	1.380	1.050	0.850	0.780
IRF7304PBF	IR	SMD 101-3370	1.410	0.940	0.720	0.580	0.540
IRF7306PBF	IR	SMD 910-2205	3.280	1.830	1.270	0.990	0.910
IRF7313PBF	IR	SMD 910-2256	2.250	1.420	1.090	0.880	0.830
IRF7314PBF	IR	SMD 910-2213	2.320	1.360	1.300	0.890	0.870
IRF7316PBF	IR	SMD 910-2221	4.960	2.880	2.760	1.710	1.550
IRF7324PBF	IR	SMD 101-3371	3.080	2.030	1.560	1.270	1.140
IRF7325PBF	IR	SMD 101-3372	1.130	0.800	0.610	0.520	0.510
IRF7328PBF	IR	SMD 101-3374	2.340	1.470	1.120	0.910	0.830
IRF7329PBF	IR	SMD 101-3375	1.950	1.250	0.950	0.780	0.700
IRF7342PBF	IR	SMD 910-2191	1.760	1.110	0.850	0.670	0.630
IRF9953PBF	IR	SMD 910-2230	2.520	1.570	1.410	0.860	0.810
NDS8947	FCH	SMD 984-4880 RL	1.300	0.940	0.670	0.490	0.440
NDS9953A	FCH	SMD 101-7729 RL	0.860	0.610	0.470	0.310	0.280
IRF7304QPBF	IR	NEW SMD 155-1920	0.620	0.420	0.370	0.330	0.320
IRF7306QPBF	IR	NEW SMD 155-1921	0.640	0.460	0.380	0.340	0.330
IRF7314QPBF	IR	NEW SMD 155-1924	0.730	0.530	0.460	0.400	0.380
IRF7316QPBF	IR	NEW SMD 155-1925	0.850	0.590	0.510	0.470	0.420
IRF7342QPBF	IR	NEW SMD 155-1927	0.740	0.530	0.460	0.400	0.390
Dual P/N Channel							
IRF7105PBF	IR	SMD 910-2132	1.490	0.940	0.720	0.580	0.550
IRF7307PBF	IR	SMD 910-2124	2.710	1.710	1.310	1.070	0.970
IRF7309PBF	IR	SMD 910-2175	3.270	1.830	1.280	1.000	0.910
IRF7317PBF	IR	SMD 910-2159	3.050	1.920	1.470	1.200	1.090
IRF7319PBF	IR	SMD 910-2167	3.390	2.140	1.630	1.340	1.190
IRF7343PBF	IR	SMD 910-2140	1.590	1.000	0.800	0.600	0.550
IRF7350PBF	IR	SMD 101-3368	1.270	0.800	0.620	0.500	– –
IRF7379PBF	IR	SMD 101-3367	2.180	1.450	1.110	0.930	0.910
IRF9952PBF	IR	SMD 910-2183	2.720	1.580	1.530	0.900	0.860
IRF7105QPBF	IR	NEW SMD 155-1918	0.510	0.350	0.310	0.270	0.260
IRF7307QPBF	IR	NEW SMD 155-1922	0.690	0.490	0.410	0.370	0.350
IRF7343QPBF	IR	NEW SMD 155-1928	0.720	0.500	0.440	0.390	0.370
IRF7379QPBF	IR	NEW SMD 155-1931	0.500	0.340	0.300	0.270	0.260
IRF9952QPBF	IR	NEW SMD 155-1939	1.600	1.120	0.960	0.870	0.820

Tubes of 95 Mftrs. List No.	Order Code	Price Per Tube 1+	3+	8+
IRF7103PBF	NEW SMD 156-4049	81.37	66.68	61.86
IRF7341PBF	NEW SMD 156-4050	71.74	59.03	54.13
IRF7343PBF	NEW SMD 156-4051	66.39	51.39	47.49
IRF7342PBF	NEW SMD 156-4052	62.10	51.39	47.49
IRF7103PBF	NEW SMD 156-4049	81.37	66.68	61.86
IRF7341PBF	NEW SMD 156-4050	71.74	59.03	54.13
IRF7343PBF	NEW SMD 156-4051	66.39	51.39	47.49
IRF7342PBF	NEW SMD 156-4052	62.10	51.39	47.49
IRF7401PBF	NEW SMD 156-4066	188.44	66.68	65.16
IRF7807APBF	NEW SMD 156-4070	42.83	36.08	33.13
IRF7416PBF	NEW SMD 156-4156	392.94	245.98	226.42
SI4435DYPBF	NEW SMD 156-4170	94.23	59.03	53.12

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Reel of 2500 Mftrs. List No.	Order Code	Price Per Reel 1+
STS4DNF60L	NEW SMD 156-2492	1,241.19

RL Re-reeling available

RoHS Compliant / Non-compliant

Power MOSFETs - continued

SO-8 MOSFET's

FAIRCHILD SEMICONDUCTOR



V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @25°C A	I_D pulsed A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Mftrs. List No.
Single N-Channel						
30	0.008	13	50	1*	2.5	FDS6670A
30	0.04	5.5	20	1*	2	FDS6930A
30	0.0125	11	50	3	2.5	FDS6690A
30	0.018	7.5	20	3	2	FDS6990A
30	0.01	11.5	50	3	2.5	FDS6680
30	0.038	6.5	40	3	2.5	FDS6630A
60	0.02	8	50	4	2.5	FDS5680
60	0.014	10	50	4	2.5	FDS5670
100	0.054	4.5	50	4	2.5	FDS3992
150	0.057	4.1	—	4	2.5	FDS2582
100	0.08	4.5	50	4	2.5	FDS3692
150	0.047	4.9	—	4	2.5	FDS2572
Single P-Channel						
20	0.024	8	50	-1.5	2.5	FDS6375
20	0.047	5	50	-1	2.5	FDS8433A
30	0.08	5.3	50	-1*	2.5	FDS9435A
30	0.035	7.9	25	-3	2.5	NDS8435A
30	0.02	8.8	50	-3	2.5	FDS4435
30	0.014	11	50	-3	2.5	FDS6675
Dual N-Channel						
20	0.018	7.5	20	1.5*	2	FDS6890A
30	0.015	8.6	30	3	2	FDS6982
30	0.016	8.6	30	3	2.5	FDS6982S
30	0.03	6.7	15	2.8	2	NDS8936
30	0.035	6	20	1*	1.6	FDS6912A
500	6.2	0.37	1.48	4	2	FQS4903TF
Dual P-Channel						
30	0.032	6	20	-3	2	FDS6975
20	0.03	6	20	-1.5	2	FDS6875
Complementary N and P Channel						
30(N)	0.028	7	20	3	2	} FDS8958A
30(P)	0.052	5	20	3	2	

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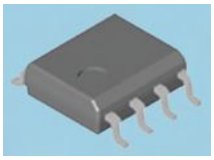
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
		Price Each				
FDS2572	SMD 984-5186● RL	1.230	0.870	0.670	– –	– –
FDS2582	SMD 107-6350● RL	1.070	0.670	0.560	– –	– –
FDS3692	SMD 107-6351● RL	0.780	0.490	0.400	– –	– –
FDS3992	SMD 984-5216● RL	2.420	1.450	1.040	– –	– –
FDS4435	SMD 984-6204● RL	0.910	0.550	0.390	0.290	0.220
FDS5670	SMD 984-5224● RL	1.320	0.900	0.650	0.560	0.460
FDS5680	SMD 984-5232● RL	1.670	1.020	0.710	0.520	0.470
FDS6375	SMD 984-6212● RL	0.610	0.400	0.310	0.220	0.210
FDS6630A	SMD 984-5240● RL	0.680	0.420	0.300	0.210	0.164
FDS6670A	SMD 109-5016● RL	1.090	0.780	0.600	0.390	0.380
FDS6675	SMD 984-6239● RL	1.040	0.740	0.570	0.380	0.290
FDS6680	SMD 101-7698● RL	0.910	0.640	0.490	0.320	0.290
FDS6690A	SMD 984-5275● RL	1.040	0.610	0.440	0.320	0.240
FDS6875	SMD 984-4899● RL	0.910	0.640	0.490	0.320	0.270
FDS6890A	SMD 984-4732● RL	2.530	1.510	1.070	0.760	0.600
FDS6912A	SMD 109-5019● RL	0.800	0.590	0.460	0.300	0.280
FDS6930A	SMD 109-5021● RL	0.680	0.470	0.340	0.199	0.180
FDS6975	SMD 984-4902● RL	1.010	0.720	0.550	0.370	0.300
FDS6982	SMD 984-4740● RL	0.880	0.630	0.480	0.320	0.260
FDS6982S	SMD 984-4759● RL	2.180	1.310	0.920	0.650	– –
FDS6990A	SMD 984-5291● RL	1.070	0.650	0.460	0.320	0.250
FDS8433A	SMD 984-6247● RL	0.610	0.390	0.280	0.165	0.131
FDS8958A	SMD 984-4830● RL	1.420	0.860	0.600	0.420	0.340
FQS4903TF	SMD 984-4791● RL	1.370	0.820	0.570	0.400	0.320
FDS9435A	SMD 109-5023● RL	0.300	0.230	0.191	0.163	0.142
NDS8435A	SMD 984-6263● RL	1.450	0.870	0.610	0.430	0.350
NDS8936	SMD 984-4724● RL	0.870	0.670	0.510	0.320	0.290

Reels of 2500 Mftrs. List No.	Order Code	Price Per Reel 1+
FDS6890A	NEW SMD 156-2485●	1,205.51
FDS8958A	NEW SMD 156-2486●	766.34
FDS6975	NEW SMD 156-2487●	939.39
FDS5670	NEW SMD 156-2488●	1,319.96
FDS5680	NEW SMD 156-2489●	1,060.55
FDS4435	NEW SMD 156-2490●	494.41
FDS6675	NEW SMD 156-2491●	964.10

FLMP SO-8

FAIRCHILD SEMICONDUCTOR

SMD



V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. List No.
Single N-Channel						
20	0.0034	23	60	3	FCH	FDS6064N3
30	0.0045	20	60	3	FCH	FDS7288N3

494914

Mftrs. List No.	Order Code	1+	25+	100+	250+
		Price Each			
FDS6064N3	SMD 149-5153●	1.36	0.93	0.66	0.58
FDS7288N3	SMD 149-5158●	1.32	0.91	0.65	0.56

PowerPAK™ SO-8

VISHAY

SMD



Supplied on 8mm tape.
H=1.07, W=6.15, D=5.15

Vishay's Siliconix PowerPAK™ Power MOSFET family is an innovative leadless package. It provides a direct thermal path between the power MOSFET die and the PCB by directly soldering the die attach copper pad to the board. Leadless technology provides for ultra-thin profiles.

- Higher power capability than equivalent SO-8 package
- 53% smaller footprint, and 55% thinner than D-Pak
- Pin compatible with standard SO-8
- Thermal resistance typically ≤1°C/W

V_{DS} V	$R_{DS(on)}$ Ω	@ V_{GS} V	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ min. V	Q_g tot. nC	P_D @ 25°C W	Mftrs. List No.
Singe N-Channel								
12	0.0047	2.5	35	60	0.4	41	52	SI7102DN-T1-E3
20	0.0065	4.5	13.4	50	0.6	50	1.9	SI7448DP
30	15	10	11	40	1	23	1.9	SI7840DP
30	0.0185	10	6.5	40	1	8.7	1.5	SI7804DN
30	0.013	10	8.5	40	0.6	20	1.5	SI7404DN
60	0.062	10	3.4	20	1	13.5	1.5	SI7810DN
60	0.025	10	5.6	30	1	16	1.5	SI7414DN
60	0.031	10	6.2	40	1	27	1.8	SI7850DP
80	10.9	10	7.6	50	2	41	1.9	SI7852DP
100	0.025	10	5.7	40	2	44	1.9	SI7456DP
150	0.085	10	3	2.4	2	17	1.9	SI7898DP
150	6.7	10	4	50	2	36	1.9	SI7846DP
200	0.080	10	3.2	40	2	42	1.9	SI7450DP
Single P-Channel								
30	0.018	10	7.4	30	-1	37.5	1.5	SI7423DN
30	0.0085	10	11	50	-1	56	1.8	SI7491DP
40	0.0092	10	11	60	-1	90	1.9	SI7463DP
60	0.065	10	3.6	30	-1	15	1.5	SI7415DN
60	0.015	10	8.6	60	-1	121	1.9	SI7461DP
Dual N Channel								
100	0.195	10	1.8	10	2.5	5.2	1.3	SI7922DN
Dual P Channel								
30	0.02	10	7	30	-1	49	1.4	SI7945DP

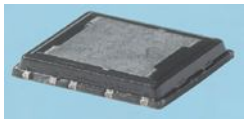
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
		Price Each				
SI7102DN-T1-E3	SMD 149-7630●	0.890	0.680	0.590	0.560	0.530
SI7404DN	SMD 815-6760● RL	0.730	0.520	0.450	0.330	0.310
SI7414DN	SMD 815-6778● RL	1.060	0.750	0.660	0.460	0.420
SI7415DN	SMD 815-6786● RL	1.100	0.760	0.690	0.500	0.470
SI7423DN	SMD 815-6794● RL	1.020	0.700	0.630	0.450	0.400
SI7448DP	SMD 955-0682● RL	1.380	1.080	0.880	0.690	0.590
SI7450DP	SMD 955-0690● RL	2.190	1.700	1.400	1.070	0.940
SI7456DP	SMD 955-0704● RL	1.920	1.490	1.230	0.940	0.810
SI7461DP	SMD 815-6808● RL	1.870	1.320	1.150	0.830	0.800
SI7463DP	SMD 815-6506● RL	1.890	1.310	1.170	0.830	0.810
SI7491DP	SMD 815-6514● RL	1.460	1.020	0.880	0.650	0.600
SI7804DN	SMD 815-6816● RL	0.430	0.290	0.250	0.190	0.175
SI7810DN	SMD 815-6824● RL	0.890	0.620	0.530	0.390	0.350
SI7840DP	SMD 955-0712● RL	1.640	1.280	1.050	0.800	0.700
SI7846DP	SMD 955-0720● RL	1.660	1.300	1.060	0.810	0.720
SI7850DP	SMD 955-0739● RL	1.440	1.100	0.920	0.710	0.620
SI7852DP	SMD 955-0747● RL	2.190	1.700	1.400	1.070	0.940
SI7898DP	SMD 815-6522● RL	0.940	0.660	0.590	0.420	0.370
SI7922DN	SMD 815-6832● RL	1.000	0.790	0.670	0.530	0.480
SI7945DP	SMD 815-6530● RL	1.380	0.940	0.840	0.610	0.600

241417

Reels of 3000 Mftrs. List No.	Order Code	Price Per Reel 1+
SI7463DP-T1-E3	NEW SMD 156-2468●	2,305.55
SI7448DP-T1-E3	NEW SMD 156-2469●	1,952.77
SI7850DP-T1-E3	NEW SMD 156-2470●	1,186.72
SI7852DP-T1-E3	NEW SMD 156-2471●	2,233.21

PolarPAK™

VISHAY



V_{DS} V	$R_{DS(on)}$ Ω @ 10V	$R_{DS(on)}$ Ω @ 4.5V	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftr.	Mftrs List No.
N Channel								
20	0.0016	0.0025	220	100	3	125	SLX	SIE808DF-T1-E3
75	0.0095	0.0125	79	80	3	125	SLX	SIE818DF-T1-E3

RL Re-reeling available

Farnell

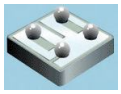
495979

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
SIE808DF-T1-E3	SMD 149-7641●	2.00	1.55	1.35	1.28
SIE818DF-T1-E3	SMD 149-7644●	2.04	1.59	1.38	1.31

FlipFET ™ P Channel HEXFET

International IOR Rectifier

SMD



- Ultra low R_{DS} per footprint area
- Low thermal resistance
- One third footprint of SOT-23
- Super low profile (less than 0.8 mm)

H=1.524, W=1.524, D=0.537

The FlipFET ™ package, is one-third the footprint of a comparable SOT-23 package. Has a profile of less than .8mm. Combined with the low thermal resistance of the die level device, this makes the FlipFET ™ desirable for applications where printed circuit board space is at a premium.
Due to the low-profile the device is ideal for thin application environments such as battery packs, cell phones and PCMCIA cards.

V_{DSS} V	P_D W	R_{DS} mΩ	I_D A	I_{DM} A	Mftrs List No.
20	2.2	65	5.1*	35	IRF6100PBF

* = repetitive rating; pulse width limited by max, junction temperature, V_{GS} = 4.5 V

419386

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
IRF6100PBF	SMD 107-8406● RL	0.56	0.44	0.35	0.29

DirectFET™ MOSFETS

International IOR Rectifier



The DirectFET power package is a breakthrough surface-mount power MOSFET packaging technology. It has the footprint of an SO-8 package and a profile of only 0.7mm. A benefit of this package is the bottom side cooling which is designed to reduce the part count and therefore the board space used by as much as 50% compared with standard SO-8 packages. This means a higher currenty density and lower total system cost. Both conduction and switching losses are also reduced due to low resistance, low charge and ultra-low package inductance. This range of MOSFETs are suitable for a number of applications including high-efficiency DC-to-DC converters, synchronous rectification and CTRL FET notebooks and desktops.

- 1.4°C/W junction to case thermal resistance enable effective top-side cooling
- Less than 1°C/W $R_{th(junction\text{-}pcb)}$ in same footprint as SO-8
- Over 90% lower die-free package resistance than SO-8
- 0.7mm profile compared with 1.75mm for SO-8
- Up to 50°C lower operating temperature increases reliability

V_{DS} V	$R_{DS(on)}$ @ V_{GS} = 10V mΩ	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ min. V	P_D @ 25°C W	Package Type	Mftrs. List No.
20	1.2	32	260	1.6	2.8	MT	IRF6691TR1PBF
20	1.65	30	240	1.55	2.8	MX	IRF6619TR1PBF
20	1.8	32	260	—	2.8	MT	IRF6691TR1
20	2	25	250	1.55	2.8	MT	IRF6609TR1PBF
20	3.2	18	140	1.55	2.2	ST	IRF6636TR1PBF
25	1.2	39	320	1.4	3.6	MX	IRF6716MTR1PBF
25	2.7	29	230	—	2.8	MX	IRF6629TR1PBF
25	3.3	27	220	—	2.8	MX	IRF6628TR1PBF
25	3.8	17	130	1.4	2.2	SQ	IRF6712STR1PBF
25	1.6	29	234	1.4	2.8	MX	IRF6714MTR1PBF
25	1.3	34	270	1.4	2.8	MX	IRF6715MTR1PBF
30	1.3	32	250	1.35	2.8	MX	IRF6635TR1PBF
30	1.3	25	250	—	2.8	MX	IRF6635TR1
30	1.7	30	240	1.35	2.8	MX	IRF6678TR1PBF
30	2	32	220	—	3.9	MX	IRF6611TR1
30	2.2	170	240	1.35	2.8	MT	IRF6618TR1
30	3.4	92	200	1.4	3.6	MT	IRF6603TR1
30	3.9	25	200	—	2.8	MX	IRF6638TR1PBF
30	4.4	95	220	1.3	2.3	MT	IRF6607TR1
30	8.1	14	120	—	2.1	ST	IRF6617TR1
30	4.7	13	110	1.4	2.3	MP	IRF6722MTR1PBF
30	4.7	13	110	1.4	2.2	ST	IRF6722STR1PBF
30	2.4	28	220	1.35	2.8	MX	IRF6725MTR1PBF
30	1.3	32	250	1.35	2.8	MT	IRF6726MTR1PBF
30	1.22	32	260	1.35	2.8	MX	IRF6727MTR1PBF
40	3.4	23	180	1.35	2.8	MT	IRF6613TR1PBF
40	4.6	19	150	—	2.8	MX	IRF6616TR1
40	8.3	55	102	1.35	2.1	ST	IRF6614TR1
60	5.5	86	260	3	2.8	MN	IRF6648TR1PBF
60	5.5	86	260	—	2.8	MN	IRF6648TR1
80	7.6	12	96	3	2.8	MN	IRF6646TR1PBF
80	7.6	12	96	—	2.8	MN	IRF6646TR1
100	10.3	10.3	82	2.8	2.8	MN	IRF6644TR1PBF
100	28	5.7	45	3	3	SJ	IRF6645TR1PBF
100	53	4.2	34	3	2.2	SH	IRF6665TR1PBF
150	34.5	6.2	76	—	2.8	MZ	IRF6643TR1PBF
150	47	28	39	3	89	MZ	IRF6775MTR1PBF
200	59.9	4.6	37	—	2.8	MZ	IRF6641TR1PBF
200	85	19	27	3	57	MZ	IRF6785MTR1PBF

405796

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
IRF6603TR1	SMD 926-6526● RL	3.13	1.96	1.54	1.26	1.14
IRF6607TR1	SMD 926-6542● RL	3.31	2.09	1.63	1.33	1.21
IRF6611TR1	SMD 107-8408● RL	2.11	1.38	1.05	0.88	0.86
IRF6614TR1	SMD 926-6577● RL	1.49	0.94	0.73	0.59	0.56
IRF6616TR1	SMD 107-8413● RL	2.81	1.54	1.14	0.87	0.84
IRF6617TR1	SMD 107-8414● RL	2.33	1.53	1.18	0.95	0.87
IRF6618TR1	SMD 926-6585● RL	3.48	2.19	1.75	1.42	1.28
IRF6635TR1	SMD 107-8419● RL	3.69	2.16	1.65	1.34	1.23
IRF6646TR1	SMD 107-8424● RL	3.85	2.19	1.67	1.39	1.35
IRF6691TR1	SMD 107-8427● RL	3.95	2.62	2.00	1.61	1.47
IRF6648TR1	SMD 108-4634● RL	3.44	1.96	1.50	1.31	1.20
IRF6609TR1PBF	SMD 143-6905●	2.41	1.82	1.58	1.52	1.46
IRF6613TR1PBF	SMD 143-6911●	2.86	1.86	1.70	1.57	1.45
IRF6619TR1PBF	SMD 143-6916●	2.42	1.58	1.45	1.33	1.23
IRF6628TR1PBF	SMD 138-8583●	3.07	2.25	2.06	1.77	1.59
IRF6629TR1PBF	SMD 138-8584●	3.29	2.41	2.19	1.90	1.70
IRF6635TR1PBF	SMD 143-6923●	3.12	2.05	1.86	1.71	1.59
IRF6636TR1PBF	SMD 143-6924●	2.03	1.31	1.20	1.11	1.02
IRF6638TR1PBF	SMD 138-8586●	3.14	2.31	2.09	1.81	1.62
IRF6641TR1PBF	SMD 138-8588●	4.55	3.34	3.04	2.63	2.35
IRF6643TR1PBF	SMD 138-5503●	4.32	3.63	3.11	2.70	2.62
IRF6644TR1PBF	SMD 143-6926●	3.04	1.98	1.81	1.66	1.54
IRF6645TR1PBF	SMD 143-6927●	1.52	1.19	1.02	0.98	0.95
IRF6646TR1PBF	SMD 143-6928●	3.16	2.07	1.87	1.74	1.60
IRF6648TR1PBF	SMD 143-6929●	2.83	1.84	1.69	1.55	1.44
IRF6665TR1PBF	SMD 143-6932●	1.59	1.23	1.05	1.02	0.98
IRF6678TR1PBF	SMD 143-6935●	2.88	1.87	1.71	1.58	1.46
IRF6691TR1PBF	SMD 143-6936●	2.83	2.16	1.87	1.81	1.74
IRF6712STR1PBF	SMD 143-6938●	0.90	0.59	0.54	0.49	0.46
IRF6716MTR1PBF	SMD 143-6939●	1.95	1.28	1.17	1.07	0.98
IRF6714MTR1PBF NEW	SMD 160-2259●	1.63	1.15	0.98	0.88	0.80
IRF6715MTR1PBF NEW	SMD 160-2260●	1.60	1.12	0.96	0.87	0.79
IRF6722MTR1PBF NEW	SMD 160-2261●	1.17	0.82	0.70	0.63	0.57
IRF6722STR1PBF NEW	SMD 160-2262●	1.07	0.74	0.65	0.58	0.53
IRF6725MTR1PBF NEW	SMD 160-2264●	1.62	1.14	0.97	0.88	0.79
IRF6726MTR1PBF NEW	SMD 160-2265●	2.02	1.42	1.21	1.09	0.98
IRF6727MTR1PBF NEW	SMD 160-2266●	1.98	1.39	1.20	1.07	0.96
IRF6775MTR1PBF NEW	SMD 160-2267●	1.66	1.17	0.99	0.89	0.81
IRF6785MTR1PBF NEW	SMD 160-2268●	1.66	1.17	0.99	0.89	0.81

Combined MOSFET and Schottky Diode

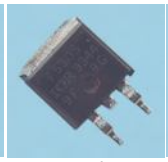
International IOR Rectifier

FAIRCHILD SEMICONDUCTOR

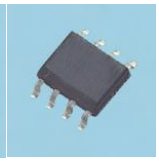
SMD



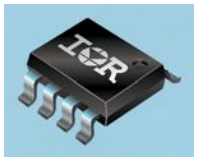
D-Pak
H=2.38, W=6.73, D=10.42



TO-263 (D^2-Pak)
H=4.69, W=10.54, D=15.49



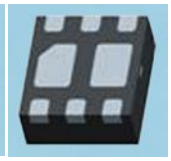
SO-8
H=1.75, W=4.98, D=6.2



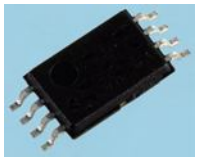
Micro8™
H=1.11, W=3.05, D=5.03



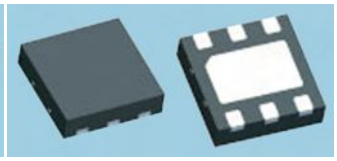
SSOT-6
SuperSOT-6: H=1.22, W=3.0, D=3.0



MicroFET
H=0.8, W=1.8, D=2.25



TSSOP-8
H=1, W=3, D=7.72



Power 33
H=0.8, W=2.65, D=3.5

- Combined MOSFET and Schottky diode
- Very low $R_{ds(on)}$
- Optimum efficiency
- Space saving

V_{DS} V	$R_{DS(on)}$ Ω	I_D @ 25°C A	I_{DM} pulsed A	$V_{GS(th)}$ max. (*min.) V	P_D @ 25°C W	Schottky Diode $I_{F(av)}$ A	Schottky Diode V_{FM} V	Package	Mftr.	Mftrs. List No.
N Channel										
20	0.009	35	159	2.5	49.5	—	—	I-PAK	FCH	FDU8580
20	0.0055	35	354	2.5	77	—	—	I-PAK	FCH	FDU8586
20	0.009	35	159	2.5	49.5	—	—	D-PAK	FCH	FDD8580
20	0.0055	35	354	2.5	77	—	—	D-PAK	FCH	FDD8586
30	0.1	3.6	29	1*	2	—	—	SOIC	—	FDS7064SN3
30	0.017	8.3	66	0.5*	2.5	—	0.54	SOIC	IR	IRF7807VD1PBF
30	0.0024	40	200	2	83	—	—	Power 56	FCH	FDMS8660S
30	0.0025	80	556	2.5	254	—	—	TO-220	FCH	FDP8860
30	0.025	8.3	66	1*	2.5	—	0.5	SOIC	IR	IRF7807D1PBF
30	0.029	6.5	6.5	1*	20	2.7	0.39	SOIC	IR	IRF7353D1PBF
30	0.035	6.4	33	4	2.5	4.0	0.42	SOIC	IR	IRF7421D1PBF
30	0.035	6	—	3	2	5	0.5	SOIC	FCH	FDFS6N303
30	0.056	4	20	2.5	—	—	—	SOIC	FCH	FDFS6N754
30	0.123	2.9	10	—	1.5	—	—	MLP-6	FCH	FDFMA3N109
40	0.0019	28	70	4	300	—	—	D2-PAK	FCH	FDB8441

RL Re-reeling available

Farnell

Power MOSFETs - continued

Combined MOSFET and Schottky Diode - continued

V_{DS}	$R_{DS(on)}$	I_D @ 25°C	I_{DM} pulsed	$V_{GS(th)}$ max. (*min.)	P_D @ 25°C	Schottky Diode $I_{F(av)}$	Schottky Diode V_{FM}	Package	Mftr.	Mftrs. List No.
V	Ω	A	A	V	W	A	V			
N Channel										
40	0.0047	80	180	4	300	—	—	TO-220	FCH	FDP8441
75	0.011	75	300	4	137	—	—	TO-220	FCH	FDP75N08A
100	0.018	80	320	5.5	255	—	—	TO-220	FCH	FDP3651U
150	0.03	79	316	5	463	—	—	TO-220	FCH	FDP79N15
200	0.07	3.9	50	4	2.5	—	—	SOIC	FCH	FDS2672
250	0.094	33	132	5	235	—	—	TO-220	FCH	FDP33N25
250	0.094	20	80	5	94	—	—	TO-220F	FCH	FDPF33N25T
250	0.06	28	112	5	117	—	—	TO-220F	FCH	FDPF51N25
250	0.117	3	50	4	2.5	—	—	SOIC	FCH	FDS2734
500	0.38	16	64	5	200	—	—	TO-220	FCH	FDP16N50
500	0.23	20	80	5	62	—	—	TO-220F	FCH	FDPF20N50T
500	1.55	5	20	4	96	—	—	D2-PAK	FCH	FQB5N50CFTM
500	0.38	16.5	66	—	205	—	—	TO-3P	FCH	FDA16N50
600	1	3.9	11.7	5	—	—	—	D-PAK	FCH	FCD4N60TM
600	0.6	7	21	5	—	—	—	D-PAK	FCH	FCD7N60TM
600	0.95	4.6	13.8	5	54	—	—	I-PAK	FCH	FCU5N60TU
650	0.95	4.6	13.8	5	—	—	—	D-PAK	FCH	FCD5N60TM
Dual N Channel										
20	0.068	3.7	6	1.5	1.4	—	—	MLP-6	FCH	FDMA1028NZ
30	0.028	6.3	20	3	2.5	3.0	0.7	SOIC	FCH	FDS6982S
30	0.016	8.6	30							
30	0.123	2.9	10	—	1.5	—	—	MLP-6	FCH	FDMA2002NZ
30	0.032	6.2	24	2	2	—	0.52	SOIC	IR	IRF7901D1PBF
40	0.029	6	20	3	2	—	—	SOIC	FCH	FDS8949
500	1.5	4.5	18	—	75	—	—	TO-220FP	INF	SPP04N50C3
P Channel										
20	0.055	4.3	4.3	-1.2*	1.25	—	0.62	Micro8	IR	IRF7534D1PBF
20	0.058	5.3	43	-0.7*	2	—	0.5	SOIC	IR	IRF7322D1PBF
20	0.09	4.6	23	4	2.5	4.0	0.52	SOIC	IR	IRF7422D2PBF
20	0.125	3.3	—	-3	2	2	0.58	SOIC	FCH	FDFS2P102A
20	0.042	6.6	24	—	2.4	—	—	MLP-6	FCH	FDMA291P
20	0.085	3	15	-0.4	1.5	—	—	WL-CSP	FCH	FDZ191P
30	0.059	5.3	—	-3	2	1	0.57	SOIC	FCH	FDFS2P103
30	0.059	5.3	—	-3	2	1	0.35	SOIC	FCH	FDFS2P103A
30	0.115	3	—	-3	1.6	2	0.58	SOIC	FCH	FDFS2P753Z
60	0.11	3	—	-3	2	2	0.62	SOIC	FCH	FDFS2P106A
150	1.5	3	12	-3	42	—	—	Power 33	FCH	FDMC2523P
Dual P										
20	0.095	3.1	6	-1.5	1.4	—	—	MLP-6	FCH	FDMA1029PZ
30	0.022	6.9	50	-3	1.6	—	—	SOIC	FCH	FDS4935BZ
Dual NP										
20(N)	68	3.7	6	0.6	1.4	—	—	MLP-6	FCH	FDMA1032CZ
20(P)	141	3.1		-0.6						
20(N)	0.7	0.6	1	1.5	0.625	—	—	SC-89	FCH	FDY4000CZ
20(P)	1.2	0.35								

211265

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
FDFS2P102A	FCH	SMD 149-5200●	0.500	0.350	0.250	0.154
FDFS2P103	FCH	SMD 149-5201●	0.680	0.480	0.360	0.240
FDFS2P103A	FCH	SMD 149-5202●	0.680	0.480	0.360	0.240
FDFS2P106A	FCH	SMD 149-5204●	1.270	0.870	0.620	0.540
FDFS2P753Z	FCH	SMD 149-5205●	0.310	0.230	0.185	0.165
FDFS6N303	FCH	SMD 149-5206●	0.730	0.490	0.350	0.210
FDS6982S	FCH	SMD 984-4759● RL	2.180	1.310	0.920	0.650
FDS7064SN3	IR	SMD 109-5022● RL	0.710	0.540	0.440	0.320
FQB5N50CFTM	FCH	SMD 132-4836●	0.830	0.690	0.540	0.390
IRF7353D1PBF	IR	SMD 910-2426●	1.460	1.260	1.050	0.830
FCD4N60TM	FCH	SMD 132-4776●	0.660	0.530	0.430	0.360
FCD5N60TM	FCH	SMD 132-4777●	0.910	0.690	0.530	0.440
FCD7N60TM	FCH	SMD 132-4778●	1.440	1.070	0.850	0.690
FCU5N60TU	FCH	132-4781●	1.000	0.800	0.650	0.550
FDA16N50	FCH	132-4783●	2.750	1.880	1.400	1.330
FDB8441	FCH	SMD 132-4784●	2.570	1.900	1.490	1.250
FDD8580	FCH	SMD 132-4785●	0.500	0.370	0.280	0.182
FDD8586	FCH	SMD 132-4786●	0.370	0.310	0.230	0.186
FDFMA3N109	FCH	SMD 132-4787●	0.330	0.240	0.183	0.114
FDFS6N754	FCH	SMD 132-4788●	0.510	0.380	0.280	0.172
FDMA1028NZ	FCH	SMD 132-4789●	0.460	0.300	0.210	0.126
FDMA1029PZ	FCH	SMD 132-4790●	0.370	0.280	0.199	0.175
FDMA1032CZ	FCH	SMD 132-4791●	0.500	0.320	0.230	0.135
FDMA2002NZ	FCH	SMD 132-4793●	0.400	0.310	0.230	0.200
FDMA291P	FCH	SMD 132-4794●	0.340	0.240	0.186	0.162
FDMC2523P	FCH	SMD 132-4795●	0.550	0.460	0.360	0.310
FDMS8660S	FCH	SMD 132-4796●	1.250	1.020	0.830	0.690
FDP16N50	FCH	132-4797●	2.350	1.600	1.190	1.130
FDP33N25	FCH	132-4798●	1.110	0.930	0.820	0.720
FDP3651U	FCH	132-4799●	2.130	1.450	1.080	1.020
FDP75N08A	FCH	132-4801●	1.200	0.820	0.590	0.550

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
FDP79N15	FCH	132-4802●	1.820	1.510	1.240	1.110
FDP8441	FCH	132-4803●	2.900	2.150	1.690	1.410
FDP8860	FCH	132-4804●	1.670	1.140	0.990	0.970
FDPF20N50T	FCH	132-4806●	1.500	1.310	1.150	1.040
FDPF33N25T	FCH	132-4807●	1.030	0.830	0.670	0.600
FDPF51N25	FCH	132-4808●	1.250	1.000	0.820	0.690
FDS2672	FCH	SMD 132-4811●	1.160	0.790	0.570	0.530
FDS2734	FCH	SMD 132-4812●	1.400	1.120	0.910	0.770
FDS4935BZ	FCH	SMD 132-4813●	0.600	0.490	0.360	0.240
FDS8949	FCH	SMD 132-4814●	0.780	0.500	0.360	0.270
FDU8580	FCH	132-4815●	0.590	0.380	0.270	0.199
FDU8586	FCH	132-4816●	0.760	0.480	0.350	0.260
FDY4000CZ	FCH	SMD 132-4817●	0.340	0.280	0.200	0.105
FDZ191P	FCH	SMD 132-4819●	0.310	0.230	0.175	0.107
IRF7421D1PBF	IR	SMD 910-2434●	2.320	1.450	1.300	0.800
IRF7422D2PBF	IR	SMD 910-3287●	1.620	1.030	0.790	0.640
IRF7534D1PBF	IR	SMD 910-3279●	1.130	0.710	0.540	0.420
IRF7807D1PBF	IR	SMD 101-3489●	1.250	0.800	0.610	0.490
IRF7807VD1PBF	IR	SMD 101-3492●	1.070	0.710	0.550	0.440
IRF7901D1PBF	IR	SMD 101-3504●	1.590	1.080	0.830	0.770
IRF7322D1PBF	IR	SMD 101-3511●	0.820	0.700	0.580	0.460
SPP04N50C3	INF	120-1588●	1.300	0.950	0.700	0.510

12V to 200V



TO-92



SOT-363



SOT-23

V_{ds}	$R_{DS(on)}$	$I_{D\ cont}$ @ 25°C	I_{DM} pulsed	$V_{GS(th)}$ max (*typ)	P_d @ 25°C	Package	Mftrs.List No.
V	Ω	A	A	V	W		
Single N Channel							
60	5	0.3	1.2	3	0.83	SOT-23	PMBF170
Dual N Channel							
30	8	0.125	0.25	1.5	0.2	SOT-363	PMGD8000LN
Single P Channel							
12	0.5	0.75	3	0.68	0.417	SOT-23	BSH205
250	15	0.2	0.6	2	1	TO-92	BSP254A

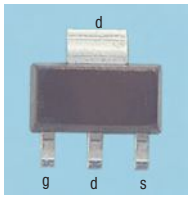
Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	250+	1K+
BSH205	SMD 108-1308● RL	0.300	0.210	0.167	0.132	0.103
BSP254A	109-7278●	0.520	0.250	0.200	0.104	0.100
PMBF170	SMD 108-1473● RL	0.300	0.109	0.107	0.080	0.078
		5+	25+	100+	1K+	3K+
PMGD8000LN	SMD 108-1479● RL	0.187	0.118	0.097	0.065	0.063

211357

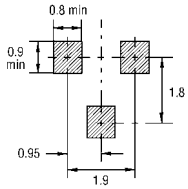
Reel of 3000 Mftrs. List No.	Order Code	Price Per Reel 1+
BSH205.215	NEW SMD 156-2510●	277.99

SOT-223

V_{DS}<100V



H=1.7, W=6.7, D=7.3
Supplied on 12mm tape.



Footprint

V_{DS}	$R_{DS(on)}$	$I_{D\ cont}$ @ 25°C	I_D pulsed	P_D @ 25°C	$V_{GS(th)}$ max. (*min)	Mftr.	Mftrs. List No.
V	Ω	A	A	W	V		
N Channel, Enhancement Mode							
30	0.031	4.6	37	2.1	2.5	IR	IRLL3303PBF●
30	0.045	5.5	16	2.1	2.4	IR	IRLL2703PBF●
50	0.3	1.7	6.8	1.5	2	INF	BSP295●
55	0.04	3.8	30	2.1	2.5	IR	IRLL2705PBF●
55	0.045	3.7	30	2.1	2	IR	IRFL4105PBF
55	0.058	5.1	41	2.8	4	IR	IRFL024ZPBF
55	0.065	3.1	12	2.1	2	IR	IRLL024NPBF●
55	0.14	2	16	2.1	2	IR	IRLL014NPBF●
55	0.16	2.7	15	1.0	4	IR	IRFL014NPBF
60	0.2	2.7	22	3.1	2	VISH	IRLL014PBF●
60	0.09	2.6	10.4	1.8	2	INF	BSP318S
60	0.1	3.5	25	3	2	FCH	NDT3055L
60	0.2	2.7	22	3.1	4	VISH	IRFL014PBF
60	0.22	2.3	6.4	2.1	4	IR	IRFL1006PBF
60	1.5	1	8	2	3	ZET	ZVN4206G
60	2	0.7	8	2	2.4	ZET	ZVN2106G
P Channel							
30	0.035	7.3	—	3	-3	FCH	NDT456P●

RL Re-reeling available

V_{DS}	$R_{DS(on)}$	I_D cont @ 25°C	I_D pulsed	P_D @ 25°C	$V_{GS(th)}$ max. (*min)		Mftrs.
P Channel							
30	0.065	5	15	3	-2.8	FCH	NDT452AP
60	0.3	2.5	15	3	-4	FCH	NDT2955
60	0.4	1.45	5.8	1.5	-2	INF	BSP171P●
60	0.5	1.8	14	3.1	-4	VISH	IRFL9014PBF
60	0.8	1.17	4.68	1.8	-2	INF	BSP315P●
60	5	0.45	4	2	-3.5	ZET	ZVP2106G

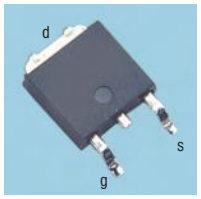
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Mftrs. List No.	Mfr.	Order Code	Price Each 1+	100+	200+	500+	1K+
BSP89	INF	SMD 121-4272● RL	1.090	0.790	0.570	0.350	0.330
BSP125	INF	SMD 121-4278● RL	1.130	0.810	0.630	0.480	0.380
BSP129	INF	SMD 121-4279● RL	0.630	0.450	0.370	0.310	0.300
BSP149	INF	SMD 121-4280● RL	0.700	0.530	0.440	0.370	0.310
BSP171P	INF	SMD 115-6441● RL	2.300	1.740	1.330	1.060	1.010
BSP295	INF	SMD 121-4268● RL	0.850	0.650	0.490	0.400	0.390
BSP297	INF	SMD 121-4270● RL	1.520	0.870	0.610	0.420	0.350
BSP298	INF	SMD 121-4281● RL	1.170	0.850	0.720	0.590	0.570
BSP299	INF	SMD 121-4271● RL	2.870	1.980	1.590	0.910	0.780
BSP315P	INF	SMD 121-4289● RL	0.900	0.480	0.420	0.290	0.270
BSP318S	INF	SMD 121-4267● RL	0.460	0.350	0.300	0.240	0.210
BSP372L6327	INF	SMD 121-4283● RL	0.950	0.690	0.520	0.330	0.310
BSP373	INF	SMD 121-4285● RL	0.950	0.690	0.520	0.330	0.310
			1+	**25+**	**100+**	**250+**	**1K+**
BSP100	NXP	SMD 151-0763●	0.280	0.220	0.189	0.168	0.147
IRFL9014PBF	VISH	SMD 864-9200●	1.940	1.140	1.120	0.660	0.590
IRFL024ZPBF	IR	SMD 865-8315●	0.660	0.420	0.320	0.260	0.240
IRFL1006PBF	IR	SMD 865-8323●	0.670	0.440	0.330	0.260	0.240
IRFL014PBF	VISH	SMD 864-9146●	1.460	0.850	0.630	0.470	0.460
IRFL014NPBF	IR	864-9138●	0.900	0.570	0.440	0.350	0.330
IRLL014NPBF	IR	SMD 865-1183●	0.910	0.530	0.380	0.310	0.290
IRLL014PBF	VISH	SMD 865-1191●	2.250	1.280	0.930	0.510	0.470
IRLL024NPBF	IR	SMD 865-1205●	1.040	0.650	0.500	0.400	0.370
IRLL2703PBF	IR	SMD 865-1221●	1.350	1.180	0.910	0.730	0.660
IRLL2705PBF	IR	SMD 865-1230●	2.390	1.430	1.360	0.880	0.810
IRLL3303PBF	IR	SMD 865-1248●	2.800	1.660	1.610	0.960	0.910
NDT2955	FCH	SMD 984-6271● RL	0.500	0.340	0.240	0.142	0.139
NDT3055L	FCH	SMD 984-5305● RL	0.520	0.350	0.250	0.143	0.126
NDT452AP	FCH	SMD 984-6280● RL	0.650	0.490	0.360	0.240	0.210
NDT456P	FCH	SMD 984-6190● RL	1.150	0.780	0.580	0.490	0.420
NDT014	FCH NEW	SMD 155-5163●	0.280	0.197	0.166	0.144	0.128
			1+	**100+**	**200+**	**500+**	**1K+**
ZVN2106G	ZET	SMD 952-5041● RL	1.010	0.730	0.550	0.400	0.340
ZVP2106G	ZET	SMD 952-5050● RL	1.220	0.890	0.620	0.390	0.380
ZVN2110G	ZET	SMD 952-6730● RL	1.130	0.830	0.560	0.340	0.330
ZVN4206G	ZET	SMD 952-6366● RL	1.370	0.980	0.700	0.400	0.380
IRFL110PBF	VISH	SMD 864-9162●	1.210	0.730	0.570	0.420	0.410
IRFL210PBF	VISH	SMD 864-9170●	1.320	0.800	0.620	0.450	0.440
IRFL214PBF	VISH	SMD 864-9189●	1.410	0.840	0.630	0.490	0.470
IRFL4310PBF	IR	SMD 864-9197●	2.180	1.330	1.270	0.780	0.710
IRFL4315PBF	IR	SMD 865-8331●	0.870	0.550	0.410	0.330	0.310
IRFL9110PBF	VISH	SMD 864-9219●	1.790	1.110	1.030	0.620	0.590
IRLL110PBF	VISH	SMD 865-1213●	1.320	0.790	0.590	0.450	0.440
NTF3055-100T1G	ON	SMD 143-1322●	0.560	0.410	0.310	0.250	0.200
NTF3055L108T1G	ON	SMD 143-1323●	0.610	0.410	0.300	0.240	0.180
NTF3055L175T1G	ON	SMD 145-3648●	0.520	0.380	0.280	0.220	0.185
NTF3055L108T1G	ON	SMD 143-1323●	0.610	0.410	0.300	0.240	0.180
NTF6P02T3G	ON	SMD 145-3628●	0.930	0.670	0.520	0.400	0.330
NTF5P03T3G	ON	SMD 145-3638●	0.820	0.590	0.450	0.360	0.290
NTF3055L175T1G	ON	SMD 145-3648●	0.520	0.380	0.280	0.220	0.185
NTF2955T1G	ON	SMD 145-3649●	0.790	0.560	0.390	0.340	0.270
			1+	**25+**	**100+**	**250+**	**1K+**
STN2NF10	ST	SMD 993-5460● RL	0.630	0.490	0.370	0.330	0.290
STN1N20	ST	SMD 993-5452● RL	0.730	0.550	0.440	0.350	0.290
			1+	**100+**	**200+**	**500+**	**1K+**
ZVN2110G	ZET	SMD 952-6730● RL	1.130	0.830	0.560	0.340	0.330
ZVN4424G	ZET	SMD 952-6749● RL	1.380	1.050	0.710	0.400	0.390
ZVP4424G	ZET	SMD 952-6757● RL	1.100	0.840	0.560	0.330	0.320

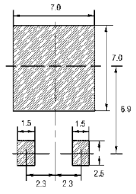
Reels of 1000 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
BSP171PL6327	NEW SMD 156-2495●	338.75	304.89
BSP318SL6327	NEW SMD 156-2497●	189.11	
BSP295L6327	NEW SMD 156-2498●	319.36	287.43
BSP297L6327	NEW SMD 156-2500●	296.97	267.27
BSP299L6327	NEW SMD 156-2501●	650.66	585.59
BSP149L6327	NEW SMD 156-2503●	299.42	– –
ZVN2106GTA	NEW SMD 156-2505●	305.10	274.59
ZVP2106GTA	NEW SMD 156-2506●	339.00	
		Price Per Reel	
Reels of 2500		**1+**	
NDT456P	NEW SMD 156-2507●	1,206.85	

12V to 800V, N Channel

TO-252 (D-Pak)



H=2.55, W=6.8, D=10.5



Footprint

ON Semiconductor

FAIRCHILD SEMICONDUCTOR

International IOR Rectifier

V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. List No.
12	90	6.7	54	52	FCH	FDD306P
20	0.009	75	280	88	IR	IRFR3706PBF
25	4.8	100	410	81	IR	IRLR8713PBF
25	4.8	100	410	81	IR	IRLU8713PBF
30	0.011	55	100	60	FCH	FDD6680S
30	0.0125	46	100	50	FCH	FDD6690A
30	0.013	61	244	87	IR	IRFR3708PBF
30	0.014	25	140	50	ST	STD35NF3LL
30	0.031	33	57	57	IR	IRFR3303PBF
30	0.05	17	68	30	ST	STD17NF03LT4
40	0.0052	17.5	80	227	FCH	FDD8444
40	0.0055	42	480	140	IR	IRFR4104PBF
40	0.0067	15.2	85	79	FCH	FDD8445
40	0.009	87	350	140	IR	IRFR3504PBF
40	0.05	7.2	35.3	4.2**	ZET	ZXMN4A06K
50	0.1	14	22	48	FCH	RFD14N05SM
60	0.08	12	48	30	ST	STD12NF06
55	0.0075	91	360	140	IR	IRFR1010ZPBF
55	0.011	42	250	91	IR	IRFR48ZPBF
55	0.013	71	280	140	IR	IRFR3505PBF
55	0.016	56	220	110	IR	IRFR2405PBF
55	0.02	37	150	69	IR	IRFR1205PBF
55	0.0245	30	120	48	IR	IRFR4105ZPBF
55	0.045	25	100	46	IR	IRFR4105PBF
55	0.07	16	68	38	IR	IRFR024NPBF
60	0.014	60	240	110	ST	STD60NF06
60	0.027	30	100	50	FCH	FDD5690
60	0.032	24	96	60	ST	STD20NF06
60	0.063	16.8	67.2	2.5	FCH	FQD20N06
60	0.1	14	56	42	VISH	IRFR024PBF
60	0.2	7.7	31	25	VISH	IRFR014PBF
60	7.1	56	315		IR	IRFR1018EPBF
60	12.6	43	170		IR	IRFR3806PBF
75	0.016	42	210	110	IR	IRFR2307ZPBF
75	0.026	42	170	110	IR	IRFR2407PBF
75	7.34	56	310		IR	IRFR3607PBF
80	0.014	70	280	140	IR	IRFR3418PBF
80	0.029	38	150	110	IR	IRFR3518PBF
100	0.018	42	220	140	IR	IRFR3710ZPBF
100	0.025	48	190	140	IR	IRFR3412PBF
100	0.03	25	100	100	ST	STD25NF10L
100	0.039	31	125	110	IR	IRFR3410PBF
100	0.06	23	92	70	ST	STD15NF10
100	0.11	15	60	52	IR	IRFR3910PBF
100	0.115	14	56	56	IR	IRFR3911PBF
100	0.21	9.1	38	39	IR	IRFR120NPBF
100	0.27	7.7	31	42	VISH	IRFR120PBF
100	0.54	4.3	17	25	VISH	IRFR110PBF
100	14	63	250	140	IR	IRLU3110ZPBF
200	0.14	15	60	2.5	FCH	FQD18N20V2
200	0.28	9	36	2.5	FCH	FQD12N20
200	0.38	9.4	38	86	IR	IRFR9N20DPBF
200	0.6	5	20	43	IR	IRFR220NPBF
200	0.7	6	18	50	ON	MTD6N20ET4G
200	0.8	4.8	19	42	VISH	IRFR220PBF
200	1.5	2.6	10	25	VISH	IRFR210PBF
200	0.105	22	88	100	ST	STD22NM20NT4
200	0.18	14	56	86	IR	IRFR13N15DTRLP
250	1.1	3.8	15	42	VISH	IRFR224PBF
400	1.8	3.1	12	42	VISH	IRFR320PBF
400	1.8	3	12	45	ST	STD5NK40ZT4
400	3.6	1.7	6	25	VISH	IRFR310PBF
500	0.8	7.5	30	100	ST	STD5NM50T4
500	1.5	4.4	17.6	70	ST	STD5NK50ZT4
500	2.7	3	12	45	ST	STD4NK50ZT4
500	3	2.4	8	42	VISH	IRFR420PBF
550	0.38	11	44	100	ST	STD12NM50N
600	1.3	3	12	42	ST	STD3NM60
600	2	4	16	70	ST	STD4NK60ZT4
600	4.4	2	8	42	VISH	IRFRC20PBF
650	1	5	20	96	ST	STD5NM60
650	1.6	5	20	90	ST	STD5NK60ZT4
800	6.3	1.8	7.7	2.5	FCH	FQD2N80

** measured power on 50mm x 50mm x 1.8mm PCB

Mftrs. List No.	Mfr.	Order Code	Price Each 1+	25+	100+	250+
FDD306P	FCH	SMD 995-8827● RL	0.400	0.290	0.200	0.169
FDD5690	FCH	SMD 984-5038● RL	1.030	0.720	0.560	0.420
FDD6680S	FCH	SMD 984-5054● RL	1.230	0.890	0.730	0.470
FDD6690A	FCH	SMD 984-5062● RL	0.790	0.570	0.440	0.300
FDD8444	FCH	SMD 122-8329●	1.200	0.950	0.780	0.670
FDD8445	FCH	SMD 122-8331●	0.670	0.530	0.440	0.370
FQD2N80	FCH	SMD 984-5119● RL	0.940	0.680	0.550	0.350
FQD12N20	FCH	SMD 984-5070● RL	0.730	0.520	0.430	0.280
FQD18N20V2	FCH	SMD 109-5052● RL	0.770	0.580	0.480	0.340
FQD20N06	FCH	SMD 984-5097● RL	0.600	0.440	0.350	0.220
IRFR9N20DPBF	IR	SMD 864-9928●	2.010	1.200	0.940	0.610
IRFR13N15DTRLP	IR	SMD 129-8545● RL	0.770	0.570	0.450	0.370
IRFR48ZPBF	IR	SMD 101-3388●	1.790	1.170	0.900	0.730
IRFR014PBF	VISH	SMD 864-9600●	0.790	0.670	0.550	0.430
IRFR024PBF	VISH	SMD 864-9634●	1.270	1.030	0.980	0.630
IRFR024NPBF	IR	SMD 864-9618●	1.660	0.970	0.960	0.560
IRFR110PBF	VISH	SMD 864-9642●	0.780	0.470	0.460	0.310

RL Re-reeling available

Farnell

RoHS ● Compliant ▲ Non-compliant

Power MOSFETs - continued

12V to 800V, N Channel - continued

TO-252 (D-Pak) - continued

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
IRFR120PBF	VISH	SMD 101-3484	1.090	0.680	0.510	0.410
IRFR120NPBF	IR	SMD 864-9669	0.930	0.560	0.540	0.320
IRFR210PBF	VISH	SMD 864-9685	0.980	0.580	0.450	0.340
IRFR220PBF	VISH	SMD 864-9707	1.120	0.680	0.650	0.390
IRFR220NPBF	IR	SMD 864-9693	0.930	0.580	0.440	0.350
IRFR224PBF	VISH	SMD 864-9715	0.790	0.650	0.530	0.400
IRFR310PBF	VISH	SMD 864-9740	1.040	0.650	0.520	0.350
IRFR320PBF	VISH	SMD 864-9758	1.370	0.830	0.620	0.470
IRFR420PBF	VISH	SMD 864-9812	1.400	0.830	0.620	0.460
IRFR1010ZPBF	IR	SMD 101-3382	1.940	1.230	0.930	0.770
IRFR1205PBF	IR	SMD 864-9650	2.450	1.470	1.420	0.870
IRFR2307ZPBF	IR	SMD 101-3383	1.840	1.170	0.940	0.720
IRFR2405PBF	IR	SMD 864-9723	1.630	1.390	1.130	0.890
IRFR2407PBF	IR	SMD 864-9731	1.630	1.090	0.880	0.640
IRFR3303PBF	IR	SMD 101-3485	0.890	0.770	0.650	0.530
IRFR3410PBF	IR	SMD 864-9766	0.990	0.660	0.540	0.400
IRFR3411PBF	IR	SMD 865-8749	2.550	1.610	1.220	0.950
IRFR3412PBF	IR	SMD 865-8757	2.490	1.580	1.200	0.990
IRFR3418PBF	IR	SMD 864-9774	3.420	2.160	1.650	1.350
IRFR3504PBF	IR	SMD 865-8765	1.150	0.720	0.550	0.440
IRFR3505PBF	IR	SMD 865-8773	1.600	0.920	0.720	0.570
IRFR3518PBF	IR	SMD 864-9782	1.130	0.740	0.570	0.470
IRFR3706PBF	IR	SMD 865-8790	1.780	1.130	0.860	0.660
IRFR3708PBF	IR	SMD 865-8811	1.460	0.910	0.700	0.560
IRFR3710ZPBF	IR	SMD 101-3384	1.550	1.420	1.220	1.010
IRFR3910PBF	IR	SMD 864-9790	2.330	1.390	1.350	0.860
IRFR3911PBF	IR	SMD 865-8820	0.950	0.610	0.460	0.380
IRFR4104PBF	IR	SMD 101-3386	2.140	1.330	1.030	0.840
IRFR4105PBF	IR	SMD 864-9804	3.630	2.180	2.110	1.280
IRFR4105ZPBF	IR	SMD 101-3387	1.140	0.730	0.570	0.470
IRFRC20PBF	VISH	SMD 864-9936	1.360	0.870	0.680	0.430
IRLR8713PBF	IR	SMD 129-8551	1.500	1.100	0.890	0.720
IRLU3110ZPBF	IR	129-8556	2.180	1.590	1.300	1.050
IRLU8713PBF	IR	129-8552	1.340	0.980	0.740	0.610
IRFR1018EPBF	IR	NEW SMD 160-2229	0.890	0.630	0.540	0.490
IRFR3607PBF	IR	NEW SMD 160-2230	0.890	0.630	0.540	0.490
IRFR3806PBF	IR	NEW SMD 160-2231	0.710	0.500	0.420	0.380
MTD6N20ET4G	ON	SMD 955-5919 RL	0.850	0.740	0.680	0.540
RFD14N05SM	FCH	SMD 101-7791	0.680	0.430	0.310	0.230
STD3NM60	ST	SMD 993-5401 RL	1.090	0.840	0.640	0.550
STD4NK50ZT4	ST	SMD 129-1960 RL	0.950	0.670	0.550	0.420
STD4NK60ZT4	ST	SMD 129-1961 RL	0.480	0.390	0.340	0.290
STD5NM50T4	ST	SMD 129-1965 RL	1.600	1.310	1.090	0.800
STD5NM60	ST	SMD 993-5428 RL	1.450	1.110	0.860	0.740
STD5NK40ZT4	ST	SMD 129-1962 RL	0.920	0.680	0.550	0.420
STD5NK50ZT4	ST	SMD 129-1963 RL	0.990	0.740	0.590	0.460
STD5NK60ZT4	ST	SMD 129-1964 RL	0.920	0.640	0.550	0.490
STD12NF06	ST	SMD 117-5684 RL	0.870	0.670	0.510	0.440
STD12NM50N	ST	SMD 125-2945 RL	2.540	1.950	1.570	1.320
STD15NF10	ST	SMD 994-6322 RL	0.910	0.680	0.520	0.460
STD17NF03LT4	ST	SMD 129-1958 RL	0.420	0.320	0.270	0.240
STD20NF06	ST	SMD 993-5363 RL	0.770	0.570	0.450	0.370
STD22NM20NT4	ST	SMD 125-2946 RL	2.010	1.420	1.140	0.950
STD25NF10L	ST	SMD 994-6330 RL	0.940	0.810	0.590	0.500
STD35NF3LL	ST	SMD 994-6349 RL	0.660	0.500	0.380	0.340
STD60NF06	ST	SMD 993-5436 RL	1.250	0.940	0.740	0.630
ZXMN4A06K	ZET	SMD 125-1236 RL	1.240	0.990	0.660	0.590

Tube of 75

Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRFR3710ZPBF	NEW SMD 156-4130	87.06	73.36	68.02

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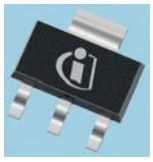
Reels of 2500

Mftrs. List No.	Order Code	Price Per Reel 1+
STD25NF10LT4.	NEW SMD 156-2573	1,239.52
MTD6N20ET4G	NEW SMD 156-2569	933.13
FDD5690	NEW SMD 156-2467	815.78

N-Channel, High Voltage, SMT >500V



D²PAK



SOT-223

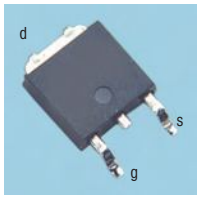
V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	P_D @ 25°C W	Mftr.	Package	Order Code	Mftrs. list No.
500	3	1.8	25.0	INF	D-PAK	147-1785	SPD02N50C3
600	0.6	7.3	83	INF	D2-PAK	147-1783	SPB07N60C3
600	1.4	3.2	38	INF	D2-PAK	147-1780	SPB03N60C3
600	3	1.8	25	INF	D-PAK	147-1786	SPD02N60S5
600	4.4	2	50	TS	D-PAK	129-9317	TSM2N60CP
650	0.95	4.5	50	INF	D-PAK	147-1811	SPU04N60C3
800	0.02	0.19	1.8	INF	SOT-223	147-1698	BSP300 L6327

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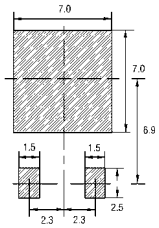
List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
TSM2N60CP	TS	SMD 129-9317	0.480	0.340	0.220	0.184
BSP300 L6327	INF	SMD 147-1698	0.730	0.580	0.520	0.490
SPB03N60C3	INF	SMD 147-1780	0.760	0.640	0.490	– –
SPB07N60C3	INF	SMD 147-1783	1.190	1.000	0.840	– –
SPD02N50C3	INF	SMD 147-1785	0.780	0.660	0.500	– –
SPD02N60S5	INF	SMD 147-1786	0.670	0.520	0.470	0.450
SPU04N60C3	INF	SMD 147-1811	0.930	0.710	0.650	0.610

12V to 400V, P Channel

TO-252 (D-Pak)



H=2.55, W=6.8, D=10.5



V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. List No.
40	0.027	32	100	69	FCH	FDD4685
40	0.044	14	60	42	FCH	FDD4243
40	0.06	9.9	—	9.5	ZET	ZXMP4A16K
55	0.065	31	110	110	IR	IRFR5305PBF
55	0.11	18	64	57	IR	IRFR5505PBF
55	0.175	11	44	38	IR	IRFR9024NPBF
30	0.035	25	30	—	SLX	SUD45P03-10
60	0.055	10.4	37.5	4.3**	ZET	ZXMP6A18K
60	0.1	15	45	42	FCH	FDD5614P
60	0.12	17	68	79	FCH	FQD17P06
60	0.13	18.6	74.4	80	INF	SPD18P06P
60	0.185	9.4	37.6	38	FCH	FQD11P06
60	0.28	8.8	35	—	VISH	IRFR9024PBF
60	0.3	8.8	35.2	42	INF	SPD08P06P
60	0.5	5.1	20	25	VISH	IRFR9014PBF
100	0.205	13	5.2	66	IR	IRFR5410PBF
100	0.48	6.6	26	40	IR	IRFR9120NPBF
100	0.6	5.6	22	42	VISH	IRFR9120PBF
100	1.2	3.1	12	25	VISH	IRFR9110PBF
150	0.295	13	44	110	IR	IRFR6215PBF
200	1.5	3.6	14	42	VISH	IRFR9220PBF
250	3	2.7	11	—	VISH	IRFR9214PBF
400	7	1.8	7.2	50	VISH	IRFR9310PBF

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
FDD4243	FCH	NEW SMD 149-5262	0.72	0.50	0.38	0.28
FDD4685	FCH	NEW SMD 149-5263	0.78	0.56	0.43	0.32
FDD5614P	FCH	SMD 984-6131 RL	0.61	0.46	0.35	– –
FQD11P06	FCH	SMD 984-6140 RL	0.64	0.47	0.37	– –
FQD17P06	FCH	SMD 984-6158 RL	0.64	0.47	0.37	– –
IRFR5305PBF	IR	SMD 864-9820	2.21	1.44	1.11	0.71
IRFR5410PBF	IR	SMD 865-8854	2.54	1.41	1.15	0.85
IRFR5505PBF	IR	SMD 864-9839	1.61	1.01	0.80	0.56
IRFR6215PBF	IR	SMD 864-9847	1.57	1.01	0.79	0.62
IRFR9014PBF	VISH	SMD 864-9855	1.15	0.68	0.52	0.38
IRFR9024PBF	VISH	SMD 101-3507	0.76	0.53	0.43	0.33
IRFR9214PBF	VISH	SMD 101-3508	1.18	0.75	0.57	0.44
IRFR9024NPBF	IR	SMD 864-9863	1.34	1.13	0.93	0.71
IRFR9110PBF	VISH	SMD 864-9871	0.80	0.52	0.41	0.31
IRFR9120PBF	VISH	SMD 865-8862	1.44	0.85	0.64	0.49
IRFR9120NPBF	IR	SMD 864-9880	1.31	0.83	0.65	0.50
IRFR9220PBF	VISH	SMD 864-9901	1.77	1.14	0.89	0.56
IRFR9310PBF	VISH	SMD 864-9910	1.27	0.75	0.57	0.44
SPD08P06P	INF	SMD 105-6543 RL	0.37	0.36	0.34	– –
SPD18P06P	INF	SMD 105-6544 RL	1.42	1.00	0.82	0.54
SUD45P03-10	SLX	SMD 102-1757 RL	1.77	1.48	1.39	1.03
ZXMP4A16K	ZET	SMD 125-1237 RL	1.49	1.18	0.79	0.71
ZXMP6A18K	ZET	SMD 125-1239 RL	1.96	1.57	1.05	0.93

Mftrs. List No.		Order Code	Price Per Reel 1+	3+
FQD11P06TF	REEL 2000	NEW SMD 156-2571	483.42	435.08
FQD17P06TF	REEL 2000	NEW SMD 156-2572	487.42	438.69
FDD5614P	REEL 2500	NEW SMD 156-2570	893.94	804.56
SUD45P03-10-E3	REEL 2000	NEW SMD 156-2466	1,301.86	
FDD5690	REEL 2500	NEW SMD 156-2467	815.78	

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Tubes of 75

Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRFR5305PBF	NEW SMD 156-4154	65.08	43.16	40.99
IRFR9024NPBF	NEW SMD 156-4155	37.20	27.62	24.86

RL Re-reeling available

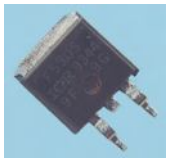
D-Pak (TO-252)

150V to 700V

ON Semiconductor

International IOR Rectifier

VISHAY



V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. List No.
N Channel						
150	0.18	14	56	86	IR	IRFR13N15DPBF
150	0.095	24	96	140	IR	IRFR24N15DPBF
200	0.125	18	72	90	ST	STD20N20T4
200	0.125	18	72	90	ST	STD20NF20
200	1.5	2.6	10	25	VISH	IRFR210PBF
200	0.8	4.8	19	42	VISH	IRFR220PBF
200	0.7	6	18	50	ON	MTD6N20ET4G
200	0.6	5	20	43	IR	IRFR220NPBF
200	0.38	9.4	38	86	IR	IRFR9N20DPBF
200	0.235	13	52	110	IR	IRFR13N20DPBF
200	0.165	17	68	140	IR	IRFR15N20DPBF
250	0.9	4	16	50	ST	STD4NS25
250	1.1	3.8	15	42	VISH	IRFR224PBF
250	0.26	14	56	144	IR	IRFR12N25DPBF
400	7	1.8	7.2	50	VISH	IRFR9310PBF
400	3.6	1.7	6	25	VISH	IRFR310PBF
400	1.8	3.1	12	42	VISH	IRFR320PBF
500	3	2.4	8	42	VISH	IRFR420PBF
500	1.7	5	20	110	VISH	IRFR430APBF
550	2.5	3	12	46	ST	STD3NM50
600	4.4	2	8	42	VISH	IRFRC20PBF
600	3.3	2.4	9.6	45	ST	STD3NK60Z
650	1	5	20	96	ST	STD5NM60
P Channel						
150	0.295	13	44	110	IR	IRFR6215PBF
200	3	1.9	7.6	25	VISH	IRFR9210PBF
200	1.5	3.6	14	42	VISH	IRFR9220PBF

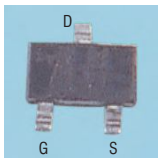
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Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
		Price Each				
IRFR9N20DPBF	SMD 864-9928	2.01	1.20	0.94	0.61	0.55
IRFR12N25DPBF	SMD 865-8706	1.75	1.12	0.86	0.69	0.63
IRFR13N15DPBF	SMD 865-8714	1.30	0.82	0.62	0.51	0.47
IRFR13N20DPBF	SMD 864-9677	2.00	1.27	0.98	0.73	0.66
IRFR15N20DPBF	SMD 865-8722	1.34	0.78	0.59	0.48	0.44
IRFR210PBF	SMD 864-9685	0.98	0.58	0.45	0.34	0.33
IRFR220NPBF	SMD 864-9693	0.93	0.58	0.44	0.35	0.33
IRFR220PBF	SMD 864-9707	1.12	0.68	0.65	0.39	0.37
IRFR224PBF	SMD 864-9715	0.79	0.65	0.53	0.40	0.34
IRFR24N15DPBF	SMD 865-8730	1.91	1.19	0.92	0.75	0.68
IRFR310PBF	SMD 864-9740	1.04	0.65	0.52	0.35	0.34
IRFR320PBF	SMD 864-9758	1.37	0.83	0.62	0.47	0.45
IRFR420PBF	SMD 864-9812	1.40	0.83	0.62	0.46	0.45
IRFR430APBF	SMD 865-8846	1.52	0.90	0.68	0.52	0.50
IRFR6215PBF	SMD 864-9847	1.57	1.01	0.79	0.62	0.57
IRFR9210PBF	SMD 864-9898	1.29	0.83	0.62	0.41	0.38
IRFR9220PBF	SMD 864-9901	1.77	1.14	0.89	0.56	0.52
IRFR9310PBF	SMD 864-9910	1.27	0.75	0.57	0.44	0.42
IRFR9N20DPBF	SMD 864-9928	2.01	1.20	0.94	0.61	0.55
IRFRC20PBF	SMD 864-9936	1.36	0.87	0.68	0.43	0.41
MTD6N20ET4G	SMD 955-5919 RL	0.85	0.74	0.68	0.54	0.45
STD3NK60Z	SMD 980-2983 RL	0.53	0.39	0.33	0.28	0.23
STD3NM50	SMD 993-5398 RL	0.81	0.62	0.49	0.41	0.36
STD4NS25	SMD 993-5410 RL	0.70	0.52	0.41	0.34	0.33
STD5NM60	SMD 993-5428 RL	1.45	1.11	0.86	0.74	0.64
STD20N20T4	SMD 951-2640 RL	1.42	1.03	0.82	0.71	0.64
STD20NF20	SMD 145-6348	1.09	0.94	0.74	0.63	0.55

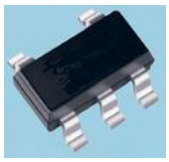
Low Gate Threshold Voltage

ROHM SEMICONDUCTOR

SMD



TSMT3
H=2.9,W=2.8,D=1



TSMT5
H=2.9,W=2.8.D=1



TUMT6
H=2,W=2.1,D=0.85
TSMT6
H=2.9,W=2.8,D=1

- Low Gate Threshold MOS(4 or 2.5V options)
- Single and dual MOS options
- Built in G-S Protection diode

V_{DSS} (V)	I_D (A)	I_{DM} (A)	R_{DS} max. (Ω)	V_{GSth} min.	V_{GSth} max.	P_D (W)	C_{iss} (pF)	Package	Mftrs List No.	Order Code
N-Channel										
30	2	8	0.154	0.5	1.5	0.7	175	TSMT5(SBD)	QS5U13TR	152-5460
30	3.5	14	0.079	0.5	1.5	1	350	TUMT6	RTL035N03TR	152-5551
30	4	16	0.066	0.5	1.5	1	475	TSMT3	RTR040N03TL	152-5562
45	2	8	0.25	0.5	1.5	1	200	TSMT3	RTR020N05TL	152-5560
Dual P-Channel										
20	1.5	6	0.43	-0.7	-2	1.25	270	TSMT6	QS6J3TR	152-5471

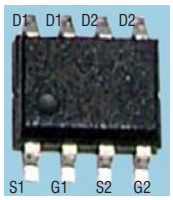
*Mounted on ceramic board
(SBD) = Schottky Barrier Diode in package

497310

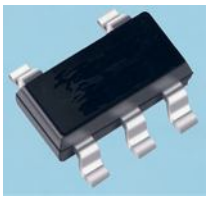
Mftrs. List No.	Case Style	Order Code	1+	25+	100+	250+
			Price Each			
QS5U13TR	TSMT5	SMD 152-5460	0.260	0.194	0.140	– –
QS6J3TR	TSMT6	SMD 152-5471	0.270	0.199	0.144	– –
RTL035N03TR	TUMT6	SMD 152-5551	0.280	0.240	0.176	0.128
RTR020N05TL	TSMT3	SMD 152-5560	0.240	0.200	0.151	0.111
RTR040N03TL	TSMT3	SMD 152-5562	0.240	0.200	0.151	0.111

Dual Low Gate Drive

ROHM SEMICONDUCTOR



SOP-8



TSMT5

- Dual N-Channels in a Compact design
- Low gate drive
- Low on resistance
- Ideal for portable switching applications
- ESD Protected, with freewheel diode

498355

V_{DS} max (V)	I_D (A)	$V_{GS(th)}$ max (V)	Mftrs. List No.	Order Code	1+	25+	100+	250+
					Price Each			
Dual N, SOP-8, 5x3.9x1.75								
30	5	2.5	SP8K1FU6TB	SMD 152-5576	0.410	0.340	0.250	0.184
30	7	2.5	SP8K3FU6TB	SMD 152-5582	0.930	0.780	0.580	0.430
30	9	2.5	SP8K4FU6TB	SMD 152-5583	0.930	0.780	0.580	0.430
45	6	2.5	SP8K24FU6TB	SMD 152-5579	0.930	0.780	0.580	0.430
Dual N, TSMT5, 2.9x1.6x0.7								
30	2	1.5	QS5K2TR	SMD 152-5458	0.430	0.340	0.280	0.240
Dual N, TSMT6, 2.9x1.6x1.0								
30	1	1.5	QS6K1TR	SMD 152-5472	0.290	0.220	0.157	– –
N + P, SOP-8, 5x3.9x1.75								
20	1.5 ±0.5		QS6M3TR	SMD 152-5473	0.220	0.167	0.121	– –
20	1.5 ±0.5		QS6M4TR	SMD 152-5474	0.250	0.190	0.139	– –
30	3.5 ±2.5		SP8M2FU6TB	SMD 152-5585	0.730	0.610	0.460	0.330
30	4.5 ±2.5		SP8M3FU6TB	SMD 152-5586	0.730	0.610	0.460	0.330
30	7 ±2.5		SP8M4FU6TB	SMD 152-5587	1.190	0.990	0.750	0.540

DPAK Logic Level, N-Channel

Infineon

ON Semiconductor

FAIRCHILD SEMICONDUCTOR

SMD

International IOR Rectifier



- Logic drive
- Low on resistance
- -Operating range: 55°C to 175°C

V_{DS} V	R_{DS} (on), Ohm Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mfttr.	Mftrs. List No.
20	4mohm	120	460	89	IR	IRLR3717PBF
20	5.7mohm	93	370	79	IR	IRFR3711ZPBF
20	6.5mohm	110	440	120	IR	IRFR3711PBF
20	8.4mohm	60	240	48	IR	IRFR3704ZPBF
20	11mohm	49	200	40	IR	IRLR3715ZPBF
30	0.38	1	4	1	ROHM	US6M1TR
30	0.0024	75	400	230	NXP	PSMN003-30B
30	3.3mohm	161	620	140	IR	IRLR7843PBF
30	4.5mohm	140	560	140	IR	IRLR7833PBF
30	5mohm	75	240	166	NXP	PHD101NQ03LT
30	7.5mohm	60	240	100	ST	STD60NF3LL
30	9.5mohm	56	220	50	IR	IRFR3707ZPBF
30	13.8mohm	40	170	40	IR	IRLR7807ZPBF
30	20mohm	30	120	60	INF	IPD20N03L
50	0.0095	65	100	70	FCH	FDD6672A
50	0.047	16	45	60	FCH	RFD16N05LSM
50	0.1	14	20	48	FCH	RFD14N05LSM
55	8mohm	89	130	130	IR	IRLR3705ZPBF
55	58mohm	16	64	35	IR	IRLR024ZPBF
60	32mohm	24	96	60	ST	STD20NF06L
60	0.047	16		90	FCH	RFD16N06LESM
60	0.07	17	40	49	FCH	RFD12N06RLESM
60	0.08	12	48	30	ST	STD12NF06L

Mftrs. List No.	Mftr.	Order Code	1+	25+	100+
			Price Each		
IRFR3704ZPBF	IR	SMD 101-3409	1.04	0.66	0.49
IRFR3707ZPBF	IR	SMD 101-3410	0.98	0.65	0.51
IRFR3711PBF	IR	SMD 101-3411	0.86	0.73	0.60
IRFR3711ZPBF	IR	SMD 101-3412	1.05	0.66	0.51
IRLR024ZPBF	IR	SMD 101-3413	1.20	0.80	0.61

RL Re-reeling available

Farnell

Power MOSFETs - continued

DPAK Logic Level, N-Channel - continued

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+
IRLR3705ZPBF	IR	SMD-101-3414●	1.89	1.45	1.08
IRLR3715ZPBF	IR	SMD-101-3416●	0.54	0.36	0.28
IRLR3717PBF	IR	SMD-101-3417●	1.24	0.85	0.64
IRLR7807ZPBF	IR	SMD-101-3419●	0.49	0.33	0.25
IRLR7833PBF	IR	SMD-101-3421●	1.86	1.22	0.94
IRLR7843PBF	IR	SMD-101-3422●	2.13	1.35	1.03
FDD6672A	FCH	SMD-101-7691● RL	1.34	0.96	0.75
RFD14N05LSM	FCH	SMD-101-7790●	0.72	0.46	0.33
RFD16N05LSM	FCH	SMD-101-7794●	0.87	0.56	0.43
PHD101NQ03LT	NXP	SMD-108-1447● RL	1.23	0.80	0.62
RFD12N06RLESM	FCH	SMD-109-5139● RL	0.56	0.44	0.36
RFD16N06LESM	FCH	SMD-109-5140● RL	0.78	0.59	0.49
IPD20N03L	INF	SMD-109-5680● RL	0.56	0.39	0.34
STD20NF06L	ST	SMD-993-5371● RL	0.64	0.52	0.43
STD60NF3LL	ST	SMD-993-5444● RL	0.97	0.73	0.56
STD12NF06L	ST	SMD-994-6373● RL	0.67	0.52	0.41
US6M1TR	ROHM	SMD-152-5602● NEW	0.34	0.28	0.21
PSMN003-30B	NXP	SMD-108-1486● RL NEW	3.05	2.18	1.89

Reels of 2500 Mftrs. List No.	Order Code	Price Per Reel 1+
FDD6672A	NEW SMD-156-2561●	1,087.71
STD12NF06LT4.	NEW SMD-156-2574●	723.61

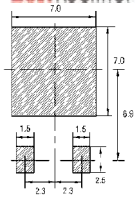
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Tubes of 75 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRLR3705ZPBF	NEW SMD-156-4131●	71.85	60.42	52.32

TO-252 (D-Pak), Logic Level



H=2.55, W=6.8, D=10.5



Footprint

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. (*min.) V	P_D @ 25°C W	Mftr.	Mftrs. List No.
N Channel							
12	0.0085	84	320	1.9	88	IR	IRLR3802PBF
20	4mohm	120	—	—	—	IR	IRLR3717PBF
20	5.7mohm	93	370	—	79	IR	IRFR3711ZPBF
20	6.5mohm	110	440	—	120	IR	IRFR3711PBF
20	8.4mohm	60	240	—	48	IR	IRFR3704ZPBF
20	0.0085	40	100	0.6*	71	SLX	SUD40N02-08
20	11mohm	49	—	—	—	IR	IRLR3715ZPBF
30	3.3mohm	161	—	—	—	IR	IRLR7843PBF
30	4.5mohm	140	—	—	—	IR	IRLR7833PBF
30	5	75	240	—	—	NXP	PHD101NQ03LT
30	0.0068	110	120	3	140	IR	IRLR8203PBF
30	7.5mohm	60	240	—	100	ST	STD60NF3LL
50	0.0095	65	100	2	70	FCH	FDD6672A
30	9.5mohm	56	220	—	50	IR	IRFR3707ZPBF
30	0.01	65	260	1*	75	IR	IRLR7821PBF
30	10.5mohm	64	—	—	—	IR	IRLR7811WPBF
30	10	75	240	—	—	NXP	PHD71NQ03LT
30	13.8mohm	40	—	—	—	IR	IRLR7807ZPBF
30	0.014	25	140	1*	50	ST	STD35NF3LL
30	0.03	30	40	1*	50	SLX	SUD30N03-30
30	0.031	33	140	1*	57	IR	IRLR3303PBF
30	0.045	22	96	1*	38	IR	IRLR2703PBF
40	0.01	40	100	1*	71	SLX	SUD40N04-10A
50	0.047	16	45	2	60	FCH	RFD16N05LSM
55	0.065	17	—	—	45	IR	IRLR024NPBF
50	0.1	14	20	2	40	FCH	RFD14N05LSM
55	8mohm	89	130	—	130	IR	IRLR3705ZPBF
55	0.014	61	240	3	120	IR	IRLR3915PBF
55	0.027	36	160	2	69	IR	IRLR2905PBF
55	0.02	35	80	1*	50	SLX	SUD35N05-26L
55	0.037	25	100	3	57	IR	IRLR3105PBF
55	58mohm	16	64	—	35	IR	IRLR024ZPBF
55	0.14	10	40	1*	28	IR	IRLR014NPBF
60	32mohm	24	96	—	—	ST	STD20NF06L
60	0.07	24	96	—	40	ST	STD16NF06LT4
60	0.08	12	48	2	30	ST	STD12NF06L
60	0.022	30	100	3	75	SLX	SUD40N06-25L
60	0.035	25	30	3	50	SLX	SUD25N06-45L
60	0.063	16.8	67.2	4	2.5	FCH	FQD20N06
60	0.2	7.7	31	2	25	VISH	IRLR014PBF
80	0.016	40	60	2*	100	SLX	SUD40N08-16
80	0.028	39	150	2.5	120	IR	IRLR2908PBF
100	0.03	25	100	2.5	100	ST	STD25NF10L
100	0.105	17	60	2	79	IR	IRLR3410PBF

V_{DS}	$R_{DS(on)}$	$I_{D\ cont}$ @ 25°C	I_D pulsed	$V_{GS(th)}$ max. (*min.)	P_D @ 25°C	Mftr.	Mftrs.
N Channel							
100	0.13	13	52	4	50	ST	STD10NF10
100	0.185	10	—	—	48	IR	IRLR120NPBF
100	0.27	7.7	31	2	42	VISH	IRLR120PBF
100	0.54	4.3	17	2	25	VISH	IRLR110PBF
150	0.077	15	25	2*	62	SLX	SUD15N15-95
200	0.28	9	36	5	2.5	FCH	FQD12N20
250	0.42	7.4	29.6	5	2.5	FCH	FQD9N25
500	5.3	1.6	6.4	5	2.5	FCH	FQD2N50
600	11.5	1	4	5	2.5	FCH	FQD1N60
800	6.3	1.8	7.7	5	2.5	FCH	FQD2N80
N Channel HEXFETs Optimised for DC-DC Converters							
30	0.0079	91	363	1*	115	IR	IRLR8103VPBF
30	0.018	44	196	1*	62	IR	IRLR8503PBF
P Channel							
30	0.035	25	30	-3	—	SLX	SUD45P03-10
60	0.1	15	45	-3	42	FCH	FDD5614P

211183

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
FDD5614P	SMD-984-6131● RL	0.610	0.460	0.350	– –	– –
FDD6672A	SMD-101-7691● RL	1.340	0.960	0.750	0.520	0.490
FQD12N20	SMD-984-5070● RL	0.730	0.520	0.430	0.280	0.230
FQD1N60	SMD-984-5089●	0.490	0.360	0.290	0.183	0.157
FQD20N06	SMD-984-5097● RL	0.600	0.440	0.350	0.220	0.191
FQD2N50	SMD-984-5100● RL	0.470	0.340	0.280	0.178	0.173
FQD2N80	SMD-984-5119● RL	0.940	0.680	0.550	0.350	0.300
FQD9N25	SMD-984-5127● RL	0.680	0.500	0.400	0.250	0.220
IRFR3704ZPBF	SMD-101-3409●	1.040	0.660	0.490	0.410	0.360
IRFR3707ZPBF	SMD-101-3410●	0.980	0.650	0.510	0.420	0.370
IRFR3711PBF	SMD-101-3411●	0.860	0.730	0.600	0.470	0.340
IRFR3711ZPBF	SMD-101-3412●	1.050	0.660	0.510	0.410	0.380
IRLR014PBF	SMD-865-1256●	1.070	0.630	0.480	0.370	0.360
IRLR014NPBF	SMD-866-0107●	1.220	0.780	0.580	0.490	0.440
IRLR024NPBF	SMD-101-3486●	1.380	0.910	0.700	0.570	0.510
IRLR024ZPBF	SMD-101-3413●	1.200	0.800	0.610	0.500	0.460
IRLR110PBF	SMD-866-0115●	0.750	0.450	0.340	0.330	0.320
IRLR120PBF	SMD-866-0123●	1.190	0.710	0.530	0.420	0.410
IRLR120NPBF	SMD-101-3487●	1.340	0.890	0.670	0.560	0.500
IRLR2703PBF	SMD-866-0131●	1.070	0.670	0.510	0.410	0.390
IRLR2905PBF	SMD-865-1264●	2.900	1.620	1.170	0.880	0.830
IRLR2908PBF	SMD-866-0140●	2.010	1.270	0.970	0.790	0.710
IRLR3105PBF	SMD-866-0158●	1.070	0.670	0.530	0.410	0.380
IRLR3303PBF	SMD-866-0166●	1.290	0.810	0.620	0.520	0.510
IRLR3410PBF	SMD-865-1280●	1.900	1.200	0.930	0.740	0.670
IRLR3705ZPBF	SMD-101-3414●	1.890	1.450	1.080	0.880	0.760
IRLR3715ZPBF	SMD-101-3416●	0.540	0.360	0.280	0.260	0.250
IRLR3717PBF	SMD-101-3417●	1.240	0.850	0.640	0.620	0.600
IRLR3802PBF	SMD-866-0190●	1.570	0.990	0.770	0.620	0.560
IRLR3915PBF	SMD-866-0204●	2.580	1.630	1.250	1.010	0.930
IRLR7807ZPBF	SMD-101-3419●	0.490	0.330	0.250	0.230	0.220
IRLR7811WPBF	SMD-101-3420●	0.890	0.590	0.450	0.370	0.330
IRLR7821PBF	SMD-910-2400●	0.960	0.660	0.510	0.410	0.380
IRLR7833PBF	SMD-101-3421●	1.860	1.220	0.940	0.770	0.690
IRLR7843PBF	SMD-101-3422●	2.130	1.350	1.030	0.840	0.760
IRLR8103VPBF	SMD-865-1299●	1.900	1.200	0.930	0.740	0.670
IRLR8203PBF	SMD-866-0212●	1.460	0.910	0.710	0.620	0.530
IRLR8503PBF	SMD-865-1302●	3.020	1.910	1.460	1.190	1.070
PHD101NQ03LT	SMD-108-1447● RL	1.230	0.800	0.620	0.450	0.420
PHD71NQ03LT	SMD-108-1449● RL	0.880	0.550	0.450	0.330	0.300
RFD14N05LSM	SMD-101-7790●	0.720	0.460	0.330	0.240	0.194
RFD16N05LSM	SMD-101-7794●	0.870	0.560	0.430	0.320	0.290
STD10NF10	SMD-117-5682● RL	0.860	0.670	0.550	0.460	0.420
STD12NF06L	SMD-994-6373● RL	0.670	0.520	0.410	0.340	0.330
STD20NF06L	SMD-993-5371● RL	0.640	0.520	0.430	0.370	0.330
STD16NF06LT4	SMD-951-2616● RL	1.070	0.710	0.580	0.510	0.410
STD25NF10L	SMD-994-6330● RL	0.940	0.810	0.590	0.500	– –
STD35NF3LL	SMD-994-6349● RL	0.660	0.500	0.380	0.340	0.310
STD60NF3LL	SMD-993-5444● RL	0.970	0.730	0.560	0.490	0.430
SUD15N15-95	SMD-955-1417● RL	1.880	1.480	1.210	0.930	0.800
SUD25N06-45L	SMD-955-1425● RL	1.120	1.040	1.000	0.730	0.670
SUD30N03-30	SMD-955-1433● RL	0.750	0.590	0.480	0.370	0.320
SUD35N05-26L	SMD-955-1441● RL	1.090	0.840	0.700	0.550	0.460
SUD40N02-08	SMD-955-1450● RL	1.400	1.070	0.890	0.680	0.600
SUD40N04-10A	SMD-955-1468● RL	1.660	1.300	1.060	0.810	0.710
SUD40N06-25L	SMD-955-1476● RL	1.580	1.470	1.380	1.030	0.960
SUD40N08-16	SMD-955-1484● RL	2.080	1.630	1.340	1.030	0.890
SUD45P03-10	SMD-102-1757● RL	1.770	1.480	1.390	1.030	0.960

Reels of 2000 Mftrs. List No.	Order Code	Price Per Reel 1+
SUD35N05-26L-E3	NEW SMD-156-2565●	1,080.45
SUD40N04-10A-E3	NEW SMD-156-2566●	1,233.46
SUD40N08-16-E3	NEW SMD-156-2567●	1,440.93
SUD50P04-15-E3	NEW SMD-156-2568●	2,230.01
SUD45P03-10-E3	NEW SMD-156-2466●	1,301.86
Reels of 2500		**Price Per Reel 1+**
FDD6672A	NEW SMD-156-2561●	1,087.71
STD12NF06LT4.	NEW SMD-156-2574●	723.61
FDD5614P	NEW SMD-156-2570●	893.94
STD25NF10LT4.	NEW SMD-156-2573●	1,239.52

RL Re-reeling available

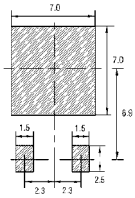
Farnell

Tubes of 75		Price Per Tube		
Mftrs. List No.	Order Code	1+	4+	10+
IRLR2905PBF	NEW SMD 156-4057●	108.20	82.86	76.74
IRLR7821PBF	NEW SMD 156-4064●	29.59	25.03	22.68
IRLR3705ZPBF	NEW SMD 156-4131●	71.85	60.42	52.32

TO-252 (D-Pak)



H=2.55, W=6.8, D=10.5



Footprint

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftrs. List No.
N Channel					
24	0.0035	150	600	150	STD150NH02LT4
60	0.07	24	96	40	STD16NF06LT4
200	0.125	18	72	90	STD20N20T4
600	3.3	2.4	9.6	45	STD3NK60Z
700	7	1.6	6.4	45	STD2NK70ZT4

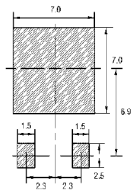
422965

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
STD150NH02LT4	SMD 951-2560●	1.52	1.05	0.86	0.72	0.70
STD16NF06LT4	SMD 951-2616● RL	1.07	0.71	0.58	0.51	0.41
STD20N20T4	SMD 951-2640● RL	1.42	1.03	0.82	0.71	0.64
STD2NK70ZT4	SMD 951-2721● RL	0.59	0.44	0.35	0.30	0.28
STD3NK60Z	SMD 980-2983● RL	0.53	0.39	0.33	0.28	0.23

TO-252 (D-Pak), 175°C, Logic Level



H=2.55, W=6.8, D=10.5



Footprint

- TrenchFET technology
- 175°C junction temperature
- PWM Optimised for high efficiency

V_{DS} V	$R_{DS(on)}$ @V_{gs}=10V Ω	$R_{DS(on)}$ @V_{gs}=4.5V Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftrs. List No.
N Channel						
20	—	0.006	30	100	100	SUD50N02-06P-E3
30	0.012	0.0175	17.5	40	46.8	SUD50N03-12P-E3
30	0.0065	0.0095	84**	100	88	SUR50N03-06P
60	0.031	0.045	23	50	100	SUD23N06-31L
P Channel						
40	0.013	0.022	48	100	93.7	SUD50P04-13L-E3

** Theoretical max. value, package limited.

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
SUD23N06-31L	SMD 815-6611● RL	0.89	0.71	0.61	0.46	0.42
SUD50N02-06P-E3	SMD 149-7656●	1.23	0.96	0.83	0.79	– –
SUD50N03-12P-E3	SMD 149-7657●	0.55	0.42	0.37	0.35	– –
SUD50P04-13L-E3	SMD 149-7660●	1.12	0.88	0.76	0.71	– –
SUR50N03-06P	SMD 815-6859● RL	1.15	0.93	0.78	0.62	0.56

372293

Reel of 2000 Mftrs. List No.	Order Code	Price Per Reel 1+
SUD23N06-31L-E3	NEW SMD 156-2564●	756.43

I-PAK, N-Channel



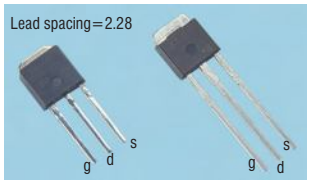
- Low resistance
- Compact package
- High power density

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	P_D @ 25°C W	Mftr.	Order Code	Mftrs. list No.
25	4.8ohm	100	81	IR	129-8552	IRLU8713PBF
30	0.004	117	93.75	ON	145-3644	NTD4804N-35G
30	0.015	35	32.6	ON	143-1311	NTD4815N-35G

496215

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
IRLU8713PBF	IR	129-8552●	1.34	0.98	0.74	0.61
NTD4815N-35G	ON	143-1311●	0.53	0.38	0.29	0.22
NTD4804N-35G	ON	145-3644●	1.24	0.90	0.68	0.55

TO-251 (I-Pak)



TO-251AA (I-Pak)
FCH, IR, ST
Lead length=9.65 max
D-Pak
HITACHI
Lead length=16.3

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	t_r/t_f typ. ns	Mftr.	Mftrs. List No.
N-channel							
30	0.0115	55	50	—	—	FCH	FDU8882
30	0.0125	61	244	87	50/3.7	IR	IRFU3708PBF
30	0.009	90	360	120	171/9.2	IR	IRFU3709PBF
50	0.1	14	35	48	26/17	FCH	RFD14N05
50	0.047	16	20	60	30/16	FCH	RFD16N05
55	0.09	13	—	35	40/45	FCH	HUF75307D3
55	0.075	17	68	45	4.9/16	IR	IRFU024NPBF
55	0.036	20	25	70	55/66	FCH	HUF75321D3
55	0.013	71	280	140	74/54	IR	IRFU3505PBF
55	0.00245	30	120	48	10/26	IR	IRFU4105ZPBF
55	0.0075	42	360	140	13/30	IR	IRFU1010ZPBF
60	0.2	8.4	34	30	50/19	VISH	IRFU014PBF
60	0.1	16	64	50	47/37	VISH	IRFU024PBF
60	7.1	56	315	110	13/55	IR	IRFU1018EPBF
60	12.6	43	170	71	6.3/49	IR	IRFU3806PBF
75	7.34	56	310	140		IR	IRFU3607PBF
100	0.54	4.3	17	25	6.9/15	VISH	IRFU110PBF
100	0.27	7.7	31	0	27/14	VISH	IRFU120PBF
100	0.21	9.4	38	48	4.5/32	IR	IRFU120NPBF
100	0.19	8.7	35	35	8.3/27	IR	IRFU120ZPBF
100	0.115	14	56	56	26/25	IR	IRFU3911PBF
100	0.115	16	60	79	27/25	IR	IRFU3910PBF
100	0.044	32	110	130	35/35	IR	IRFU3411PBF
100	0.039	31	125	110	27/13	IR	IRFU3410PBF
100	0.025	48	190	140	68/37	IR	IRFU3412PBF
100	0.018	42	220	140	14/53	IR	IRFU3710ZPBF
200	1.5	2.6	10	25	8.2/14	VISH	IRFU210PBF
200	0.8	4.8	19	42	7.2/19	VISH	IRFU220PBF
200	0.6	5	20	43	11/12	IR	IRFU220NPBF
200	0.235	14	52	110	27/10	IR	IRFU13N20DPBF
250	2	2.2	8.8	25	7/16	VISH	IRFU214PBF
250	0.26	14	56	144	25/9.2	IR	IRFU12N25DPBF
400	3.6	1.7	6	25	7.9/21	VISH	IRFU310PBF
400	1.8	3.1	12	42	10/30	VISH	IRFU320PBF
400	1.47	3	12	45	9.2/22.5	ST	STD5NK40Z-1
450	4.1	1.5	6	30	6.7/8.5	ST	STD2NC45-1
500	3	2.4	7.7	42	8.6/16	VISH	IRFU420PBF
500	1.7	5	20	110	27/16	VISH	IRFU430APBF
600	8	1.4	5.6	45	8/22	ST	STD2NK60Z-1
600	2.8	2.4	9.6	50	30/35	FCH	FQU3N60CTU
600	3.3	2.4	9.6	45	9/19	ST	STD3NK60Z-1
P-channel							
50	0.28	9.9	40	42	57/12	VISH	IRFU9020PBF
55	0.175	11	44	38	13/23	IR	IRFU9024NPBF
55	0.11	18	64	57	28/16	IR	IRFU5505PBF
55	0.065	22	110	110	14/39	IR	IRFU5305PBF
60	0.5	5.6	22	30	40/17	VISH	IRFU9014PBF
60	0.28	8.8	35	42	68/29	VISH	IRFU9024PBF
60	0.185	9.4	37.6	38	40/45	FCH	FQU11P06
60	0.134	12	68	79	100/60	FCH	FQU17P06
100	1.2	3.1	12	25	27/17	VISH	IRFU9110PBF
100	0.6	5.6	25	42	29/25	VISH	IRFU9120PBF
100	0.48	6.5	26	39	47/31	IR	IRFU9120NPBF
100	0.0205	13	52	66	15/45	IR	IRFU5410PBF
150	0.295	13	44	110	36/37	IR	IRFU6215PBF
400	7	1.8	7.2	50	10/24	VISH	IRFU9310PBF

211104

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
FDU8882	FCH	122-8340●	0.49	0.34	0.29	0.26
FQU11P06	FCH	984-6166●	0.37	0.26	0.20	– –
FQU17P06	FCH	984-6174●	0.50	0.35	0.28	– –
FQU3N60CTU	FCH	149-5251●	0.57	0.37	0.27	0.25
HUF75307D3	FCH	984-5143●	0.95	0.56	0.42	0.25
IRFU014PBF	VISH	864-9979●	1.10	0.61	0.43	0.29
IRFU024PBF	VISH	910-2493●	1.58	0.84	0.59	0.48
IRFU024NPBF	IR	864-9987●	1.05	0.57	0.41	0.32
IRFU110PBF	VISH	864-9995●	1.28	0.68	0.48	0.39
IRFU120PBF	VISH	865-8919●	1.34	0.71	0.50	0.41
IRFU120NPBF	IR	865-0004●	1.28	0.69	0.49	0.39
IRFU210PBF	VISH	865-0012●	1.07	0.62	0.49	0.35
IRFU214PBF	VISH	865-0020●	1.43	0.76	0.54	0.44
IRFU220NPBF	IR	865-8978●	0.99	0.52	0.37	0.30
IRFU220PBF	VISH	865-0039●	1.17	0.63	0.44	0.36
IRFU310PBF	VISH	865-0047●	1.54	0.82	0.58	0.47
IRFU320PBF	VISH	865-0055●	1.43	0.76	0.54	0.44
IRFU3410PBF	IR	865-9028●	1.72	0.94	0.70	0.58
IRFU3411PBF	IR	865-9036●	1.12	0.64	0.47	0.39
IRFU3412PBF	IR	865-9044●	2.78	1.52	1.13	0.94
IRFU3505PBF	IR	865-9060●	1.88	1.03	0.76	0.63

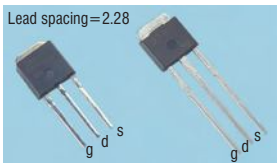
RL Re-reeling available

Power MOSFETs - continued

TO-251 (I-Pak) - continued

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
IRFU3708PBF	IR	865-9117	1.02	0.57	0.44	0.37
IRFU3709PBF	IR	865-9125	1.88	1.03	0.76	0.63
IRFU3910PBF	IR	865-0063	1.58	0.85	0.62	0.60
IRFU3911PBF	IR	865-9133	1.51	0.81	0.57	0.46
IRFU420PBF	VISH	865-0071	1.34	0.71	0.50	0.41
IRFU430APBF	VISH	865-9168	0.91	0.57	0.42	0.34
IRFU5305PBF	IR	865-0080	1.40	0.80	0.59	0.48
IRFU5505PBF	IR	865-9176	1.61	0.85	0.60	0.49
IRFU6215PBF	IR	865-9184	1.54	0.88	0.65	0.54
IRFU9014PBF	VISH	865-0098	1.27	0.68	0.48	0.39
IRFU9020PBF	VISH	865-9192	1.62	0.89	0.66	0.55
IRFU9024NPBF	IR	865-0101	1.24	0.67	0.47	0.38
IRFU9024PBF	VISH	865-0110	1.17	0.67	0.50	0.47
IRFU9110PBF	VISH	865-0128	1.05	0.56	0.40	0.36
IRFU12N25DPBF	IR	865-8927	2.21	1.21	0.90	0.75
IRFU13N20DPBF	IR	865-8943	1.36	0.72	0.51	0.50
IRFU9120NPBF	IR	865-9206	1.74	0.93	0.66	0.53
IRFU9120PBF	VISH	865-0136	1.03	0.86	0.68	0.50
IRFU9310PBF	VISH	865-0144	1.59	0.87	0.65	0.54
IRFU1010ZPBF	IR	101-3401	1.52	0.96	0.70	0.62
HUF75321D3	FCH	101-7708	1.21	0.69	0.54	0.31
IRFU3710ZPBF	IR	101-3402	1.30	0.91	0.75	0.57
IRFU4105ZPBF	IR	101-3406	1.36	0.85	0.60	0.49
IRFU5410PBF	IR	101-3472	1.01	0.57	0.43	0.40
RFD14N05	FCH	101-7788	0.68	0.43	0.31	0.23
RFD16N05	FCH	101-7793	0.76	0.54	0.41	0.31
STD2NC45-1	ST	980-2975	0.68	0.52	0.42	0.33
STD2NK60Z-1	ST	951-2683	0.59	0.44	0.35	0.30
STD3NK60Z-1	ST	994-6357	0.78	0.58	0.46	0.38
STD5NK40Z-1	ST	980-2991	0.73	0.55	0.43	0.35
IRFU120ZPBF	IR	143-6982	1.04	0.56	0.39	0.32
IRFU1018EPBF	IR	NEW 160-2236	0.89	0.63	0.54	0.49
IRFU3607PBF	IR	NEW 160-2237	0.89	0.63	0.54	0.49
IRFU3806PBF	IR	NEW 160-2239	0.71	0.50	0.42	0.38

TO-251 (I-Pak), Logic Level



	V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftr.	Mftrs List No.
N Channel								
	12	0.0085	84	320	1.9	88	IR	IRLU3802PBF
	20	0.0042	120	460	2.45	89	IR	IRLU3717PBF
	20	0.02	36	140	3	47	IR	IRLU3714PBF
	30	0.0033	161	620	2.3	140	IR	IRLU7843PBF
	30	0.0095	56	220	2.25	50	IR	IRFU3707ZPBF
	30	0.019	55	220	2	107	IR	IRLU3103PBF
	30	0.045	22	96	—	38	IR	IRLU2703PBF
	50	0.1	14	20	2	40	FCH	RFD14N05L
	55	0.008	89	360	3	130	IR	IRLU3705ZPBF
	55	0.014	61	240	3	120	IR	IRLU3915PBF
	55	0.027	42	160	2	110	IR	IRLU2905PBF
	55	0.037	25	100	3	57	IR	IRLU3105PBF
	55	0.058	16	64	—	35	IR	IRLU024ZPBF
	55	0.065	17	72	2	46	IR	IRLU024NPBF
	55	0.14	10	40	—	28	IR	IRLU014NPBF
	60	0.039	24	96	2.5	44	FCH	FQU30N06L
	60	0.071	17	20	2	40	FCH	RFD12N06RLE
	60	0.2	7.7	31	2	25	VISH	IRLU014PBF
	80	0.028	39	150	2.5	120	IR	IRLU2908PBF
	100	0.185	10	35	2	48	IR	IRLU120NPBF
	100	0.54	4.6	18	2	30	VISH	IRLU110PBF
P Channel								
	30	0.024	15	45	—	30	SY	2SJ538

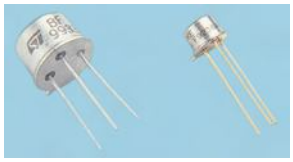
211184

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	1K+
FQU30N06L	984-5135	0.61	0.46	0.35	0.22
IRFU3707ZPBF	101-3424	1.39	0.88	0.65	0.54
IRLU014NPBF	866-0220	1.24	0.67	0.47	0.38
IRLU014PBF	865-1310	1.00	0.53	0.38	0.31
IRLU024NPBF	865-1329	1.38	0.77	0.54	0.39
IRLU110PBF	865-1337	1.30	0.71	0.50	0.37
IRLU120NPBF	865-1345	1.09	0.90	0.71	0.52
IRLU2703PBF	866-0239	1.35	0.72	0.51	0.38
IRLU2905PBF	865-1353	1.80	1.06	0.81	0.68
IRLU2908PBF	866-0255	1.23	0.74	0.56	0.45
IRLU3103PBF	865-1361	2.16	1.28	0.98	0.95
IRLU3105PBF	866-0263	1.43	0.76	0.54	0.44
IRLU3410PBF	866-0280	1.77	0.97	0.72	0.58
IRLU3705ZPBF	101-3425	2.38	1.42	1.05	0.88
IRLU3714PBF	866-0298	0.72	0.41	0.33	0.25
IRLU3717PBF	866-0310	1.42	0.90	0.65	0.51
IRLU3802PBF	866-0328	1.80	1.00	0.75	0.62

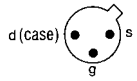
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	1K+
IRLU7843PBF	101-3426	3.04	1.66	1.24	1.02
IRLU3915PBF	866-0336	1.72	0.94	0.70	0.58
RFD12N06RLE	101-7787	1.08	0.60	0.48	0.26
RFD14N05L	101-7789	0.69	0.44	0.32	0.23
IRLU024ZPBF	143-6993	1.13	0.76	0.54	0.44
		1+	25+	100+	250+
2SJ538	120-8645	2.25	1.78	1.44	1.20

TO-39 (TO-205AF)

International IOR Rectifier



TO-39 (TO-205AF) Leads on 5.08 dia circle



Pin-out view from base

- High reliability
- Rugged, hermetically sealed package
- Repetitive avalanche rated
- Dynamic dv/dt rating
- Simple drive requirements
- Ease of paralleling

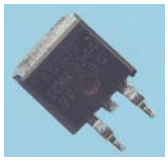
	V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	JEDEC Ref.	Mftrs. List No.
N-Channel								
	100	0.6	3.5	14	15	IR	—	IRFF110
	100	0.3	6	24	20	IR	—	IRFF120
	100	0.18	8	32	25	IR	—	IRFF130
	100	0.6	3.5	8	15	SEM	2N6782	—
	100	0.18	8	25	25	SEM	2N6796	—
	200	0.4	5.5	22	25	IR	—	IRFF230
	100	0.3	6	24	20	IR	—	IRFF120
P-Channel								
	100	0.6	4	16	20	SEM	2N6845	—
	100	0.3	6.5	25	25	IR	—	IRFF9130

211116

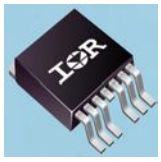
Mftrs. List No. / JEDEC Ref.	Mfr.	Order Code	Price Each 1+	25+	100+	250+	1K+
2N6782	SEM	120-8691	5.81	4.03	3.06	2.57	1.86
2N6796	SEM	120-8692	9.46	6.17	5.26	4.64	4.41
2N6845	SEM	120-8693	13.08	9.53	7.30	6.41	6.07
IRFF110	IR	419-0774	7.07	4.55	3.51	2.92	2.84
IRFF120	IR	419-0786	6.38	4.03	3.08	2.50	2.27
IRFF130	IR	419-0798	10.11	6.39	4.87	3.96	3.60
IRFF230	IR	419-0828	8.98	5.67	4.33	3.52	3.19
IRFF9130	IR	419-0877	8.69	5.56	4.30	3.29	3.07

D²PAK, N-Channel HEXFET™

VISHAY SMD



H=2.38, W=6.73, D=10.28



7-Pin D²PAK

- Fully avalanche rated
- Logic drive options
- Fast switching
- Low gate charge

HEXFET™ technology utilises advanced processing techniques to achieve extremely low on-resistance per silicon area. This benefit, combined with the fast switching speed and ruggedized design of these devices, provide an extremely efficient and reliable component choice within their application area.

	V_{DS} V	R_{DS} (on) Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ min. V	$V_{GS(th)}$ max. V	t_{rr} ns	E_{AS} mJ	P_D @ 25°C W	Mftrs. List No.
D2-Pak (TO-263)										
	30	0.0038	150	600	1.4	2.3*	42	560	140	IRL7833SPBF
	40	0.0055	120	470	2	4	23	120	140	IRF4104SPBF
	55	0.014	64	210	2	4	100	700	130	IRFZ48NSPBF
	55	0.035	30	110	1	2*	76	110	3.8	IRLZ34NSPBF
	55	0.06	18	72	1	2*	60	68	3.8	IRLZ24NSPBF
	75	0.007	106	550	2	4	93	430	200	IRF3808SPBF
	100	0.018	59	240	2	4	50	170	160	IRF3710ZSPBF
	100	0.077	28	110	2	4	180	230	150	IRF540SPBF
	—	0.75	9.2	37	-2	-4	530	290	170	IRFS9N60APBF
7-Pin D2-Pak										
	75	0.0038	180	700	2	4	35	—	300	IRF2907ZS-7PPBF

* denotes logic level drive capable

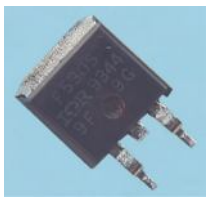
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Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
IRF2907ZS-7PPBF	SMD 107-8405	4.05	2.76	2.11	1.85
IRF3710ZSPBF	SMD 101-3376	2.72	1.72	1.31	1.07
IRF3808SPBF	SMD 101-3377	3.05	1.93	1.47	1.20
IRF4104SPBF	SMD 101-3378	2.20	1.52	1.13	0.94
IRF540SPBF	SMD 101-3379	2.28	1.44	1.08	0.84
IRL7833SPBF	SMD 101-3408	2.35	1.49	1.13	0.93
IRFZ48NSPBF	SMD 101-3480	2.11	1.41	1.08	0.87
IRLZ24NSPBF	SMD 101-3482	1.73	1.09	0.85	0.67
IRLZ34NSPBF	SMD 101-3483	2.25	1.43	1.13	0.89
IRFS9N60APBF	SMD 101-3505	2.55	1.94	1.46	1.12

RL Re-reeling available

Farnell

D²PAK, N-Channel



- Avalanche rated
- Logic drive options
- Fast switching
- Low gate charge

H=2.38, W=6.73, D=10.28

V_{DS} V	R_{DS} (on) Ω	$I_{D\ cont}$ @ 25°C A	$V_{GS(th)}$ min. V	$V_{GS(th)}$ max. V	t_{rr} ns	Input Cap pf	E_{AR} mJ	P_D @ 25°C W	Mfttr.	Mftrs. List No.
30	0.0015	34	1	3*	59	11400	—	300	FCH	FDB8832
30	0.0024	75	1	3	—	9200	—	230	NXP	PSMN003-30B
40	0.0022	110	3.4	4.5	65	15720	—	3.75	SLX	SUM110N04-2M7H-E3
40	0.0028	110	2.5	4	60	8250	211	437.5	SLX	SUM110N04-03-E3
55	0.006	110	1	3	70	3300	180	158	SLX	SUM110N05-06L-E3
60	0.025	48	1	2*	—	1630	—	100	FCH	NDB6060L
100	0.0095	110	2	4	70	6700	280	437.5	SLX	SUM110N10-09-E3
150	0.019	85	2	4	130	4750	125	375	SLX	SUM85N15-19-E3
200	0.03	65	2	4	130	5100	61	375	SLX	SUM65N20-30-E3

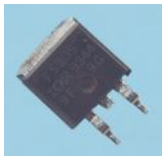
* denotes logic level drive capable

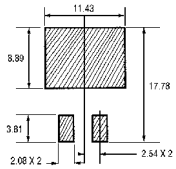
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
SUM110N04-03-E3	SMD 107-5742● RL	3.09	2.12	1.73	1.39	1.32
SUM110N05-06L-E3	SMD 107-5744● RL	2.17	1.48	1.23	0.98	0.92
SUM110N10-09-E3	SMD 107-5750● RL	2.95	2.02	1.66	1.32	1.28
SUM65N20-30-E3	SMD 107-5751● RL	3.52	2.99	2.20	1.79	1.59
SUM85N15-19-E3	SMD 107-5752● RL	4.89	3.34	2.49	2.08	1.88
SUM110N04-2M3L	NEW SMD 157-1433●	2.93	2.02	1.65	1.32	1.26
		1+	25+	100+	1K+	
FDB8832	NEW SMD 149-5284●	2.16	1.58	1.17	1.12	
NDB6060L	NEW SMD 101-7723● RL	1.19	0.85	0.65	0.48	
SUM110N04-2M7H-E3	NEW SMD 149-7661●	1.89	1.47	1.28	1.21	
PSMN003-30B	NEW SMD 108-1486● RL	3.05	2.18	1.89	1.34	

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Reels of 800 Mftrs. List No.	Order Code	Price Per Reel 1+
SUM110N10-09-E3	NEW SMD 156-2577●	915.29
SUM85N15-19-E3	NEW SMD 156-2578●	1,134.51

D²PAK





TO-263 (D²-Pak) H=4.69, W=10.54, D=15.49

D²-Pak Footprint

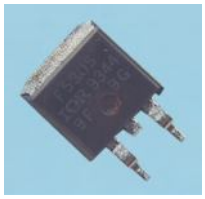
V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$I_{DM\ pulse}$ @ 25°C A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftrs List No.
N Channel						
40	0.0025	160	640	4	330	STB270N4F3
55	0.0085	80	320	4	110	STB60N55F3
200	0.045	40	160	4	160	STB40NF20

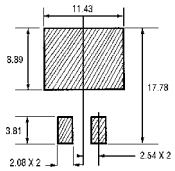
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Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
STB270N4F3	SMD 145-6345●	2.98	2.58	2.00	1.74
STB40NF20	SMD 145-6353●	3.19	2.36	1.85	1.72
STB60N55F3	SMD 145-6340●	1.76	1.50	1.19	1.04

TO-263 (D²-Pak)

V_{DS} 20V - 100V





TO-263 (D²-Pak) H=4.69, W=10.54, D=15.49

D²-Pak Footprint

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$I_{DM\ pulse}$ @ 25°C A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Mftr.	Mftrs List No.
N Channel							
20	0.004	180	720	3	210	IR	IRL3716SPBF
20	0.006	92	380	2.45	79	IR	IRF3711ZSPBF
20	0.007	110	420	0.70*	140	IR	IRL3502SPBF
20	0.0085	77	280	2	2.5	IR	IRF3706SPBF
20	0.0125	62	248	3	87	IR	IRF3707SPBF
20	0.013	61	240	2.5	89	IR	IRL3102SPBF

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$I_{DM\ pulse}$ @ 25°C A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Mftr.	Mftrs List No.
N Channel							
20	0.02	39	160	2.5	57	IR	IRL3302SPBF
20	4	180	720	4	210	IR	IRL3716STRLPBF
20	0.8	110	420	0.70*	140	IR	IRL3502STRLPBF
20	0.042	24	96	1.0	75	IR	IRL5602STRLPBF
30	0.0016	31	—	3	254	FCH	FDB8860
30	0.0024	75	400	3	230	NXP	PSMN003-30B
30	0.003	200	1040	2.5	200	IR	IRL3713SPBF
30	0.0033	190	960	4	200	IR	IRF1503SPBF
30	0.0038	150	600	2.3	140	IR	IRL7833SPBF
30	0.006	105	420	2.25	110	IR	IRL8113SPBF
30	0.006	120	470	2.5	150	IR	IRL3803SPBF
30	0.0063	87	350	2.25	79	IR	IRF3709ZSPBF
30	0.009	90	360	3	120	IR	IRF3709SPBF
30	0.0095	54	—	2.5	55	FCH	FDB8880
30	0.0095	59	230	2.25	57	IR	IRF3707ZSPBF
30	0.014	56	220	2.5	83	IR	IRL3103SPBF
30	3	200	1040	2.5	200	IR	IRL3713STRLPBF
40	0.002	75	1080	4	300	IR	IRF2804SPBF
40	0.0021	80	—	4	254	FCH	FDB8442
40	0.0031	75	790	2.7	200	IR	IRL1404ZSPBF
40	0.0037	75	710	4	200	IR	IRF1404ZSPBF
40	0.004	160	640	3	3.8	IR	IRL1404SPBF
40	0.004	162	650	4	200	IR	IRF1404SPBF
40	0.0036	170	850	3.6	200	IR	IRF2204SPBF
40	0.0055	120	470	4	140	IR	IRF4104SPBF
40	0.0065	110	450	1*	3.1	IR	IRL1004SPBF
40	0.008	104	416	1*	2.4	IR	IRL1104SPBF
40	0.0085	50	100	3*	60	FCH	FDB8447L
40	2.3	280	1080	4	330	IR	IRF2804LPBF
55	0.0026	160	1000	4	300	IR	IRF3805S-7PPBF
55	0.0047	135	700	4	200	IR	IRF2805SPBF
55	0.0049	120	590	4	230	IR	IRF1405ZS-7PPBF
55	0.0053	131	680	4	200	IR	IRF1405SPBF
55	0.008	98	390	4	150	IR	IRF3205SPBF
55	0.008	104	360	2	200	IR	IRL2505SPBF
55	0.008	86	340	3	130	IR	IRL3705ZSPBF
55	0.008	80	320	4	300	ST	STB80NF55-08T4
55	0.0065	110	440	4	170	IR	IRF3205ZSPBF
55	0.0075	94	360	4	140	IR	IRF1010ZSPBF
55	0.01	89	310	2	170	IR	IRL3705NSPBF
55	0.011	84	290	4	170	IR	IRF1010NSPBF
55	0.0135	51	204	3	80	IR	IRLZ44ZSPBF
55	0.0135	42	240	3	110	IR	IRLR2905ZPBF
55	0.0136	51	200	4	82	IR	IRFZ46ZSPBF
55	0.0139	51	200	4	80	IR	IRFZ44ZSPBF
55	0.014	64	210	4	130	IR	IRFZ48NSPBF
55	0.022	47	160	2	110	IR	IRLZ44NSPBF
55	0.035	30	110	2	3.8	IR	IRLZ34NSPBF
55	0.04	29	100	4	68	IR	IRFZ34NSPBF
55	0.06	18	72	2	3.8	IR	IRLZ24NSPBF
55	0.07	17	68	4	45	IR	IRFZ24NSPBF
55	35	30	110	2	68	IR	IRLZ34NSTRLPBF
55	0.175	12	48	4	45	IR	IRF9Z24NSTRLPBF
55	0.02	74	260	4	200	IR	IRF4905LPBF
55	0.02	74	260	4	200	IR	IRF4905STRLPBF
60	7.1mohm	79	315	4	110	IR	IRF1018ESPBF
60	12.6mohm	43	170	4	71	IR	IRFS3806PBF
60	0.0024	210	840	4	300	IR	IRFS3206PBF
60	0.0033	160	620	4	230	IR	IRFS3306PBF
60	0.008	75	240	4	187	SLX	SUB75N06-08
60	0.0085	84	340	4	140	IR	IRF1010EZSPBF
60	0.012	83	330	4	170	IR	IRF1010ESPBF
60	0.012	57	230	4	92	IR	IRFZ44VZSPBF
60	0.012	72	290	4	150	IR	IRFZ48VSPBF
60	0.016	60	240	1*	110	ST	STB60NF06LT4
60	0.016	60	240	4	110	ST	STB60NF06T4
60	0.0165	55	220	4	115	IR	IRFZ44VSPBF
60	0.022	50	200	4	120	FCH	FQB50N06
60	0.025	48	144	2	100	FCH	NDB6060L
60	0.028	30	120	4	70	IR	IRFZ34VSPBF
60	0.028	50	200	2	150	VISH	IRLZ44SPBF
60	0.28	11	44			VISH	IRF9Z24SPBF
60	0.14	18	72			VISH	IRF9Z34SPBF
75	7.34mohm	80	310	4	140	IR	IRFS3607PBF
75	0.0033	170	670	4	300	IR	IRFS3207ZPBF
75	8.8mohm	97	390	4	190	IR	IRFS3507PBF
75	0.0094	89	350	4	170	IR	IRF2807ZSPBF
75	0.007	106	550	4	200	IR	IRF3808SPBF
75	0.013	82	280	4	200	IR	IRF2807SPBF
75	0.022	42	80	4	110	IR	IRFR2607ZPBF
75	4.5	170	680	4	330	IR	IRF2907ZLPBF
75	7.8	100	520	4	200	IR	IRF1407STRLPBF
100	14mohm	73	290	4	190	IR	IRFS4610PBF
100	0.014	75	300	5.5	200	IR	IRFS4710PBF
100	0.015	80	320	4	260	IR	IRF8010SPBF
100	0.018	59	240	4	160	IR	IRF3710ZSPBF
100	0.025	59	236	5.5	200	IR	IRFS59N10DPBF
100	0.026	55	220	4	155	FCH	FQB55N10
100	0.0265	36	140	4	92	IR	IRF540ZSPBF
100	0.028	46	180	4	150	IR	IRF3710SPBF
100	0.028	50	200	4	150	ST	STB40NF10
100	0.036	42	140	4	160	IR	IRF1310NSPBF
100	0.044	36	120	2	140	IR	IRL540NSPBF
100	0.052	33	110	4	140	IR	IRF540NSPBF
100	0.077	28	110	4	150	VISH	IRF540SPBF
100	0.1	17	60	2	79	IR	IRL530NSPBF
100	0.11	17	60	4	79	IR	IRF530NSPBF
100	0.18	10	35	2	48	IR	IRL520NSPBF
100	0.2	9.7	38	4	48	IR	IRF520NSPBF
100	0.54	5.6	20	4	43	VISH	IRF510SPBF
100	0.117	23	76	4	140	IR	IRF9540NLPBF

RL Re-reeling available

Farnell

Power MOSFETs - continued

TO-263 (D^2-Pak) - continued

V_{DS} 20V - 100V - continued

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$I_{DM\ pulse}$ @ 25°C A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Mftr.	Mftrs List No.
N Channel							
100	15	80	320	4	260	IR	IRF8010STRLPBF
100	0.6	6.8	27	4	60	VISH	IRF9520STRLPBF
100	0.3	12	48	4	88	VISH	IRF9530SPBF
100	0.2	19	72	4	150	VISH	IRF9540SPBF
100	0.117	23	76	4	140	IR	IRF9540NSTRLPBF
100	0.06	40	140	4	200	IR	IRF5210STRLPBF
100	1.2	2.8	16	4	43	VISH	IRF9510SPBF
100	0.48	6.8	27	4	48	IR	IRF9520NSTRLPBF
100	0.06	40	140	4	200	IR	IRF5210LPBF
100	0.04	30	132	4	127	FCH	FQB33N10TM
150	0.032	60	240	5	320	IR	IRFS52N15DPBF
150	0.032	60	240	5	320	IR	IRFS52N15DTRLP
200	0.054	44	180	5	320	IR	IRFS38N20DTRLP
200	0.8	6.5	26	4	74	VISH	IRF9630STRLPBF
200	0.5	11	44	4	125	VISH	IRF9640LPBF
200	0.5	11	44	4	125	VISH	IRF9640STRLPBF
200	26	62	260	5	330	IR	IRFS4227PBF
550	0.38	11	44	4	100	ST	STB12NM50N
600	0.5	13.5	54	4.5	160	ST	STB14NK60ZT4
650	0.17	20	80	4	160	ST	STB25NM60N
660	0.22	17	64	4	140	ST	STB21NM60N
P-Channel							
55	0.02	64	260	-4	150	IR	IRF4905SPBF
55	0.06	31	110	-4	110	IR	IRF5305SPBF
55	0.1	19	72	-4	68	IR	IRF9Z34NSPBF
55	0.175	12	48	-4	45	IR	IRF9Z24NSPBF
60	0.02	60	200	-4	150	SLX	SUB65P06-20
60	0.026	47	188	-4	160	FCH	FQB47P06TM_AM002
60	0.5	6.7	27	-4	43	VISH	IRF9Z14SPBF
100	0.06	40	140	-4	200	IR	IRF5210SPBF
100	0.117	23	27	-4	140	IR	IRF9540NSPBF
100	0.48	6.8	27	-4	48	IR	IRF9520NSPBF
100	0.096	22	88	-4	125	FCH	FQB22P10TM
100	0.2	14	56	-4	79	IR	IRF9530NSPBF
600	0.75	9.2	37	-4	170	VISH	IRFS9N60APBF

** When mounted on 1" square PCB

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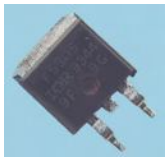
Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	1K+
FDB8442	FCH	SMD 149-5271	2.08	1.41	1.13	1.10
FDB8447L	FCH	SMD 149-5272	0.61	0.46	0.36	0.32
FDB8860	FCH	SMD 122-8326	2.28	1.68	1.37	1.21
FDB8880	FCH	SMD 122-8327	0.51	0.35	0.30	0.28
FQB47P06TM_AM002	FCH	SMD 149-5279	1.35	1.09	0.91	0.83
FQB50N06	FCH	SMD 984-4996 RL	0.90	0.68	0.55	0.42
FQB55N10	FCH	SMD 984-5003 RL	1.38	1.03	0.85	0.62
IRF510SPBF	VISH	SMD 864-8212	1.08	0.64	0.49	0.37
IRF520NSPBF	IR	SMD 864-8220	1.19	0.77	0.58	0.48
IRF530NSPBF	IR	SMD 864-8271	1.71	1.09	0.83	0.68
IRF540NSPBF	IR	SMD 864-8301	2.85	1.81	1.38	1.12
IRF540SPBF	VISH	SMD 101-3379	2.28	1.44	1.08	0.84
IRF540ZSPBF	IR	SMD 865-7700	2.29	1.45	1.10	0.90
IRF1010ESPBF	IR	SMD 865-7319	3.18	2.00	1.53	1.19
IRF1010EZSPBF	IR	SMD 865-7335	1.90	1.21	0.91	0.75
IRF1010NSPBF	IR	SMD 864-7984	3.78	2.40	1.82	1.49
IRF1010ZSPBF	IR	SMD 865-7351	2.49	1.58	1.20	0.97
IRF1310NSPBF	IR	SMD 864-8000	3.12	2.01	1.57	1.20
IRF1404SPBF	IR	SMD 865-7386	4.81	2.79	2.18	1.74
IRF1404ZSPBF	IR	SMD 143-6940	3.15	2.26	2.00	1.77
IRF1405SPBF	IR	SMD 865-7408	5.88	3.72	2.83	2.19
IRF1405ZS-7PPBF	IR	SMD 149-8185	5.66	3.14	2.57	2.02
IRF1503SPBF	IR	SMD 865-7459	2.71	1.71	1.30	1.06
IRF2204SPBF	IR	SMD 865-7483	2.92	1.66	1.27	1.11
IRF2804SPBF	IR	SMD 143-6941	5.34	3.48	3.20	2.98
IRF2805SPBF	IR	SMD 865-7513	4.39	2.76	2.12	1.71
IRF2807SPBF	IR	SMD 864-8042	4.24	2.70	2.10	1.60
IRF2807ZSPBF	IR	SMD 865-7530	3.04	1.92	1.49	1.20
IRF2807SPBF	IR	SMD 864-8042	4.24	2.70	2.10	1.60
IRF3205SPBF	IR	SMD 864-8069	4.68	2.62	2.10	1.59
IRF3706SPBF	IR	SMD 864-8131	1.33	0.85	0.64	0.53
IRF3707SPBF	IR	SMD 864-8140	1.11	0.70	0.54	0.50
IRF3709ZSPBF	IR	SMD 143-6944	1.83	1.31	1.17	1.02
IRF3205SPBF	IR	SMD 864-8069	4.68	2.62	2.10	1.59
IRF3205ZSPBF	IR	SMD 865-7564	2.35	1.47	1.12	0.92
IRF3707ZSPBF	IR	SMD 865-7602	1.14	0.72	0.55	0.44
IRF3709SPBF	IR	SMD 865-7629	2.15	1.35	1.04	0.85
IRF3710SPBF	IR	SMD 864-8174	7.11	3.95	3.20	2.43
IRF3710ZSPBF	IR	SMD 101-3376	2.72	1.72	1.31	1.07
IRF3711ZSPBF	IR	SMD 865-7653	1.76	1.12	0.85	0.70
IRF3805S-7PPBF	IR	SMD 149-8187	6.49	3.61	2.95	2.31
IRF3808SPBF	IR	SMD 101-3377	3.05	1.93	1.47	1.20
IRF4104SPBF	IR	SMD 101-3378	2.20	1.52	1.13	0.94
IRF4905SPBF	IR	SMD 910-3201	13.63	7.65	5.64	3.83
IRF5210SPBF	IR	SMD 910-3120	4.27	2.70	2.06	1.69
IRF5305SPBF	IR	SMD 910-3163	2.13	1.34	1.02	0.83
IRF8010SPBF	IR	SMD 865-7831	2.74	1.55	1.19	1.04
IRF9520NSPBF	IR	SMD 910-3597	1.61	1.02	0.79	0.63
IRF9530NSPBF	IR	SMD 910-3147	2.42	1.53	1.18	0.96
IRF9540NSPBF	IR	SMD 910-3155	2.41	1.77	1.41	1.17
IRF9Z14SPBF	VISH	SMD 910-3171	1.44	0.85	0.64	0.49
IRF9Z24NSPBF	IR	SMD 910-3180	1.61	1.02	0.79	0.63
IRF9Z34NSPBF	IR	SMD 910-3139	3.01	1.90	1.46	1.17
IRFR2607ZPBF	IR	SMD 138-5505	1.96	1.66	1.43	1.23
IRFS59N10DPBF	IR	SMD 910-2302	3.11	1.76	1.35	1.18
IRFS3206PBF	IR	SMD 143-6973	4.89	3.51	3.08	2.74
IRFS3207ZPBF	IR	SMD 143-6974	4.84	3.47	3.05	2.72
IRFS3306PBF	IR	SMD 143-6975	3.76	2.71	2.38	2.11
IRFS3507PBF	IR	SMD 905-2062	3.38	2.36	1.84	1.41
IRFS4610PBF	IR	SMD 905-2038	4.40	3.07	2.38	1.81
IRFS4710PBF	IR	SMD 101-3381	2.28	1.60	1.30	0.98
IRFS4610PBF	IR	SMD 905-2038	4.40	3.07	2.38	1.81
IRFS9N60APBF	VISH	SMD 101-3505	2.55	1.94	1.46	1.12
IRFZ24NSPBF	IR	SMD 865-0179	1.04	0.88	0.72	0.56
IRFZ34NSPBF	IR	SMD 865-0209	2.17	1.38	1.05	0.85
IRFZ34VSPBF	IR	SMD 865-9265	1.63	0.87	0.61	0.50
IRFZ44NSPBF	IR	SMD 865-0233	2.69	1.70	1.29	1.05
IRFZ44VSPBF	IR	SMD 865-9290	1.52	0.85	0.69	0.50
IRFZ44VZSPBF	IR	SMD 865-9303	1.09	0.69	0.53	0.50
IRFZ44ZSPBF	IR	SMD 865-9320	1.39	1.02	0.76	0.57
IRFZ46ZSPBF	IR	SMD 865-9354	1.63	0.90	0.67	0.55
IRFZ48NSPBF	IR	SMD 101-3480	2.11	1.41	1.08	0.87
IRFZ48VSPBF	IR	SMD 865-0306	2.02	1.35	1.03	0.81
IRL520NSPBF	IR	SMD 865-1051	1.70	0.91	0.64	0.52
IRL530NSPBF	IR	SMD 865-1060	2.33	1.46	1.12	0.91
IRL540NSPBF	IR	SMD 865-1086	1.92	1.21	0.93	0.77
IRL1004SPBF	IR	SMD 865-0861	4.78	3.01	2.30	1.87
IRL1104SPBF	IR	SMD 865-0888	2.83	1.65	1.27	0.96
IRL1404SPBF	IR	SMD 865-9710	4.51	2.85	2.17	1.77
IRL1404ZSPBF	IR	SMD 143-6989	2.32	1.66	1.46	1.31
IRL2505SPBF	IR	SMD 865-0926	5.85	3.76	2.94	2.23
IRL3102SPBF	IR	SMD 865-0950	1.95	1.23	0.95	0.78
IRL3103SPBF	IR	SMD 865-0977	5.24	2.92	2.39	1.78
IRL3302SPBF	IR	SMD 865-0985	1.41	0.89	0.67	0.55
IRL3502SPBF	IR	SMD 865-9753	3.03	1.91	1.46	1.19
IRL3705NSPBF	IR	SMD 865-1027	5.00	3.16	2.41	1.96
IRL3705ZSPBF	IR	SMD 865-9770	2.36	1.48	1.14	0.92
IRL3713SPBF	IR	SMD 865-9796	3.78	3.15	2.51	1.87
IRL3716SPBF	IR	SMD 101-3481	2.38	1.66	1.36	1.02
IRL3803SPBF	IR	SMD 865-1043	6.56	3.66	2.96	2.23
IRL7833SPBF	IR	SMD 101-3408	2.35	1.49	1.13	0.93
IRL8113SPBF	IR	SMD 865-9940	1.53	0.97	0.74	0.61
IRLR2905ZPBF	IR	SMD 138-5507	1.82	1.35	1.16	1.01
IRLZ24NSPBF	IR	SMD 101-3482	1.73	1.09	0.85	0.67
IRLZ34NSPBF	IR	SMD 101-3483	2.25	1.43	1.13	0.89
IRLZ44NSPBF	IR	SMD 865-1426	2.87	1.83	1.39	1.13
IRLZ44SPBF	VISH	SMD 866-0352	1.91	1.12	0.87	0.85
IRLZ44ZSPBF	IR	SMD 866-0379	1.70	1.08	0.83	0.66
NDB6060L	FCH	SMD 101-7723 RL	1.19	0.85	0.65	0.48
PSMN003-30B	NXP	SMD 108-1486 RL	3.05	2.18	1.89	1.34
STB40NF10	ST	SMD 117-5681 RL	2.04	1.59	1.24	1.06
STB60NF06LT4	ST	SMD 117-5644 RL	1.23	0.96	0.78	0.64
SUB65P06-20	SLX	SMD 955-1395 RL	3.44	2.99	2.59	2.06
SUB75N06-08	SLX	SMD 955-1409 RL	2.70	1.89	1.45	1.20
FQB22P10TM	FCH	SMD 155-5164	0.75	0.58	0.50	0.38
FQB33N10TM	FCH	SMD 155-5165	0.75	0.58	0.50	0.38
IRF1018ESPBF	IR	NEW SMD 160-2225	0.74	0.53	0.46	0.40
IRFS3607PBF	IR	NEW SMD 160-2232	0.89	0.63	0.54	0.49
IRFS3806PBF	IR	NEW SMD 160-2233	0.62	0.44	0.38	0.33

Tubes of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRF3205SPBF	NEW SMD 156-4060	129.61	100.12	90.10
IRF2807ZSPBF	NEW SMD 156-4063	59.18	48.92	44.76
IRF5210SPBF	NEW SMD 156-4150	74.38	70.67	62.15
IRF5305SPBF	NEW SMD 156-4152	48.46	40.28	37.21
IRF4905SPBF	NEW SMD 156-4153	203.99	141.54	127.39
IRF3710SPBF	NEW SMD 156-4061	116.08	89.76	80.78
IRF3808SPBF	NEW SMD 156-4129	90.73	75.38	69.17

Reel of 800 Mftrs. List No.	Order Code	Price Per Reel 1+
SUB75N06-08-E3	NEW SMD 156-2579	1,027.30

D2-Pak (TO-263) 100V to 650V

100V to 650V



V_{DS} 100V to 650V

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$V_{GS(th)}$ max. V	P_D** @ 25°C W	P_D @ 25°C W	Mftr.	Mftrs List No.
N Channel							
100	0.0048	75	4	250	250	IR	IRFS4310ZPBF
100	0.0072	75	4	230	230	IR	IRFS4410ZPBF
100	0.018	59	4	160	160	IR	IRF3710ZSPBF
100	0.028	46	4	3.7	150	IR	IRF3710SPBF
100	0.044	36	2	3.8	140	IR	IRL540NSPBF
100	0.052	33	4	3.8	140	IR	IRF540NSPBF
100	0.1	17	2	3.8	79	IR	IRL530NSPBF
100	0.11	17	4	3.8	79	IR	IRF530NSPBF
100	0.18	10	2	3.8	48	IR	IRL520NSPBF
100	0.2	9.7	4	3.8	48	IR	IRF520NSPBF
100	0.54	5.6	4	3.7	43	VISH	IRF510SPBF
100	0.54	5.6	4	3.7	43	VISH	IRF510SPBF
150	0.012	83	5	330	330	IR	IRFS4321PBF

RL Re-reeling available

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$V_{GS(th)}$ max. V	P_D** @ 25°C W	P_D @ 25°C W	Mftr.	Mftrs List No.
N Channel							
150	0.042	43	4	3.8	200	IR	IRF3415SPBF
150	0.045	41	4.5	200	200	IR	IRF3515SPBF
150	0.045	41	5.5	3.1	3.1	IR	IRFS41N15DPBF
150	0.082	21	4	3.8	84	IR	IRF3315SPBF
200	0.0229	62	5	260	260	FCH	FDB2614
200	0.03	65	4	3.75	375	SLX	SUM65N20-30-E3
200	0.054	44	5	320	320	IR	IRFS38N20DPBF.
200	0.075	31	2	180	180	FCH	FQB34N20LTM
200	0.1	24	5.5	3.8	3.8	IR	IRFS23N20DPBF
200	0.15	18	4	150	150	IR	IRF640NSPBF
200	0.17	16	5.5	3.8	140	IR	IRFS17N20DPBF
200	0.18	17	2	3.1	125	VISH	IRL640SPBF
200	0.3	9.3	4	3.8	82	IR	IRF630NSPBF
200	0.3	9	4	74	74	VISH	IRF630SPBF
200	0.36	10	4	3.13	87	FCH	FQB10N20
200	0.8	5.2	4	3	50	VISH	IRF620SPBF
200	0.8	6.5	-4	74	74	VISH	IRF9630S.PBF
200	1.5	3.3	4	3.0	36	VISH	IRF610SPBF
250	0.0363	50	5	260	260	FCH	FDB2710
250	0.24	14	4	150	150	VISH	IRF644NSPBF
250	0.042	45	5	330	330	IR	IRFS4229PBF
250	1.1	4.4	4	50	50	VISH	IRF624SPBF
300	0.29	14	5	140	140	FCH	FDB14N30TM
400	0.55	10	4	125	125	VISH	IRF740ASPBF
400	0.55	10	4	3.1	125	VISH	IRF740SPBF
400	1	5.5	4.5	74	74	VISH	IRF730ASPBF
500	0.52	11	4	3.1	170	VISH	IRFS11N50APBF
500	0.85	9	4	173	173	FCH	FQB9N50CFTM
500	0.85	8	4	3.1	125	VISH	IRF840ASPBF
500	0.85	8	4	3.1	125	VISH	IRF840SPBF
500	1.4	5	4	125	125	VISH	IRF830ASPBF
P-Channel							
200	0.5	11	-4	3	125	VISH	IRF9640SPBF

* Theoretical max. value, package limited.

** When mounted on 1" square PCB

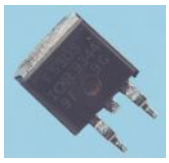
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Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+
FDB14N30TM	FCH	NEW SMD 149-5273●	0.88	0.65	0.51
FDB2614	FCH	NEW SMD 149-5274●	3.06	2.09	1.56
FDB2710	FCH	NEW SMD 149-5275●	2.97	2.17	1.74
FQB10N20	FCH	SMD 984-4988● RL	0.62	0.47	0.38
FQB34N20LTM	FCH	NEW SMD 149-5278●	1.38	0.94	0.67
FQB9N50CFTM	FCH	NEW SMD 149-5283●	1.11	0.73	0.55
IRF510SPBF	VISH	SMD 864-8212●	1.08	0.64	0.49
IRF520NSPBF	IR	SMD 864-8220●	1.19	0.77	0.58
IRF530NSPBF	IR	SMD 864-8271●	1.71	1.09	0.83
IRF540NSPBF	IR	SMD 864-8301●	2.85	1.81	1.38
IRF610SPBF	VISH	SMD 910-2310●	1.04	0.61	0.47
IRF620SPBF	VISH	SMD 910-2280●	1.14	0.68	0.51
IRF624SPBF	VISH	SMD 101-3380●	1.18	0.99	0.86
IRF630NSPBF	IR	SMD 864-8352●	1.52	0.96	0.73
IRF630SPBF	VISH	SMD 865-7726●	1.35	0.81	0.60
IRF640NSPBF	IR	SMD 864-8387●	4.12	2.33	1.65
IRF644NSPBF	VISH	SMD 865-7777●	1.89	1.05	0.86
IRF730ASPBF	VISH	SMD 865-7793●	1.87	1.10	0.84
IRF740ASPBF	VISH	SMD 865-7815●	2.51	1.49	1.12
IRF740SPBF	VISH	SMD 864-8492●	2.51	1.49	1.12
IRF830ASPBF	VISH	SMD 864-8530●	0.91	0.83	0.63
IRF840ASPBF	VISH	SMD 864-8565●	2.94	1.70	1.29
IRF840SPBF	VISH	SMD 864-8590●	2.31	1.38	1.04
IRF3315SPBF	IR	SMD 864-8085●	2.08	1.28	0.95
IRF3415SPBF	IR	SMD 864-8107●	4.72	3.04	2.35
IRF3515SPBF	IR	SMD 865-7572●	4.33	2.74	2.09
IRF3710SPBF	IR	SMD 864-8174●	7.11	3.95	3.20
IRF3710ZSPBF	IR	SMD 101-3376●	2.72	1.72	1.31
IRF3808SPBF	IR	SMD 101-3377●	3.05	1.93	1.47
IRF4104SPBF	IR	SMD 101-3378●	2.20	1.52	1.13
IRF9630S.PBF	VISH	SMD 910-3198●	1.66	1.03	0.78
IRF9640SPBF	VISH	SMD 910-3112●	3.12	1.85	1.39
IRFS11N50APBF	VISH	SMD 864-9944●	2.40	1.52	1.13
IRFS17N20DPBF	IR	SMD 910-2299●	2.29	1.44	1.28
IRFS23N20DPBF	IR	SMD 864-9952●	3.30	2.18	1.67
IRFS38N20DPBF.	IR	SMD 865-8889●	3.27	2.07	1.58
IRFS41N15DPBF	IR	SMD 864-9960●	3.74	2.38	1.81
IRFS4229PBF	IR	SMD 143-6978●	5.00	3.60	3.15
IRFS4310ZPBF	IR	SMD 143-6979●	3.91	2.81	2.47
IRFS4321PBF	IR	SMD 143-6980●	10.98	7.88	6.90
IRFS4410ZPBF	IR	SMD 143-6981●	2.78	2.00	1.76
IRL520NSPBF	IR	SMD 865-1051●	1.70	0.91	0.64
IRL530NSPBF	IR	SMD 865-1060●	2.33	1.46	1.12
IRL540NSPBF	IR	SMD 865-1086●	1.92	1.21	0.93
IRL640SPBF	VISH	SMD 865-1116●	2.67	1.58	1.18
SUM65N20-30-E3	SLX	SMD 107-5751● RL	3.52	2.99	2.20

Mftrs. List No.		Order Code	Price Per Tube 1+	3+	8+
SI4410DYPBF	TUBE 95	NEW SMD 156-4068●	123.13	102.76	93.88
IRF7455PBF	TUBE 95	NEW SMD 156-4069●	72.81	60.13	55.22
FB180SA10PBF	TUBE 10	NEW 156-4071●	163.38	155.22	130.49
			1+	4+	10+
IRFB31N20DPBF	TUBE 50	NEW 156-4053●	71.57	56.39	51.49
IRF640NPBF	TUBE 50	NEW 156-4091●	47.34	35.68	35.46
IRFB4710PBF	TUBE 50	NEW 156-4095●	66.50	55.24	50.57
IRFZ44VPBF	TUBE 50	NEW 156-4097●	34.39	24.16	21.51

Mftrs. List No.		Order Code	Price Per Tube 1+	3+	8+
IRFP3703PBF	TUBE 25	NEW 156-4113●	70.17	64.16	61.92
IRFP260NPBF	TUBE 25	NEW 156-4111●	59.45	46.03	42.74
IRF640NSPBF	TUBE 50	NEW SMD 156-4062●	59.74	48.34	44.18
IRF1104PBF	TUBE 50	NEW 156-4083●	54.66	42.01	41.28
IRF3706PBF	TUBE 50	NEW 156-4087●	34.94	29.92	26.74

N Channel, 100V to 900V



V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$V_{GS(th)}$ max. V	P_D** @ 25°C W	P_D @ 25°C W	Mftrs List No.
100	0.015	80	4	260	260	IRF8010SPBF
100	0.0265	36	4	92	92	IRF540ZSPBF
500	0.52	11	4	3.1**	170	IRFS11N50APBF
500	0.85	8	4	3.1**	125	IRF840SPBF
800	3	2.2	4	125	50	IRFBC20SPBF
900	8	1.7	4	3.1**	54	IRFBF20SPBF

**Power Dissipation on $1"^2$ PCB

383338

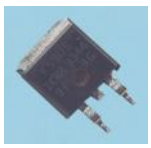
Mftrs. List No.	Fab.	Order Code	Price Each 1+	25+	100+
IRF540ZSPBF	IR	SMD 865-7700●	2.29	1.45	1.10
IRF840SPBF	VISH	SMD 864-8590●	2.31	1.38	1.04
IRF8010SPBF	IR	SMD 865-7831●	2.74	1.55	1.19
IRFBC20SPBF	VISH	SMD 865-8048●	2.38	1.40	1.06
IRFBF20SPBF	VISH	SMD 864-8875●	2.01	1.18	0.90
IRFS11N50APBF	VISH	SMD 864-9944●	2.40	1.52	1.13

HEXFETs™


TO-220

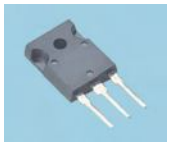

SOT-223


SO-8


D^2-Pak


SOT-227


TO-220 Full Pak


TO-247


I-Pak

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Package	Mftrs List No.
Single N Channel							
20	0.0065	16	130	2	2.5	SOIC	IRF7456PBF
20	0.0085	77	280	2	88	TO-220AB	IRF3706PBF
20	0.0085	77	280	2	2.5	D2-PAK	IRF3706SPBF
20	0.009	77	308	3	87	TO-220AB	IRF3704PBF
20	0.009	12	100	2	2.5	SOIC	IRF7459PBF
30	0.0028	210	1000	4	230	TO-247AC	IRFP3703PBF
30	0.005	179	720	1*	270	Super-220	IRLBA3803PPBF
30	0.0075	15	120	2	2.5	SOIC	IRF7455PBF
30	0.008	14	110	3	2.5	SOIC	IRF7458PBF
30	0.012	62	248	2	87	TO-220AB	IRF3708PBF
30	0.012	11	90	2	2.5	SOIC	IRF7467PBF
30	0.012	62	248	2	87	TO-220AB	IRF3708PBF
30	0.0125	62	248	3	87	D2-PAK	IRF3707SPBF
30	0.0135	10	50	1*	2.5	SOIC	SI4410DYPBF
30	0.045	5.5	16	2.4	2.1	SOT-223	IRLL2703PBF
30	0.4	24	96	1*	45	TO-220AB	IRL2703PBF
40	0.009	100	400	4	170	TO-220AB	IRF1104PBF
40	0.008	104	416	1*	2.4	D2-PAK	IRL1104SPBF
40	0.0065	130	520	1*	200	TO-220AB	IRL1004PBF
40	0.0065	110	450	1*	3.1	D2-PAK	IRL1004SPBF
55	0.075	4	11.2	4	2.1	SOT-223	IRFL024NPBF
55	0.065	3.1	12	2	2.1	SOT-223	IRLL024NPBF
60	0.012	72	290	4	150	TO-220AB	IRFZ48VPBF
60	0.0165	55	220	4	115	TO-220AB	IRFZ44VPBF
60	0.028	50	200	3	150	TO-220AB	IRFZ44RPBF
75	0.0038	180	700	4	300	D2-PAK	IRF2907ZS-7PPBF
100	0.014	75	300	4.5	200	TO-220AB	IRFB4710PBF
100	0.06	4.5	36	5.5	2.5	SOIC	IRF7452PBF
100	0.025	59	236	5.5	200	TO-220AB	IRFB59N10DPBF
100	0.0065	180	720	4	480	ISOTOP	FB180SA10PBF
150	0.166	12	48	2	80	TO-220AB	IRL3215PBF
150	0.09	23	92	5.5	136	TO-220AB	IRFB23N15DPBF
150	0.045	41	164	5.5	3.1	D2-PAK	IRFS41N15DPBF
150	0.045	41	164	5.5	200	TO-220AB	IRFB41N15DPBF

RL Re-reeling available

Power MOSFETs - continued

HEXFETs™ - continued

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Package	Mftrs List No.
Single N Channel							
200	0.3	9.3	37	4	82	TO-220AB	IRF630NPBF
200	0.235	13	52	5.5	110	D-PAK	IRFR13N20DPBF
200	0.15	18	72	4	150	TO-220AB	IRF640NPBF
200	0.15	18	72	4	150	D2-PAK	IRF640NSPBF
200	0.1	24	96	5.5	3.8	D2-PAK	IRFS23N20DPBF
200	0.1	24	96	5.5	170	TO-220AB	IRFB23N20DPBF
200	0.082	31	124	5.5	3.1	D2-PAK	IRFS31N20DPBF
200	0.082	31	124	5.5	200	TO-220AB	IRFB31N20DPBF
200	0.075	30	120	4	214	TO-247AC	IRFP250NPBF
200	0.04	50**	200	4	300	TO-247AC	IRFP260NPBF
200	0.023	98	390	5	650	Super-220	IRFBA90N20DPBF
400	1	5.5	22	4.5	74	TO-220AB	IRF730APBF
400	0.55	10	40	4	125	TO-220AB	IRF740APBF
500	3	2.5	10	4.5	50	TO-220AB	IRF820APBF
500	1.4	5	20	4	125	D2-PAK	IRF830ASPBF
500	1.4	5	20	4	74	TO-220AB	IRF830APBF
500	0.85	8	32	4	125	D2-PAK	IRF840ASPBF
500	0.52	6.6	44	4	60	TO-220FP	IRFIB7N50APBF
500	0.52	11	44	4	170	TO-220AB	IRFB11N50APBF
500	0.4	14	56	4	190	TO-247AC	IRFP450APBF
500	0.28	17	68	5.5	200	TO-220AB	IRFB17N50LPBF
500	0.27	20	80	4	280	TO-247AC	IRFP460APBF
500	0.25	18	72	5.5	200	TO-220AB	IRFB18N50KPBF
500	0.23	22	88	4	277	TO-247AC	IRFP22N50APBF
500	0.23	24	96	4	340	Super-220	IRFBA22N50APBF
500	0.08	57	228	4	625	ISOTOP	FA57SA50LCPBF
600	0.58	11	44	4	180	TO-247AC	IRFPC50APBF
600	0.75	5.5	37	4	60	TO-220FP	IRFIB6N60APBF
600	0.75	9.2	37	4	170	TO-220AB	IRFB9N60APBF
600	1.2	6.2	25	4	125	TO-220AB	IRFBC40APBF
600	2.2	3.6	14	4.5	74	TO-220AB	IRFBC30APBF
600	7	1.4	5.6	4	36	I-PAK	IRFU1N60APBF
650	0.93	5.1	21	4	60	TO-220FP	IRFIB5N65APBF
650	0.93	8.5	21	4	167	TO-220AB	IRFB9N65APBF
Single P Channel							
14	0.012	11	86	-0.6*	2.5	SOIC	IRF7220PBF
Dual N/P Channel							
20	0.135/0.27(P)	2.4(N), 1.7(P)	19(N), 14(P)	0.7*	1.25	Micro8	IRF7507PBF
30	0.029(N), 0.058(P)	7.3(N), 5.3(P)	30(N), 30(P)	1*	2.5	SOIC	IRF7389PBF

** Denotes calculated value - exceeding package limits

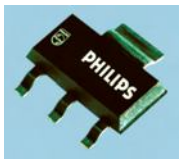
Mftrs. List No.	Order Code		1+	25+	100+	250+	1K+
			Price Each				
FA57SA50LCPBF	910-2965●		58.67	36.90	27.80	21.38	20.48
FB180SA10PBF	910-2973●		29.25	17.51	14.13	11.80	11.55
IRF630NPBF	864-8344●		1.70	0.93	0.69	0.58	0.52
IRF640NPBF	864-8379●		2.17	1.19	0.88	0.73	0.72
IRF640NSPBF	SMD 864-8387●		4.12	2.33	1.65	1.30	1.19
IRF730APBF	864-8433●		1.63	0.87	0.62	0.50	0.49
IRF740APBF	864-8468●		1.89	1.03	0.77	0.64	0.62
IRF1104PBF	864-7992●		3.00	1.64	1.22	1.01	0.98
IRF3704PBF	864-8115●		1.94	1.06	0.79	0.66	0.54
IRF3706PBF	864-8123●		1.82	1.00	0.74	0.62	0.55
IRF3706SPBF	SMD 864-8131●		1.33	0.85	0.64	0.53	0.48
IRF3707SPBF	SMD 864-8140●		1.11	0.70	0.54	0.50	0.49
IRF3708PBF	864-8158●		1.93	1.06	0.79	0.59	0.53
IRF7220PBF	SMD 910-3341●		3.75	2.38	1.82	1.47	1.34
IRF730APBF	864-8433●		1.63	0.87	0.62	0.50	0.49
IRF7389PBF	SMD 910-2116●		3.66	2.18	1.66	1.36	1.23
IRF7452PBF	SMD 910-2817●		2.34	1.49	1.13	0.90	0.81
IRF7455PBF	SMD 910-2655●		2.03	1.27	0.97	0.79	0.71
IRF7456PBF	SMD 910-2639●		1.84	1.16	0.89	0.70	0.63
IRF7458PBF	SMD 910-2825●		2.19	1.38	1.06	0.84	0.77
IRF7459PBF	SMD 910-2620●		1.84	1.17	0.89	0.69	0.63
IRF7467PBF	SMD 910-2647●		1.30	0.82	0.63	0.58	0.57
IRF7507PBF	SMD 910-2094●	RL	2.78	1.77	1.33	1.03	0.97
IRF820APBF	864-8506●		1.57	0.86	0.64	0.53	0.52
IRF830APBF	864-8522●		1.90	1.04	0.78	0.64	0.62
IRF830ASPBF	SMD 864-8530●		0.91	0.83	0.63	0.60	0.58
IRF840APBF	864-8557●		1.94	1.06	0.79	0.75	0.73
IRF840ASPBF	SMD 864-8565●		2.94	1.70	1.29	0.97	0.92
IRFB9N60APBF	864-8808●		2.12	1.16	0.86	0.76	0.74
IRFB9N65APBF	910-3007●		2.79	1.53	1.14	0.94	0.88
IRFB11N50APBF	864-8700●		2.16	1.18	0.88	0.76	0.74
IRFB17N50LPBF	864-8719●		4.86	2.76	2.11	1.85	1.79
IRFB18N50KPBF	864-8727●		4.86	2.76	2.11	1.85	1.79
IRFB23N15DPBF	864-8735●		2.27	1.30	0.97	0.80	0.74
IRFB23N20DPBF	864-8743●		3.21	1.82	1.39	1.20	1.04
IRFB31N20DPBF	864-8751●		3.71	2.11	1.61	1.25	1.14
IRFB41N15DPBF	864-8760●		2.88	1.63	1.25	1.09	1.07
IRFB59N10DPBF	864-8786●		2.97	1.68	1.29	1.13	1.02
IRFB4710PBF	864-8778●		2.92	1.66	1.27	1.11	1.00
IRFBA22N50APBF	865-8021●		6.06	3.82	2.96	2.67	2.53
IRFBA90N20DPBF	865-8030●		9.85	6.22	4.74	4.20	4.09
IRFBC30APBF	864-8816●		2.40	1.32	0.98	0.81	0.79
IRFBC40APBF	864-8824●		2.05	1.13	0.84	0.70	0.68
IRFIB5N65APBF	864-9065●		2.73	1.55	1.19	1.04	1.00
IRFIB6N60APBF	864-9073●		2.77	1.57	1.20	1.05	1.00
IRFIB7N50APBF	864-9081●		2.97	1.62	1.21	1.00	0.99
IRFL024NPBF	SMD 864-9154●		1.19	0.69	0.51	0.41	0.37
IRFP22N50APBF	864-9243●		4.63	2.63	2.30	2.24	2.18
IRFP250NPBF	864-9260●		3.15	2.14	1.87	1.79	1.74
IRFP260NPBF	864-9294●		4.97	2.82	2.16	1.89	1.73

Mftrs. List No.	Order Code		1+	25+	100+	250+	1K+
			Price Each				
IRFP3703PBF	864-9367●		5.35	3.04	2.32	2.23	2.18
IRFP450APBF	864-9391●		3.71	2.11	1.61	1.41	1.37
IRFP460APBF	864-9421●		5.93	3.37	2.58	2.25	2.20
IRFPC50APBF	864-9472●		5.51	3.22	2.45	1.79	1.76
IRFR1N60APBF	SMD 939-9852●		1.27	0.73	0.56	0.43	0.42
IRFR13N20DPBF	SMD 864-9677●		2.00	1.27	0.98	0.73	0.66
IRFR18N15DPBF	SMD 910-3104●		2.06	1.29	0.98	0.73	0.66
IRFS23N20DPBF	SMD 864-9952●		3.30	2.18	1.67	1.29	1.23
IRFS31N20DPBF	SMD 910-2272●		3.60	2.28	1.73	1.42	1.31
IRFS31N20DPBF	SMD 910-2272●		3.60	2.28	1.73	1.42	1.31
IRFS41N15DPBF	SMD 864-9960●		3.74	2.38	1.81	1.47	1.33
IRFR1N60APBF	SMD 939-9852●		1.27	0.73	0.56	0.43	0.42
IRFU1N60APBF	910-2507●		1.17	0.70	0.55	0.38	0.32
IRFZ44RPBF	865-0241●		1.63	0.93	0.69	0.55	0.54
IRFZ44VPBF	865-0250●		1.76	0.96	0.72	0.59	0.52
IRFZ48VPBF	865-0292●		1.94	1.23	0.96	0.62	0.61
IRL1004PBF	865-0853●		2.94	1.67	1.28	1.12	1.09
IRL1004SPBF	SMD 865-0861●		4.78	3.01	2.30	1.87	1.69
IRL1104PBF	865-0870●		2.71	1.48	1.10	0.91	0.83
IRL1104SPBF	SMD 865-0888●		2.83	1.65	1.27	0.96	0.87
IRL2703PBF	865-0934●		1.40	0.75	0.53	0.39	0.32
IRL3215PBF	910-2736●		1.66	1.02	0.76	0.62	0.49
IRL3215PBF	910-2736●		1.66	1.02	0.76	0.62	0.49
IRF7452PBF	SMD 910-2817●		2.34	1.49	1.13	0.90	0.81
IRF7458PBF	SMD 910-2825●		2.19	1.38	1.06	0.84	0.77
IRLBA3803PPBF	865-9966●		4.36	2.48	1.89	1.66	1.51
IRLL024NPBF	SMD 865-1205●		1.04	0.65	0.50	0.40	0.37
IRLL2703PBF	SMD 865-1221●		1.35	1.18	0.91	0.73	0.66
SI4410DYPBF	SMD 910-2612●		4.32	2.66	2.03	1.66	1.50

211359

Mftrs. List No.		Order Code		1+	3+	8+
				Price Per Tube		
SI4410DYPBF	TUBE 95	NEW SMD 156-4068●		123.13	102.76	93.88
IRF7455PBF	TUBE 95	NEW SMD 156-4069●		72.81	60.13	55.22
FB180SA10PBF	TUBE 10	NEW 156-4071●		163.38	155.22	130.49
				1+	4+	10+
IRFB31N20DPBF	TUBE 50	NEW 156-4053●		71.57	56.39	51.49
IRF640NPBF	TUBE 50	NEW 156-4091●		47.34	35.68	35.46
IRFB4710PBF	TUBE 50	NEW 156-4095●		66.50	55.24	50.57
IRFZ44VPBF	TUBE 50	NEW 156-4097●		34.39	24.16	21.51
IRFP3703PBF	TUBE 25	NEW 156-4113●		70.17	64.16	61.92
IRFP260NPBF	TUBE 25	NEW 156-4111●		59.45	46.03	42.74
IRF640NSPBF	TUBE 50	NEW SMD 156-4062●		59.74	48.34	44.18
IRF1104PBF	TUBE 50	NEW 156-4083●		54.66	42.01	41.28
IRF3706PBF	TUBE 50	NEW 156-4087●		34.94	29.92	26.74

55V, N-Channel TrenchMOS™



SOT-223



TO-220AB

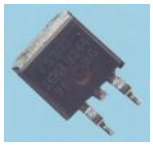
Mftrs. List No.	V_{DS} V	$R_{DS(on)}$ Ω	@ V_{GS} V	$I_{D\ max.}$ @ 25°C A	Package
PHP21N06LT	55	0.07	5	21	TO-220AB
PHT6N06LT	55	0.15	5	5.5	SOT-223
PHT6N06T	55	0.15	5	5.5	SOT-223
PHT8N06LT	55	0.08	5	7.5	SOT-223

211162

Mftrs. List No.	Order Code		1+	25+	100+	250+	1K+
			Price Each				
PHP21N06LT	108-1452●		1.350	0.730	0.530	0.280	0.270
PHT6N06LT	SMD 108-1455●	RL	0.960	0.550	0.350	0.155	0.146
PHT6N06T	SMD 108-1456●	RL	0.770	0.460	0.300	0.138	0.128
PHT8N06LT	SMD 108-1458●		0.680	0.530	0.410	0.210	0.178

Reels of 4000 Mftrs. List No.	Order Code		1+	3+
			Price Per Reel	
PHT6N06LT.135	NEW SMD 156-2494●		658.09	592.28
PHT8N06LT.135	NEW SMD 156-2580●		491.05	– –

50V to 60V MOSFETs



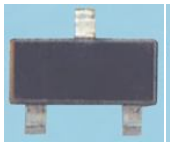
D^2-PAK



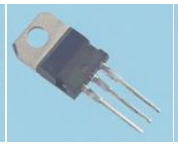
SOT-223



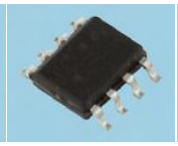
TO-92



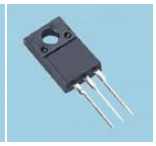
SOT-23



TO-220



SO-8



TO-220FP

RL Re-reeling available

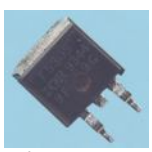
Farnell

V_{DS} V	Polarity	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	P_D @ 25°C W	Mftr.	Package	Order Code	Mftrs. list No.
50	N	3.5	0.2	0.36	ZET	SOT-23	147-1176	BSS138TA
50	N	3.5	0.2	0.225	ON	SOT-23	143-1319	BSS138LT1G
50	P	10	0.13	0.225	ON	SOT-23	143-1318	BSS84LT1G
50	P	10	0.13	0.36	ZET	SOT-23	147-1178	BSS84TA
55	P	0.175	12	45	IR	D2-PAK	129-8481	IRF9Z24NSTRLPBF
55	N	35	30	68	IR	D2-PAK	129-8487	IRLZ34NSTRLPBF
60	N	0.0095	75	214	ON	TO-220	143-1326	NTP75N06G
60	N	0.0095	75	214	ON	D2-PAK	145-9154	NTB75N06G
60	N	0.014	60	150	ON	TO-220	143-1324	NTP60N06G
60	N	0.016	60	136.4	ON	TO-220	143-1325	NTP60N06LG
60	P	0.023	80	375	INF	TO-220	147-1809	SPP80P06P
60	N	0.026	45	125	ON	TO-220	145-3656	NTP45N06G
60	N	0.0375	20	60	ON	D2-PAK	145-9160	NTD20N06G
60	N	0.046	27	88.2	ON	TO-220	145-3653	NTP27N06G
60	N	0.046	30	88.2	ON	TO-220	145-3654	NTP30N06LG
60	N	0.054	18	55	ON	D-PAK	145-9158	NTD18N06LG
60	N	0.09	15	48.4	ON	TO-220	145-3651	NTP18N06G
60	N	0.1	3	2.1	ON	SOT-223 (TO-261)	143-1322	NTF3055-100T1G
60	N	0.12	3	2.1	ON	SOT-223	143-1323	NTF3055L108T1G
60	P	0.14	18	88	VISH	D2-PAK	129-8499	IRF9Z34SPBF
60	P	0.17	2.6	1	ON	SOT-223	145-3649	NTF2955T1G
60	N	0.175	2	2.1	ON	SOT-223	145-3648	NTF3055L175T1G
60	P	0.196	12	2.4	ON	TO-220	145-3650	NTP2955G
60	N	0.2	2.5	2.5	ST	SOT-223	129-1978	STN3PF06
60	P	0.28	11	60	VISH	D2-PAK	129-8498	IRF9Z24SPBF
60	P	0.45	5	40	ON	D-PAK	145-9139	MTD5P06VT4G
60	N	0.75	1	40	ON	TO-220	145-3647	MLP1N06CLG
60	N	1.7	0.3	0.8	ON	SOT-223 (TO-261)	145-3645	MMFT960T1G
60	N	3.5	0.28	0.50	INF	SOT-23 (TO-236)	147-1701	BSS138W E6327
60	N	3.5	0.23	0.36	INF	SOT-23	147-1702	BSS159N E6327
60	N	5	200	0.35	TS	TO-92	129-9312	TSM2N7000CT
60	N	5	0.2	0.35	ON	TO-92	145-9027	2N7000G
60	N	5	0.5	0.225	ON	SOT-23	143-1321	MMBF170LT1G
60	N	5	0.23	0.5	INF	SOT-323	147-1758	SN7002W L6433
60	N	7.5	0.5	0.33	ZET	SOT-23	147-1177	2N7002TA
60	N	7.5	0.115	0.225	TS	SOT-23	129-9313	TSM2N7002CX
Dual Transistors								
60	NP	0.105	3.9	1.25	ZET	SOIC	147-1155	ZXMC4559DN8TA
60	Dual N	0.18	3.2	1.25	ZET	SOIC	147-1151	ZXMN6A11DN8TA

497179

Mftrs. List No.	Mftr.	Order Code		5+	25+	Price Each 100+	1K+	3K+
BSS138TA	ZET	SMD 147-1176●		0.310	0.220	0.182	0.176	0.167
BSS138LT1G	ON	SMD 143-1319●		0.126	0.088	0.068	0.054	0.046
BSS84LT1G	ON	SMD 143-1318●		0.151	0.108	0.082	0.066	0.054
BSS84TA	ZET	SMD 147-1178●		0.310	0.220	0.182	0.176	0.167
IRF9Z24NSTRLPBF	IR	SMD 129-8481●	RL	1.460	1.070	0.890	0.710	0.640
IRLZ34NSTRLPBF	IR	SMD 129-8487●	RL	1.600	1.190	1.020	0.900	0.860
NTP75N06G	ON	143-1326●		2.130	1.580	1.120	0.960	0.860
NTB75N06G	ON	SMD 145-9154●		2.010	1.790	1.690	– –	– –
NTP60N06G	ON	143-1324●		2.000	1.420	1.140	0.950	0.780
NTP60N06LG	ON	143-1325●		2.910	2.070	1.600	1.260	1.030
SPP80P06P	INF	147-1809●		3.160	2.460	1.800	– –	– –
NTP45N06G	ON	145-3656●		1.340	0.990	0.730	0.610	0.460
NTD20N06G	ON	SMD 145-9160●		0.650	0.570	0.540	– –	– –
NTP27N06G	ON	145-3653●		1.230	0.870	0.680	0.540	0.450
NTP30N06LG	ON	145-3654●		1.490	1.060	0.820	0.650	0.540
NTD18N06LG	ON	SMD 145-9158●		0.400	0.350	0.330	– –	– –
NTP18N06G	ON	145-3651●		1.010	0.740	0.540	0.460	0.350
NTF3055-100T1G	ON	SMD 143-1322●		0.560	0.410	0.310	0.250	0.200
NTF3055L108T1G	ON	SMD 143-1323●		0.610	0.410	0.300	0.240	0.180
IRF9Z34SPBF	VISH	SMD 129-8499●		2.010	1.470	1.130	0.880	0.840
NTF2955T1G	ON	SMD 145-3649●		0.790	0.560	0.390	0.340	0.270
NTF3055L175T1G	ON	SMD 145-3648●		0.520	0.380	0.280	0.220	0.185
NTP2955G	ON	145-3650●		1.150	0.810	0.640	0.500	0.400
STN3PF06	ST	SMD 129-1978●	RL	0.740	0.580	0.450	0.370	0.320
IRF9Z24SPBF	VISH	SMD 129-8498●		1.400	1.050	0.810	0.610	0.590
MTD5P06VT4G	ON	SMD 145-9139●		0.570	0.450	0.370	– –	– –
MLP1N06CLG	ON	145-3647●		1.600	1.150	0.880	0.710	0.570
MMFT960T1G	ON	SMD 145-3645●		0.620	0.450	0.340	0.270	0.220
BSS138W E6327	INF	SMD 147-1701●		0.062	0.052	0.043	0.042	0.041
BSS159N E6327	INF	SMD 147-1702●		0.250	0.189	0.168	0.158	0.147
TSM2N7000CT	TS	129-9312●		0.085	0.061	0.038	0.033	0.030
2N7000G	ON	145-9027●		0.142	0.126	0.119	– –	– –
MMBF170LT1G	ON	SMD 143-1321●		0.124	0.086	0.065	0.053	0.045
SN7002W L6433	INF	SMD 147-1758●		0.053	0.044	0.043	0.042	0.032
2N7002TA	ZET	SMD 147-1177●		0.220	0.151	0.096	0.083	0.061
TSM2N7002CX	TS	SMD 129-9313●		0.062	0.045	0.029	0.024	0.021
ZXMC4559DN8TA	ZET	SMD 147-1155●		1.550	1.110	0.940	0.900	– –
ZXMN6A11DN8TA	ZET	SMD 147-1151●		0.930	0.670	0.560	0.540	– –

100V to 450V


D²PAK (TO-263AB)


SOT-23


TO-247max


SO-8


I-PAK (TO-251)


TO-92


PowerFlat

V_{DS} V	Polarity	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	P_D @ 25°C W	Mftr.	Package	Order Code	Mftrs. list No.
100	N	0.01	140	450	ST	TO-247	129-1998	STY140NS10
100	P	0.117	23	140	IR	D2-PAK	129-8541	IRF9540NSTRLPBF
100	P	0.117	23	140	IR	TO-262	129-8540	IRF9540NLPBF
100	N	0.165	12	56.6	ON	D-PAK	145-9155	NTD12N10G
100	P	0.2	19	150	VISH	D2-PAK	129-8492	IRF9540SPBF
100	P	0.3	12	88	VISH	D2-PAK	129-8491	IRF9530SPBF
100	P	0.48	6.8	48	IR	D2-PAK	129-8515	IRF9520NSTRLPBF
100	P	0.6	6.8	60	VISH	D2-PAK	129-8490	IRF9520STRLPBF
100	N	0.6	5.5	40	INF	D2-PAK	147-1704	BUZ73AL
100	P	1.2	2.8	43	VISH	D2-PAK	129-8489	IRF9510SPBF
100	N	6	0.17	0.36	ZET	SOT-23	147-1175	BSS123ATA
100	N	14	63	140	IR	I-PAK	129-8556	IRLU3110ZPBF
100	N	18	8.3	2.5	IR	SOIC	129-8555	IRF7853PBF
150	N	0.24	2.2	2.5	IR	SOIC	129-8488	IRF6216PBF
150	N	1.2	0.9	2	IR	TSOP-6	129-8505	IRF5802TRPBF
150	N	0.032	60	320	IR	D2-PAK	129-8503	IRFS52N15DPBF
150	N	44	5.2	3	IR	SOIC	129-8546	IRF7494PBF
200	N	0.054	44	320	IR	D2-PAK	129-8484	IRFS38N20DTRLP
200	N	0.081	30	214	ON	TO-220	145-3659	NTP30N20G
200	N	0.105	20	80	ST	PowerFLAT 6 x 5	129-1976	STL20NM20N
200	N	0.18	14	86	IR	D-PAK	129-8545	IRFR13N15DTRLP
200	P	0.5	11	125	VISH	D2-PAK	129-8496	IRF9640LPBF
200	P	0.5	11	125	VISH	D2-PAK	129-8497	IRF9640STRLPBF
200	P	0.8	6.5	74	VISH	D2-PAK	129-8494	IRF9630STRLPBF
200	N	2.2	0.6	2	IR	TSOP-6	129-8504	IRF5801TRPBF
200	N	25	65	330	IR	TO-247	129-8553	IRFP4227PBF
200	N	26	62	330	IR	D2-PAK	129-8538	IRFS4227PBF
240	N	10	0.2	0.35	ON	TO-92	145-3661	VN2410LZL1G
300	N	59	46	430	IR	TO-247	129-8480	IRFP4242PBF
450	N	50	0.14	2	ZET	SOT-223	147-1160	ZVN0545GTA

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Mftrs. List No.	Mftrs.	Mftr.	Order Code		1+	Price Each 25+	100+
STL20NM20N	PowerFLAT 6 x 5	ST	SMD 129-1976●	RL	1.750	1.490	1.110
STY140NS10	TO-247	ST	129-1998●		10.190	9.300	6.930
IRFP4242PBF	TO-247	IR	129-8480●		6.240	4.590	3.780
IRFS38N20DTRLP	D2-PAK	IR	SMD 129-8484●	RL	3.540	2.590	2.210
IRF6216PBF	SOIC	IR	SMD 129-8488●		1.270	0.830	0.710
IRF9510SPBF	D2-PAK	VISH	SMD 129-8489●		1.110	0.960	0.750
IRF9520STRLPBF	D2-PAK	VISH	SMD 129-8490●	RL	1.390	1.020	0.800
IRF9530SPBF	D2-PAK	VISH	SMD 129-8491●		1.680	1.240	0.960
IRF9540SPBF	D2-PAK	VISH	SMD 129-8492●		2.700	1.990	1.540
IRF9630STRLPBF	D2-PAK	VISH	SMD 129-8494●	RL	1.870	1.380	1.060
IRF9640LPBF	D2-PAK	VISH	SMD 129-8496●		2.460	1.820	1.390
IRF9640STRLPBF	D2-PAK	VISH	SMD 129-8497●	RL	2.460	1.820	1.390
IRFS52N15DPBF	D2-PAK	IR	SMD 129-8503●		3.430	2.500	1.950
IRF5801TRPBF	TSOP-6	IR	SMD 129-8504●	RL	0.570	0.440	0.340
IRF5802TRPBF	TSOP-6	IR	SMD 129-8505●	RL	0.560	0.420	0.330
IRF9520NSTRLPBF	D2-PAK	IR	SMD 129-8515●	RL	0.990	0.730	0.610
IRFS4227PBF	D2-PAK	IR	SMD 129-8538●		4.100	3.020	2.480
IRF9540NLPBF	TO-262	IR	129-8540●		2.480	1.820	1.460
IRF9540NSTRLPBF	D2-PAK	IR	SMD 129-8541●	RL	2.590	1.900	1.630
IRFR13N15DTRLP	D-PAK	IR	SMD 129-8545●	RL	0.770	0.570	0.450
IRF7494PBF	SOIC	IR	SMD 129-8546●		1.820	1.330	1.120
IRFP4227PBF	TO-247	IR	129-8553●		5.560	4.100	3.190
IRF7853PBF	SOIC	IR	SMD 129-8555●		1.670	1.210	0.930
IRLU3110ZPBF	I-PAK	IR	129-8556●		2.180	1.590	1.300
NTP30N20G	TO-220	ON	145-3659●		3.380	2.410	1.870
VN2410LZL1G	TO-92	ON	145-3661●		0.950	0.680	0.530
NTD12N10G	D-PAK	ON	SMD 145-9155●		0.540	0.490	0.460
ZVN0545GTA	SOT-223	ZET	SMD 147-1160●		0.680	0.490	0.410
BSS123ATA	SOT-23	ZET	SMD 147-1175●		0.310	0.220	0.189
BUZ73AL	D2-PAK	INF	SMD 147-1704●		0.660	0.520	0.460

TO-220



● Available in Tubes

V_{DS} V	$R_{DS(on)}$ max. Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Mftrs List No.
N Channel						
60	0.01	85	300	4	160	FQP85N06
60	0.014	70	180	4	150	RFP70N06
60	0.016	65	260	4	150	FQP65N06
60	0.022	50	200	4	120	FQP50N06
60	0.022	50	120	4	131	RFP50N06
60	0.07	27	108	-4	120	FQP27P06
60	0.12	17	68	-4	79	FQP17P06
60	0.41	7	28	-4	45	FQP7P06
60	0.41	7	28	-4	45	FQP7P06
100	0.023	57	228	4	160	FQP70N10
100	0.04	40	100	4	160	RFP40N10
100	0.052	33	132	4	127	FQP33N10
200	0.4	9	36	4	100	IRF630
240	2.2	0.3	1.4	2	0.8	TN2404KL
500	0.43	12.5	50	5	170	FQP13N50
500	0.73	9	36	5	147	FQP9N50
500	2.7	3.4	13.6	5	70	FQP4N50
500	4.9	2.7	10.8	-5	85	FQP3P50
500	10.5	1.5	6	-5	63	FQP1P50

RL Re-reeling available

Power MOSFETs - continued

TO-220 - continued

V_{DS} V	$R_{DS(on)}$ max. Ω	I_D cont. @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. (*min) V	P_D @ 25°C W	Mftrs List No.
N Channel						
600	2.2	4.4	17.6	5	106	FQP4N60
800	1.95	5.8	23.2	5	158	FQP6N80
800	2.6	4.8	19.2	5	140	FQP5N80
900	3.3	4.2	16.8	5	140	FQP4N90
900	7.2	2.2	8.8	5	85	FQP2N90

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Mftrs. List No.	Order Code	Price Each 1+	25+	100+
FQP13N50	**984-5488**	1.94	1.39	1.07
FQP17P06	**984-6506**	0.60	0.42	0.30
FQP1P50	**984-6522**	0.58	0.42	0.32
FQP27P06	**984-6530**	0.59	0.46	0.34
FQP2N90	**984-5526**	0.78	0.55	0.43
FQP33N10	**984-5534**	0.93	0.66	0.50
FQP3P50	**984-6549**	0.75	0.53	0.40
FQP4N50	**984-5577**	0.61	0.44	0.34
FQP4N60	**984-5585**	0.96	0.71	0.53
FQP4N90	**984-5607**	1.24	0.90	0.69
FQP50N06	**984-5615**	0.79	0.58	0.46
FQP5N80	**984-5623**	1.30	0.92	0.72
FQP65N06	**984-5658**	1.45	1.05	0.80
FQP6N80	**984-5674**	1.48	1.07	0.83
TN2404KL	**102-1756**	1.28	0.65	0.42
FQP70N10	**984-5682**	1.29	0.94	0.71
FQP7P06	**984-6557**	0.44	0.30	0.24
FQP85N06	**984-5739**	1.49	1.01	0.73
FQP9N50	**984-5747**	1.10	0.82	0.62
FQP7P06	**984-6557**	0.44	0.30	0.24
RFP40N10	**984-5763**	0.90	0.66	0.48
RFP50N06	**984-5771**	1.07	0.78	0.59
RFP70N06	**984-5780**	1.23	0.84	0.60
IRF630	**980-2380**	1.00	0.78	0.58

Tubes of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
FQP13N50	NEW **156-4103**	50.63	34.10	29.07
FQP70N10	NEW **156-4105**	46.46	31.97	26.92
FQP17P06	NEW **156-4167**	14.09	12.69	11.43
FQP27P06	NEW **156-4168**	16.19	14.57	13.11
FQP50N06	NEW **156-4104**	25.05	17.60	14.54
FQP85N06	NEW **156-4106**	48.01	33.04	28.00

TO-220, N Channel 20V to 1500V



TO-220 & TO-220AB
Lead spacing=2.54



Isolated Tab:
TO-220SIS
TO-220FH
TO-220FP

V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. list No.
20	0.004	180	700	230	IR	IRF1302PBF
20	0.0057	92	330	79	IR	IRF3711ZPBF
20	0.006	110	440	120	IR	IRF3711PBF
20	0.0085	77	280	88	IR	IRF3706PBF
20	0.009	77	308	87	IR	IRF3704PBF
30	0.0019	75	—	345	FCH	ISL9N302AP3
30	0.0028	210	1000	230	IR	IRF3703PBF
30	0.0033	240	960	330	IR	IRF1503PBF
30	0.007	70	240	187	SLX	SUP75P03-07
30	0.009	90	360	120	IR	IRF3709PBF
30	0.0095	59	230	57	IR	IRF3707ZPBF
30	0.0116	54	65	55	FCH	FDP8880
30	0.012	62	248	87	IR	IRF3708PBF
40	0.002	280	1080	330	IR	IRF2804PBF
40	0.0036	210	850	330	IR	IRF2204PBF
40	0.0037	190	750	220	IR	IRF1404ZPBF
40	0.004	162	650	200	IR	IRF1404PBF
40	0.0046ohm	120	480	300	ST	STP100NF04
40	0.009	100	400	170	IR	IRF1104PBF
40	0.055	120	470	140	IR	IRF4104PBF
50	0.008	75	240	250	SLX	SUP75P05-08
55	0.0047	175	700	330	IR	IRF2805PBF
55	0.0049	150	600	230	IR	IRF1405ZPBF
55	0.0053	169	680	330	IR	IRF1405PBF
55	0.0065	80	320	300	ST	STP80NF55-06
55	0.0065	110	440	170	IR	IRF3205ZPBF
55	0.0075	94	360	140	IR	IRF1010ZPBF
55	0.006	75	—	215	FCH	HUF75345P3
55	0.008	80	320	300	ST	STP140NF55
55	0.008	80	320	300	ST	STP80NF55-08
55	0.008	80	320	300	ST	STP80NF55L-06
55	0.008	98	390	150	IR	IRF3205PBF.
55	0.009	75	150	150	FCH	HUF75343P3
55	0.011	61	240	91	IR	IRFZ48ZPBF
55	0.0125	68	270	115	IR	IRF1010NPBF
55	0.0136	51	200	82	IR	IRFZ46ZPBF
55	0.0139	51	200	80	IR	IRFZ44ZPBF
55	0.014	64	210	130	IR	IRFZ48NPBF
55	0.012	75	160	200	FCH	HUF75339P3
55	0.016	66	70	150	FCH	HUF75333P3
55	18mohm	80	—	300	ST	STP80PF55
55	0.02	46	180	88	IR	IRFZ46NPBF
55	0.024	41	160	83	IR	IRFZ44NPBF
55	0.04	26	100	56	IR	IRFZ34NPBF
55	0.07	17	68	45	IR	IRFZ24NPBF
60	0.0046	80	320	242	FCH	FDP5800
60	0.008	75	240	187	SLX	SUP75N06-08
60	0.0085	84	340	140	IR	IRF1010EZPBF
60	0.009	115	360	270	IR	IRFB4215PBF
60	0.012	81	330	170	IR	IRF1010EPBF
60	0.012	57	230	92	IR	IRFZ44VZPBF
60	0.012	72	290	150	IR	IRFZ48VPBF
60	0.016	60	240		ST	STP60NF06
60	0.018	50	200	30	ST	STP55NF06
60	0.0165	55	220	115	IR	IRFZ44VPBF
60	0.018	50	290	190	VISH	IRFZ48PBF
60	0.018	50	290	190	VISH	IRFZ48RPBF
60	0.018	60	240	120	SLX	SUP60N06-18
60	0.023	48	192	110	IR	IRFZ44EPBF
60	0.025	48	144	100	FCH	NDP6060
60	0.028	30	120	70	IR	IRFZ34VPBF
60	0.028	23	92	30	ST	STF40NF06
60	0.028	50	200	150	VISH	IRFZ44RPBF
60	0.028ohm	26	152	80	ST	STP45NF06
60	0.028	50	200	150	VISH	IRFZ44PBF
60	0.042	28	112	68	IR	IRFZ34EPBF
60	0.06	17	68	44	IR	IRFZ24VPBF
60	0.2	10	40	36	VISH	IRFZ14PBF
60	7.1	79	315	110	IR	IRF1018EPBF
60	12.6	43	170	71	IR	IRFB3806PBF
75	3.6mohm	180	720	330	IR	IRFB3207PBF
75	0.0045	170	680	330	IR	IRF2907ZPBF
75	5mohm	130	510	250	IR	IRFB3307PBF
75	0.007	140	550	330	IR	IRF3808PBF
75	0.0078	130	520	330	IR	IRF1407PBF
75	0.0094	89	350	170	IR	IRF2807ZPBF
75	0.0126	80	320	200	IR	IRF3007PBF
75	0.013	71	280	150	IR	IRF2807PBF
75	3.3	210	850	—	IR	IRFB3077PBF
75	7.34	80	310	140	IR	IRFB3607PBF
80	0.01	95	380	210	IR	IRF1312PBF
80	0.01	75	240	187	SLX	SUP75N08-10
100	0.0085	90	360	250	FCH	FQP90N10V2
100	0.052	28	110	107	FCH	IRF540A
100	0.077	28	110	150	VISH	IRF540PBF
150	0.034	45	180	220	FCH	FQP45N15V2
200	26	65	260	—	IR	IRFB4227PBF
200	0.041	61	244	417	FCH	FDP61N20
200	0.12	18	72	123	FCH	FQP18N20V2
230	37	56	220	370	IR	IRFB4233PBF
450	0.68	10	40	40	TOSH	2SK3869
500	0.14	22	88	160	ST	STP25NM50N
500	0.14	22	88	40	ST	STF25NM50N
500	0.19	18	72	140	ST	STP21NM50N
500	0.225	18	72	208	FCH	FQP18N50V2
500	0.23	20	80	250	FCH	FDP20N50
500	0.3	15	60	50	TOSH	2SK3934
500	0.34	14	56	160	ST	STP15NK50ZFP
500	0.38	11	44	100	ST	STP12NM50N
500	0.65	8	32	134	FCH	IRF840B
500	0.85	8	32	74	TOSH	2SK3759
500	0.85	8	32	40	TOSH	2SK3561
500	1.14	5	20	73	FCH	FQP5N50C
500	1.5	5	20	35	TOSH	2SK3563
550	0.35	12	48	160	ST	STP12NM50
600	0.17	20	80	160	ST	STP25NM60N
600	0.17	20	80	40	ST	STF25NM60N
600	0.22	17	64	140	ST	STP21NM60N
600	0.26	16	48	167	FCH	FCP16N60
600	0.38	11	44	25	ST	STF12NM50N
600	0.43	13	52	50	TOSH	2SK3797
600	0.53	12	48	225	FCH	FQP12N60C
600	0.6	9.5	38	156	FCH	FQP10N60C
600	0.75	10	40	45	TOSH	2SK3569
600	0.95	7	28	125	ST	STP9NK60ZD
600	0.95	7	28	30	ST	STF9NK60ZD
600	0.95	7	28	30	ST	STP9NK60ZFP
600	1	7.5	30	147	FCH	FQP8N60C
600	1	3.9	11.7	50	FCH	FCP4N60
600	1.25	6	24	40	TOSH	2SK3562
600	2	4	16	25	ST	STP4NK60ZFP
600	2.2	3.5	14	35	TOSH	2SK3567
600	3.6	1.35	8	54	FCH	FQP2N60C
600	4.5	2	5	25	TOSH	2SK3767
650	0.38	11	33	125	FCH	FCP11N60F
700	0.85	8.6	34	110	ST	STP10NK70Z
800	1.5	6.2	24.8	30	ST	STP8NK80ZFP
800	1.57	6.6	26.4	167	FCH	FQP7N80C
800	2.1	5.5	22	158	FCH	FQP6N80C

RL Re-reeling available

Farnell

V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. list No.
800	4	3	12	107	FCH	FQP3N80C
800	4.5	2.5	10	25	ST	STF3NK80Z
900	1.12	8	32	205	FCH	FQP9N90C
900	1.3	8	—	50	TOSH	2SK3799
900	1.93	6	24	167	FCH	FQP6N90C
900	2.5	5	15	45	TOSH	2SK3565
900	6.4	2.5	7.5	40	TOSH	2SK3566
900	2	5.8	23.2	30	ST	STP6NK90ZFP
1500	7	4	12	160	ST	STP4N150

*Exceeds package current handling capability
**Denotes fully protected, MESH Overlay™, voltage clamped

Mftrs. List No.	Pkg.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
2SK3561	TO-220SIS	TOSH	130-0772●	1.140	0.800	0.620	0.570
2SK3562	TO-220SIS	TOSH	130-0777●	1.160	0.820	0.630	0.570
2SK3563	TO-220SIS	TOSH	130-0771●	0.750	0.430	0.360	0.350
2SK3566	TO-220SIS	TOSH	130-0782●	0.810	0.630	0.500	0.380
2SK3565	TO-220SIS	TOSH	130-0783●	1.440	1.010	0.920	0.880
2SK3567	TO-220SIS	TOSH	130-0776●	0.810	0.680	0.550	0.390
2SK3569	TO-220SIS	TOSH	130-0779●	1.930	1.350	1.220	1.150
2SK3759	TO-220AB	TOSH	130-0786●	0.790	0.560	0.500	0.470
2SK3767	TO-220SIS	TOSH	130-0774●	0.570	0.410	0.330	0.310
2SK3797	TO-220SIS	TOSH	130-0780●	1.730	1.200	1.100	1.040
2SK3799	TO-220SIS	TOSH	130-0784●	2.850	2.000	1.820	1.720
2SK3869	TO-220SIS	TOSH	130-0769●	0.750	0.530	0.470	0.450
2SK3934	TO-220SIS	TOSH	130-0773●	1.590	1.110	1.010	0.960
FCP4N60	TO-220	FCH	149-5236●	1.070	0.870	0.730	0.660
FCP11N60F	TO-220	FCH	122-8346●	2.020	1.430	1.200	1.080
FCP16N60	TO-220	FCH	122-8347●	3.410	2.380	2.040	1.800
FDP20N50	TO-220	FCH	122-8358●	2.840	1.990	1.690	1.500
FDP5800	TO-220	FCH	149-5237●	1.470	1.000	0.720	0.670
FDP61N20	TO-220	FCH	122-8360●	1.970	1.340	0.960	0.900
FDP8880	TO-220	FCH	122-8334●	0.540	0.370	0.320	0.290
FQP2N60C	TO-220	FCH	109-5062●	0.440	0.320	0.280	0.191
FQP3N80C	TO-220	FCH	109-5065●	0.460	0.340	0.290	0.200
FQP5N50C	TO-220	FCH	109-5068●	0.550	0.420	0.350	0.240
FQP6N80C	TO-220	FCH	109-5071●	0.890	0.670	0.550	0.390
FQP6N90C	TO-220	FCH	109-5072●	1.160	0.830	0.630	0.480
FQP7N80C	TO-220	FCH	109-5073●	1.020	0.770	0.620	0.460
FQP8N60C	TO-220	FCH	109-5074●	0.760	0.560	0.480	0.340
FQP9N90C	TO-220	FCH	109-5077●	1.620	1.210	1.010	0.720
FQP10N60C	TO-220	FCH	109-5054●	0.850	0.650	0.530	0.360
FQP12N60C	TO-220	FCH	109-5057●	0.950	0.720	0.590	0.410
FQP18N20V2	TO-220	FCH	109-5058●	0.770	0.580	0.480	0.340
FQP18N50V2	TO-220	FCH	109-5059●	1.590	1.200	1.000	0.680
FQP45N15V2	TO-220	FCH	109-5066●	1.210	0.910	0.760	0.540
FQP90N10V2	TO-220	FCH	109-5076●	2.360	1.770	1.460	1.040
HUF75333P3	TO-220AB	FCH	101-7709●	1.680	1.210	0.940	0.620
HUF75339P3	TO-220AB	FCH	109-5124●	0.930	0.700	0.570	0.400
HUF75343P3	TO-220AB	FCH	101-7710●	2.180	1.610	1.270	0.850
HUF75345P3	TO-220AB	FCH	984-5755●	1.660	1.170	0.850	0.790
IRFB3077PBF	TO-220AB	IR	129-8539●	5.390	3.720	2.850	2.430
IRFB3207PBF	TO-220AB	IR	905-2070●	5.160	2.930	2.240	1.910
IRFB3307PBF	TO-220AB	IR	905-2089●	3.520	2.080	1.580	1.390
IRFB4215PBF	TO-220AB	IR	865-7963●	2.670	1.520	1.160	1.020
IRFB4227PBF	TO-220AB	IR	129-8536●	4.060	2.990	2.500	2.030
IRFB4233PBF	TO-220AB	IR	129-8506●	5.510	4.030	3.320	2.710
IRFZ14PBF	TO-220AB	VISH	865-0152●	1.040	0.550	0.390	0.350
IRFZ24NPBF	TO-220AB	IR	865-0160●	1.420	0.750	0.530	0.430
IRFZ24VPBF	TO-220AB	IR	865-9222●	1.660	0.890	0.630	0.510
IRFZ34EPBF	TO-220AB	IR	865-0187●	0.960	0.810	0.660	0.510
IRFZ34VPBF	TO-220AB	IR	865-9257●	1.180	0.740	0.570	0.470
IRFZ34NPBF	TO-220AB	IR	865-0195●	1.620	0.860	0.610	0.490
IRFZ44PBF	TO-220AB	VISH	865-9281●	2.170	1.230	0.920	0.690
IRFZ44VZPBF	TO-220AB	IR	821-0578●	1.850	1.010	0.750	0.620
IRFZ44ZPBF	TO-220AB	IR	865-9311●	1.770	0.970	0.720	0.510
IRFZ46ZPBF	TO-220AB	IR	865-9346●	1.740	0.960	0.710	0.590
IRFZ48ZPBF	TO-220AB	IR	865-9370●	1.350	0.770	0.570	0.480
IRFZ44EPBF	TO-220AB	IR	865-0217●	1.900	1.040	0.770	0.640
IRFZ44NPBF	TO-220AB	IR	865-0225●	1.690	0.920	0.690	0.530
IRFZ44RPBF	TO-220AB	VISH	865-0241●	1.630	0.930	0.690	0.550
IRFZ44VPBF	TO-220AB	IR	865-0250●	1.760	0.960	0.720	0.590
IRFZ46NPBF	TO-220AB	IR	865-0268●	1.800	0.980	0.730	0.600
IRFZ48PBF	TO-220AB	VISH	865-0276●	3.120	1.710	1.270	1.050
IRFZ48NPBF	TO-220AB	IR	101-3497●	1.920	1.170	1.140	1.110
IRFZ48RPBF	TO-220AB	VISH	865-0284●	4.450	2.860	2.220	1.360
IRF540PBF	TO-220	VISH	SMD 864-8310●	2.430	1.380	1.030	0.780
IRFZ48VPBF	TO-220AB	IR	865-0292●	1.940	1.230	0.960	0.620
IRF540A	TO-220	FCH	109-5126●	0.830	0.610	0.510	0.360
IRF840B	TO-220	FCH	109-5127●	0.870	0.650	0.530	0.380
IRF1010EPBF	TO-220AB	IR	864-7968●	2.660	1.450	1.090	0.940
IRF1010EZPBF	TO-220AB	IR	865-7327●	2.620	1.440	1.070	0.890
IRF1010NPBF	TO-220AB	IR	864-7976●	2.500	1.370	1.050	1.020
IRF1010ZPBF	TO-220AB	IR	865-7343●	2.250	1.450	1.080	0.890
IRF1104PBF	TO-220AB	IR	864-7992●	3.000	1.640	1.220	1.010
IRF1302PBF	TO-220AB	IR	865-7360●	2.850	1.560	1.160	0.960
IRF1312PBF	TO-220AB	IR	865-7378●	2.810	1.590	1.220	1.030
IRF1404PBF	TO-220AB	IR	864-8018●	3.270	1.860	1.420	1.240
IRF1404ZPBF	TO-220AB	IR	865-7394●	3.150	1.790	1.370	1.200
IRF1405PBF	TO-220AB	IR	864-8026●	3.710	2.340	1.790	1.460
IRF1405ZPBF	TO-220AB	IR	865-7416●	3.080	1.750	1.340	1.170
IRF1407PBF	TO-220AB	IR	865-7424●	3.310	1.870	1.440	1.260
IRF1503PBF	TO-220AB	IR	865-7440●	2.330	1.380	1.060	0.930
IRF2204PBF	TO-220AB	IR	865-7475●	3.310	1.880	1.440	1.260
IRF2804PBF	TO-220AB	IR	865-7491●	4.780	2.710	2.080	1.820
IRF2805PBF	TO-220AB	IR	865-7505●	3.460	1.960	1.500	1.310
IRF2807PBF	TO-220AB	IR	864-8034●	2.880	1.570	1.170	1.130
IRF2807ZPBF	TO-220AB	IR	865-7521●	2.630	1.490	1.110	0.750
IRF2907ZPBF	TO-220	IR	865-7548●	3.290	2.780	2.130	1.860
IRF3007PBF	TO-220AB	IR	865-7556●	2.700	1.480	1.100	0.910
IRF3205PBF.	TO-220AB	IR	864-8050●	3.110	1.810	1.380	1.050
IRF3205ZPBF	TO-220AB	IR	821-0640●	2.890	1.580	1.180	0.970

Mftrs. List No.	Pkg.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
IRF3703PBF	TO-220AB	IR	865-7580●	4.700	2.670	2.040	1.780
IRF3704PBF	TO-220AB	IR	864-8115●	1.940	1.060	0.790	0.660
IRF3706PBF	TO-220AB	IR	864-8123●	1.820	1.000	0.740	0.620
IRF3707ZPBF	TO-220AB	IR	865-7599●	1.190	0.750	0.550	0.440
IRF3708PBF	TO-220AB	IR	864-8158●	1.930	1.060	0.790	0.590
IRF3709PBF	TO-220AB	IR	865-7610●	1.150	0.660	0.490	0.440
IRF3711PBF	TO-220AB	IR	864-8182●	1.580	1.200	0.890	0.740
IRF3711ZPBF	TO-220AB	IR	865-7645●	1.280	0.810	0.590	0.470
IRF3808PBF	TO-220AB	IR	865-7661●	3.470	1.970	1.510	1.320
IRF4104PBF	TO-220AB	IR	865-7670●	2.080	1.180	0.880	0.740
IRF1018EPBF	TO-220	IR	NEW 160-2223●	0.940	0.660	0.570	0.510
IRFB3607PBF	TO-220AB	IR	NEW 160-2227●	0.940	0.660	0.570	0.510
IRFB3806PBF	TO-220AB	IR	NEW 160-2228●	0.710	0.500	0.420	0.380
ISL9N302AP3	TO-220	FCH	149-5238●	3.140	2.530	2.110	1.930
NDP6060	TO-220AB	FCH	101-7725●	0.680	0.500	0.430	0.420
STF3NK80Z	TO-220FP	ST	129-1972●	0.840	0.630	0.510	0.430
STF9NK60ZD	TO-220FP	ST	129-1975●	2.280	1.700	1.380	1.120
STF12NM50N	TO-220FP	ST	125-2952●	3.750	2.670	2.070	1.760
STF25NM50N	TO-220FP	ST	125-2955●	6.670	5.130	3.660	3.130
STF25NM60N	TO-220FP	ST	125-2956●	4.710	4.010	3.110	2.560
STF40NF06	TO-220FP	ST	129-1973●	1.330	1.020	0.750	0.570
STP4N150	TO-220	ST	125-2935●	6.170	5.230	3.880	3.090
STP80NF55-06	TO-220	ST	129-1987●	2.310	1.930	1.570	1.400
STP80NF55-08	TO-220	ST	129-1988●	2.240	1.720	1.310	1.150
STP80NF55L-06	TO-220	ST	129-1989●	2.920	2.190	1.780	1.550
STP140NF55	TO-220	ST	129-1982●	2.310	1.720	1.380	1.120
STP4NK60ZFP	TO-220FP	ST	129-1985●	0.860	0.690	0.580	0.490
STP6NK90ZFP	TO-220FP	ST	129-1986●	1.580	1.150	0.970	0.840
STP8NK80ZFP	TO-220FP	ST	129-1990●	2.030	1.470	1.240	1.080
STP9NK60ZD	TO-220	ST	129-1991●	1.650	1.310	1.000	0.800
STP9NK60ZFP	TO-220FP	ST	129-1992●	1.400	1.050	0.880	0.740
STP10NK70Z	TO-220	ST	129-1979●	1.790	1.290	1.070	0.930
STP15NK50ZFP	TO-220	ST	129-1983●	2.290	1.720	1.430	1.230
STP12NM50	TO-220	ST	129-1980●	3.340	2.890	2.200	1.860
STP12NM50N	TO-220	ST	125-2939●	3.250	2.410	1.720	1.470
STP21NM50N	TO-220	ST	125-2941●	3.140	2.420	1.730	1.470
STP21NM60N	TO-220	ST	125-2942●	4.740	3.580	2.780	2.430
STP25NM50N	TO-220	ST	125-2943●	6.520	5.040	3.590	3.060
STP25NM60N	TO-220	ST	125-2944●	6.300	4.740	3.700	3.210
STP45NF06	TO-220AB	ST	993-5630●	1.280	0.960	0.790	0.630
STP55NF06	TO-220	ST	980-3211●	1.160	0.880	0.640	0.550
STP60NF06	TO-220	ST	980-3262●	1.680	1.300	0.940	0.800
STP80PF55	TO-220AB	ST	993-5703●	2.230	1.650	1.310	1.240
STP100NF04	TO-220AB	ST	993-5509●	2.070	1.550	1.250	1.020
SUP60N06-18	TO-220AB	SLX	955-1557●	2.020	1.410	1.070	0.880
SUP75N06-08	TO-220AB	SLX	955-1573●	3.550	3.090	2.690	1.940
SUP75N08-10	TO-220AB	SLX	955-1581●	2.640	2.300	2.000	1.600
SUP75P03-07	TO-220AB	SLX	955-1590●	3.080	2.840	2.690	2.000
SUP75P05-08	TO-220AB	SLX	955-1603●	4.770	3.420	2.730	2.000

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Tubes of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRF1405PBF	NEW 156-4084●	100.30	83.44	76.15
IRF2807PBF	NEW 156-4085●	77.76	63.87	62.79
IRF3205PBF.	NEW 156-4086●	153.28	119.68	114.51
IRFZ34NPBF	NEW 156-4096●	27.05	20.14	19.76
IRF2804PBF	NEW 156-4099●	96.36	85.74	79.64
IRF2907ZPBF	NEW 156-4100●	93.54	73.65	68.02
IRFB4215PBF	NEW 156-4101●	51.28	46.03	41.86
IRFZ48NPBF	NEW 156-4132●	82.28	67.89	66.85
FQP90N10V2	NEW 156-4137●	62.62	45.30	41.99
IRF540A	NEW 156-4138●	24.01	17.60	16.16
BUZ11	NEW 156-4140●	18.74	16.63	15.77
IRFB4227PBF	NEW 156-4141●	118.91	98.40	90.10
SUP75P03-07	NEW 156-4148●	127.76	96.82	90.09
SUP75P05-08	NEW 156-4149●	129.75	96.82	95.24
IRF1104PBF	NEW 156-4083●	54.66	42.01	41.28
IRF3706PBF	NEW 156-4087●	34.94	29.92	26.74

TO-220



FAIRCHILD SEMICONDUCTOR™ ON Semiconductor International IOR Rectifier

V_{DS} V	$R_{DS(on)}$ max. Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftrs List No.
N-Channel						
60	0.01	85	300	4	160	FQP85N06
60	0.016	65	260	4	150	FQP65N06
60	0.022	50	—	4	120	FQP50N06
60	0.047	30	100	2	96	RFP30N06LE
60	0.15	12	28	2	48	RFP3055LE
100	0.052	33	—	4	127	FQP33N10
100	0.22	10	35	2	40	MTP10N10ELG
200	0.4	9	36	4	100	IRF630
P-Channel						
30	0.025	50	150	-2	125	MTP50P03HDLG.
60	0.12	23	81	—	90	MTP23P06VG
100	0.3	12	—	—	88	MTP12P10G
100	0.117	19	76	-4	94	IRF9540NPBF
500	6	2	—	-4	75	MTP2P50EG

RL Re-reeling available

Power MOSFETs - continued

TO-220 - continued

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+	1K+
MTP2P50EG	ON	955-6893	2.400	1.710	1.370	1.140	0.940
IRF9540NPBF	IR	864-8620	2.080	1.140	0.850	0.700	0.690
MTP10N10ELG	ON	955-6036	1.230	0.830	0.650	0.490	0.400
MTP12P10G	ON	955-6907	1.880	1.330	1.070	0.890	0.730
MTP23P06VG	ON	955-5927	1.690	1.200	0.960	0.800	0.660
RFP3055LE	FCH	101-7797	0.700	0.450	0.320	0.240	0.192
FQP50N06	FCH	984-5615	0.790	0.580	0.460	0.330	0.300
MTP50P03HDLG.	ON	955-7032	3.370	2.140	1.590	1.310	1.160
FQP65N06	FCH	984-5658	1.450	1.050	0.800	0.530	0.460
RFP30N06LE	FCH	101-7798	0.800	0.560	0.430	0.320	0.290
FQP33N10	FCH	984-5534	0.930	0.660	0.500	0.380	0.340
FQP85N06	FCH	984-5739	1.490	1.010	0.730	0.680	0.620

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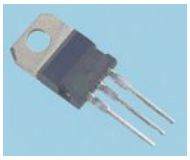
Tubes of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
FQP50N06	NEW 156-4104	25.05	17.60	14.54
FQP85N06	NEW 156-4106	48.01	33.04	28.00
IRF9540NPBF	NEW 156-4164	55.22	42.58	41.86

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Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
STP100NF04	993-5509	2.07	1.55	1.25	1.02	1.00
STP150NF55	993-5550	2.19	1.70	1.38	1.14	1.12
STP45NF06	993-5630	1.28	0.96	0.79	0.63	0.51
STP80PF55	993-5703	2.23	1.65	1.31	1.24	

TO-220AB N-Channel 30V - 250V

International IOR Rectifier



V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftr.	Mftrs List No.
N Channel							
30	0.0063	87	350	2.25	79	IR	IRF3709ZPBF
60	0.003	210	840	4	300	IR	IRFB3206PBF
60	0.0042	160	620	4	230	IR	IRFB3306PBF
75	0.0041	170	670	4	300	IR	IRFB3207ZPBF
75	0.0058	120	480	4	230	IR	IRFB3307ZPBF
100	0.0045	180	670	4	370	IR	IRFB4110PBF
100	0.006	127	560	4	250	IR	IRFB4310ZPBF
100	0.009	97	390	4	230	IR	IRFB4410ZPBF
100	0.0725	18	57	5	60	IR	IRFB4212PBF
150	0.015	83	330	5	330	IR	IRFB4321PBF
150	0.095	17	51	4.9	80	IR	IRFB4019PBF
200	0.1	18	52	4.9	100	IR	IRFB4020PBF
250	0.033	60	230	5	390	IR	IRFB4332PBF
250	0.046	46	180	5	330	IR	IRFB4229PBF

495889

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
IRF3709ZPBF	143-6943	1.94	1.07	0.79	0.66
IRFB3206PBF	143-6949	4.12	2.96	2.59	2.31
IRFB3207ZPBF	143-6950	4.62	3.31	2.90	2.58
IRFB3306PBF	143-6951	3.51	2.51	2.22	1.96
IRFB3307ZPBF	143-6952	3.51	2.51	2.22	1.96
IRFB4019PBF	143-6953	1.43	1.23	1.09	0.95
IRFB4020PBF	143-6954	1.73	1.26	1.10	0.98
IRFB4110PBF	143-6955	6.55	3.72	2.85	2.43
IRFB4212PBF	143-6956	1.66	0.91	0.68	0.56
IRFB4229PBF	143-6957	4.82	3.46	3.04	2.71
IRFB4310ZPBF	143-6959	3.38	2.41	2.11	1.88
IRFB4321PBF	143-6961	5.04	3.62	3.16	2.83
IRFB4332PBF	143-6962	5.83	4.18	3.67	3.27
IRFB4410ZPBF	143-6963	2.86	2.14	1.87	1.66

TO-220, N Channel 40V to 1500V



TO-220 Lead spacing=2.54

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$I_{DM\ pulse}$ @ 25°C A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftrs List No.
N Channel						
40	0.0029	120	480	4	330	STP270N4F3
200	0.034	75	300	4	190	STP75NF20
200	0.125	18	72	4	90	STP20NF20
1500	9	2.5	10	5	140	STP3N150

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Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
STP20NF20	145-6351	1.28	1.05	0.84	0.72
STP270N4F3	145-6346	2.82	2.41	1.87	1.62
STP3N150	145-6344	3.63	3.10	2.41	2.09
STP75NF20	145-6354	3.01	2.32	1.93	1.74

N Channel 100V to 900V

FAIRCHILD SEMICONDUCTOR · International IOR Rectifier · VISHAY · Infineon · Fuji Electric Device Technology Co.,Ltd.

TO-220 (SOT-78B)



Lead spacing=2.54

$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. list No.
20 V V_{DS}					
0.006	110	440	120	IR	IRF3711PBF
100 V V_{DS}					
0.01	96	380	250	IR	IRFB4410PBF
0.014	61	70	150	FCH	FDP3652
0.014	75	300	200	IR	IRFB4710PBF
0.015	80	320	260	IR	IRF8010PBF
0.015	80	320	300	ST	STP80NF10
0.018	59	240	160	IR	IRF3710ZPBF
0.025	73	292	270	FE	2SK3586-01
0.025	59	236	200	IR	IRFB59N10DPBF
0.0265	36	140	92	IR	IRF540ZPBF
0.028	50	200	150	ST	STP40NF10
0.028	46	180	150	IR	IRF3710PBF
0.035	40	160	115	ST	STP35NF10
0.036	41	160	170	IR	IRF1310NPBF
0.045	35	140	115	ST	STP30NF10
0.052	27	110	94	IR	IRF540NPBF
0.06	26	104	85	ST	STP24NF10
0.1	19	76	75	FCH	FQP19N10
0.11	15	60	63	IR	IRF530NPBF
0.16	14	60	88	VISH	IRF530PBF
0.165	9.6	37	44	IR	IRF520VPBF
0.2	9.5	38	47	IR	IRF520NPBF
0.27	9.2	37	60	VISH	IRF520PBF
0.35	7.3	29.2	40	FCH	FQP7N10
0.54	5.6	20	43	VISH	IRF510PBF
150 V V_{DS}					
0.032	60	240	320	IR	IRFB52N15DPBF
0.032	60	250	330	IR	IRFB61N15DPBF
0.042	37	150	150	IR	IRF3415PBF
0.045	41	164	200	IR	IRFB41N15DPBF
0.056	33	130	170	IR	IRFB33N15DPBF
0.07	27	108	136	IR	IRF3315PBF
0.09	23	92	136	IR	IRFB23N15DPBF
200 V V_{DS}					
0.04	56	220	380	IR	IRFB260NPBF
0.054	44	180	320	IR	IRFB38N20DPBF
0.055	42.6	180	300	IR	IRFB42N20DPBF
0.082	31	124	200	IR	IRFB31N20DPBF
0.1	24	96	170	IR	IRFB23N20DPBF
0.12	19.4	78	140	FCH	FQP19N20
0.13	21	84	125	INF	BUZ30A
0.15	18	72	150	IR	IRF640NPBF
0.17	16	64	140	IR	IRFB17N20DPBF
0.18	18	72	125	VISH	IRF640PBF
0.2	14.5	58	95	INF	BUZ31
0.3	9.3	37	82	IR	IRF630NPBF
0.4	7	28	40	INF	BUZ73
0.4	9	36	100	ST	IRF630
0.6	5.5	22	40	INF	BUZ73A
0.8	5.2	18	50	VISH	IRF620PBF
0.8	6	24	75	ST	IRF620
1.5	3.3	10	36	VISH	IRF610PBF
250 V V_{DS}					
0.28	14	56	125	VISH	IRF644PBF
0.435	8	32	88	VISH	IRF634NPBF
300 V V_{DS}					
0.13	32	128	270	FE	2SK3772-01
0.4	9	36	90	ST	STP12NK30Z

RL Re-reeling available

Farnell

$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. list No.
400 V V_{DS}					
0.55	9	36	110	ST	STP11NK40Z
0.55	10	40	125	VISH	IRF740PBF
0.55	10	40	125	VISH	IRF740APBF
0.55	10	32	125	VISH	IRF740LCPBF
0.62	7	28	98	FCH	FQP7N40
1	5.5	22	74	VISH	IRF730PBF
1	5.5	22	74	VISH	IRF730APBF
1	5.4	21.6	70	ST	STP7NK40Z
1.8	3	12	40	VISH	IRF720PBF
3.6	1.5	6	20	VISH	IRF710PBF
500 V V_{DS}					
0.52	11	44	170	VISH	IRFB11N50APBF
0.28	17	68	200	VISH	IRFB17N50LPBF
0.25	18	72	200	VISH	IRFB18N50KPBF
0.25	20	80	280	VISH	IRFB20N50KPBF
0.38	19	76	270	FE	2SK3682-01
0.52	10	40	125	ST	STP11NK50Z
0.85	7.2	28.8	110	ST	STP9NK50Z
0.85	8	32	125	VISH	IRF840PBF
0.85	8	32	125	VISH	IRF840APBF
0.85	8	28	125	VISH	IRF840LCPBF
1.5	4.4	17.6	70	ST	STP5NK50Z
1.4	5	20	74	VISH	IRF830APBF
1.5	4.5	18	74	VISH	IRF830PBF
2.7	3	12	45	ST	STP4NK50Z
3	2.5	10	40	VISH	IRF820PBF
3	2.5	10	50	VISH	IRF820APBF
600 V V_{DS}					
0.75	10	36	115	ST	STP10NK60Z
800 V V_{DS}					
1.8	5.2	20.8	125	ST	STP7NK80Z
2.6	4.8	19.2	140	FCH	FQP5N80
900 V V_{DS}					
4.25	3.6	14.4	130	FCH	FQP3N90

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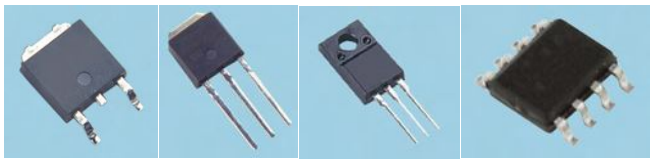
Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+
BUZ30A	INF	**105-6528●**	2.13	1.70	1.30
BUZ31	INF	**105-6531●**	1.58	1.27	0.97
BUZ73	INF	**115-6440●**	1.12	0.77	0.61
BUZ73A	INF	**115-6438●**	2.36	1.70	1.26
FDP3652	FCH	**101-7692●**	1.65	1.12	0.81
FQP3N90	FCH	**984-5550●**	1.03	0.75	0.57
FQP5N80	FCH	**984-5623●**	1.30	0.92	0.72
FQP7N10	FCH	**984-5690●**	0.38	0.28	0.21
FQP7N40	FCH	**984-5704●**	0.79	0.56	0.43
FQP19N10	FCH	**984-5496●**	0.72	0.51	0.39
FQP19N20	FCH	**984-5500●**	0.96	0.71	0.53
IRF510PBF	VISH	**864-8204●**	1.00	0.68	0.53
IRF520PBF	VISH	**864-8239●**	1.46	0.78	0.55
IRF610PBF	VISH	**864-8328●**	0.97	0.80	0.63
IRF710PBF	VISH	**864-8417●**	1.07	0.64	0.49
IRF720PBF	VISH	**864-8425●**	1.31	0.70	0.49
IRF730PBF	VISH	**864-8441●**	1.67	0.89	0.63
IRF740PBF	VISH	**864-8484●**	2.05	1.12	0.84
IRF820PBF	VISH	**864-8514●**	1.32	0.71	0.53
IRF830PBF	VISH	**864-8549●**	1.61	0.85	0.60
IRF840PBF	VISH	**864-8581●**	2.08	1.14	0.85
IRF1310NPBF	IR	**910-3023●**	3.23	1.85	1.40
IRF3315PBF	IR	**864-8077●**	2.16	1.18	0.88
IRF3415PBF	IR	**864-8093●**	3.43	2.02	1.55
IRF3710PBF	IR	**864-8166●**	2.66	1.46	1.09
IRF3710ZPBF	IR	**101-3470●**	2.85	1.56	1.16
IRF3711PBF	IR	**864-8182●**	1.58	1.20	0.89
IRF540ZPBF	IR	**821-0667●**	2.27	1.24	0.93
IRF520NPBF	IR	**910-3031●**	1.58	0.84	0.60
IRF520VPBF	IR	**865-7688●**	1.66	0.91	0.67
IRF530PBF	VISH	**864-8280●**	1.45	0.77	0.54
IRF620	ST	**980-2371●**	0.86	0.64	0.50
IRF620PBF	VISH	**864-8336●**	1.19	0.63	0.45
IRF630	ST	**980-2380●**	1.00	0.78	0.58
IRF630NPBF	IR	**864-8344●**	1.70	0.93	0.69
IRF634NPBF	VISH	**865-7734●**	1.67	0.89	0.63
IRF640NPBF	IR	**864-8379●**	2.17	1.19	0.88
IRF640PBF	VISH	**864-8395●**	1.52	0.86	0.72
IRF644PBF	VISH	**864-8409●**	1.88	1.07	0.81
IRF730APBF	VISH	**864-8433●**	1.63	0.87	0.62
IRF740APBF	VISH	**864-8468●**	1.89	1.03	0.77
IRF740LCPBF	VISH	**864-8476●**	3.02	1.66	1.24
IRF820APBF	VISH	**864-8506●**	1.57	0.86	0.64
IRF830APBF	VISH	**864-8522●**	1.90	1.04	0.78
IRF840APBF	VISH	**864-8557●**	1.94	1.06	0.79
IRF840LCPBF	VISH	**864-8573●**	2.23	1.22	0.91
IRF8010PBF	IR	**865-7823●**	3.09	1.69	1.26
IRFB11N50APBF	VISH	**864-8700●**	2.16	1.18	0.88
IRFB17N50LPBF	VISH	**864-8719●**	4.86	2.76	2.11
IRFB18N50KPBF	VISH	**864-8727●**	4.86	2.76	2.11
IRFB20N50KPBF	VISH	**865-7920●**	4.97	2.83	2.16
IRFB4410PBF	IR	**905-2046●**	3.16	2.20	1.68
IRFB17N20DPBF	IR	**865-7904●**	2.34	1.28	0.95
IRFB260NPBF	IR	**865-7939●**	4.58	2.60	1.99
IRFB23N15DPBF	IR	**864-8735●**	2.27	1.30	0.97
IRFB23N20DPBF	IR	**864-8743●**	3.21	1.82	1.39
IRFB31N20DPBF	IR	**864-8751●**	3.71	2.11	1.61
IRFB33N15DPBF	IR	**865-7947●**	3.00	1.64	1.22

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+
IRFB38N20DPBF	IR	**865-7955●**	3.93	2.23	1.71
IRFB41N15DPBF	IR	**864-8760●**	2.88	1.63	1.25
IRFB42N20DPBF	IR	**865-7971●**	4.32	2.45	1.88
IRFB4710PBF	IR	**864-8778●**	2.92	1.66	1.27
IRFB52N15DPBF	IR	**865-7980●**	3.89	2.21	1.69
IRFB59N10DPBF	IR	**864-8786●**	2.97	1.68	1.29
IRFB61N15DPBF	IR	**865-7998●**	3.64	2.14	1.75
STP7NK40Z	ST	**980-3300●**	1.03	0.82	0.64
STP7NK80Z	ST	**980-3319●**	2.04	1.57	1.21
STP10NK60Z	ST	**980-3017●**	1.16	0.88	0.71
STP12NK30Z	ST	**993-5533●**	1.45	1.09	0.85
STP35NF10	ST	**993-5592●**	1.23	0.94	0.70
STP80NF10	ST	**993-5681●**	2.40	1.79	1.44
STP24NF10	ST	**980-3106●**	0.91	0.68	0.53
STP30NF10	ST	**994-6403●**	0.87	0.66	0.51
STP40NF10	ST	**980-3157●**	1.32	1.03	0.86
STP4NK50Z	ST	**816-5220●**	0.49	0.37	0.29
STP5NK50Z	ST	**816-5270●**	0.80	0.59	0.46
STP9NK50Z	ST	**816-5300●**	1.09	0.82	0.64
STP11NK40Z	ST	**980-3033●**	0.94	0.78	0.65
STP11NK50Z	ST	**980-3050●**	2.09	1.61	1.25
2SK3586-01	FE	**120-8657●**	3.84	3.04	2.39
2SK3682-01	FE	**120-8660●**	3.91	3.11	2.43
2SK3772-01	FE	**120-8659●**	3.84	3.04	2.39
IRF530NPBF	IR	**864-8263●**	1.76	0.94	0.66
IRF540NPBF	IR	**864-8298●**	1.92	1.05	0.78

Tubes of 50

Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRF3710PBF	NEW **156-4088●**	90.73	70.78	68.02
IRF530NPBF	NEW **156-4089●**	29.87	23.02	22.68
IRF540NPBF	NEW **156-4090●**	36.64	28.20	27.91
IRF740PBF	NEW **156-4093●**	56.61	35.32	35.03
IRF840PBF	NEW **156-4094●**	56.61	43.68	42.83
IRF520NPBF	NEW **156-4102●**	28.17	21.87	21.51
IRFB31N20DPBF	NEW **156-4053●**	71.57	56.39	51.49
IRF640NPBF	NEW **156-4091●**	47.34	35.68	35.46
IRFB4710PBF	NEW **156-4095●**	66.50	55.24	50.57
IRFZ44VPBF	NEW **156-4097●**	34.39	24.16	21.51

MDmesh, SuperMesh MOSFETs



D-Pak (TO-252) | I-Pak (TO-251) | TO-220FP | SO-8

V_{DS} V	R_{DS} (on) Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ min. V	$V_{GS(th)}$ typ. V	$V_{GS(th)}$ max. V	E_{AS} mJ	Pd @ 25°C W	Package	Mftrs. List No.
20	0.2	2.5	10	—	—	—	—	2	SOIC	STS2DPFS20V
24	0.008	60	240	1	1.8	—	280	60	D-PAK	STD70N02L
500	2.7	3	12	2.5	3.5	4.5	120	45	I-PAK	STD4NK50ZD-1
600	4.8	2	8	3	3.75	4.5	120	45	I-PAK	STD2HNK60Z-1
600	0.45	11	44	3	4	5	350	35	TO-220FP	STP11NM60FDFP
650	0.45	10	40	2	3	4	200	100	I-PAK	STD11NM60N-1
650	0.45	10	40	2	3	4	200	25	TO-220FP	STF11NM60N
650	0.45	10	40	2	3	4	200	100	TO-220	STP11NM60N

* denotes logic level drive capable

453355

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
D-PAK (TO-252)					
STD70N02L	SMD **131-7107●**	1.23	0.82	0.67	0.58
I-PAK (TO-251)					
STD2HNK60Z-1	**131-7099●**	1.11	0.74	0.59	0.51
STD4NK50ZD-1	**131-7102●**	0.74	0.55	0.43	0.37
STD11NM60N-1	**131-7098●**	1.58	1.04	0.93	0.91
TO-220FP					
STF11NM60N	**131-7108●**	2.67	1.91	1.55	1.35
STP11NM60FDFP	**131-7112●**	2.53	1.91	1.49	1.29
TO-220					
STP11NM60N	**131-7113●**	4.25	2.82	2.30	1.97
SO-8, P Channel 2.7 V drive MOSFET + Schottky					
STS2DPFS20V	SMD **131-7116●**	0.99	0.64	0.52	0.46

PowerMOS - MDmesh 2nd Generation



D^2Pak (TO-263) | TO-247 | PowerFlat

RL Re-reeling available

Power MOSFETs - continued

PowerMOS - MDMesh 2nd Generation - continued


TO-220FP


TO-220


D²Pak (TO-252)

This series of devices is realized with the second generation of MDmesh ™ Technology. This revolutionary MOSFET associates a new verticle structure to the companies strip layout to yield one of the worlds lowest on-resistance and gate charge. It is therefore suitable for the most demanding high efficiency convertors.

V_{DSS} @ $T_{j\ max}$(V)	$R_{DS(on)}$ (Ω)	I_D (A)	P_D (W)	Case Style.	Mftrs List No.
200	0.105	20	80	PowerFLAT 6 x 5	STL20NM20N
300	0.09	30	160	TO-220	STP30NM30N
500	0.14	22	40	TO-220FP	STF25NM50N
500	0.14	22	160	TO-220	STP25NM50N
500	0.19	18	30	TO-220FP	STF21NM50N
500	0.19	18	140	TO-220	STP21NM50N
500	0.38	11	100	TO-220	STP12NM50N
550	0.1	45	417	TO-247	STW45NM50
550	0.19	18	140	TO-247	STW21NM50N
550	0.25	20	214	TO-247	STW20NM50
550	0.38	11	100	D-PAK	STD12NM50N
550	0.38	11	100	D2-PAK	STB12NM50N
600	0.14	22	160	TO-247	STW25NM50N
600	0.17	20	40	TO-220FP	STF25NM60N
600	0.17	20	160	TO-220	STP25NM60N
600	0.22	17	140	TO-220	STP21NM60N
600	0.38	11	25	TO-220FP	STF12NM50N
650	0.11	45	417	TO-247	STW45NM60
650	0.17	20	160	TO-247	STW25NM60N
650	0.17	20	160	D2-PAK	STB25NM60N
660	0.22	17	140	TO-247	STW21NM60N
660	0.22	17	140	D2-PAK	STB21NM60N
660	0.22	17	30	TO-220FP	STF21NM60N
700	1.2	7.5	156	TO-247	STW9NK70Z
1500	7	4	160	TO-247	STW4N150

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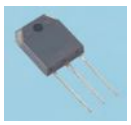
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
		Price Each				
STB12NM50N	SMD 129-1949● RL	2.25	1.62	1.40	1.21	1.07
STB21NM60N	SMD 129-1952● RL	2.76	2.10	1.62	1.42	1.22
STB25NM60N	SMD 129-1953● RL	3.88	3.39	2.63	2.12	1.96
STD12NM50N	SMD 125-2945● RL	2.54	1.95	1.57	1.32	1.18
STF12NM50N	125-2952●	3.75	2.67	2.07	1.76	1.58
STF21NM50N	125-2953●	3.53	2.71	1.93	1.65	1.47
STF21NM60N	129-1971●	3.87	2.94	2.27	1.97	1.74
STF25NM50N	125-2955●	6.67	5.13	3.66	3.13	2.78
STF25NM60N	125-2956●	4.71	4.01	3.11	2.56	2.37
STL20NM20N	SMD 129-1976● RL	1.75	1.49	1.11	0.87	0.73
STP12NM50N	125-2939●	3.25	2.41	1.72	1.47	1.31
STP21NM50N	125-2941●	3.14	2.42	1.73	1.47	1.38
STP21NM60N	125-2942●	4.74	3.58	2.78	2.43	2.12
STP25NM50N	125-2943●	6.52	5.04	3.59	3.06	2.74
STP25NM60N	125-2944●	6.30	4.74	3.70	3.21	2.81
STP30NM30N	NEW 145-6339●	5.31	4.57	3.54	3.07	2.69
STW4N150	125-2936●	5.83	5.28	4.09	3.19	3.12
STW9NK70Z	129-1997●	1.68	1.23	1.03	0.91	0.81
STW20NM50	129-1994●	5.36	3.89	3.32	2.88	2.58
STW21NM50N	125-2947●	4.26	3.42	2.66	2.13	2.01
STW21NM60N	125-2948●	3.29	2.66	2.22	1.90	1.67
STW25NM50N	125-2949●	5.81	4.97	3.65	2.90	2.74
STW25NM60N	125-2950●	5.70	5.17	4.00	3.11	3.02
STW45NM50	129-1995●	10.21	9.36	7.59	6.74	6.51
STW45NM60	129-1996●	12.51	10.44	8.35	7.61	6.93

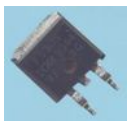
600V, SuperFET ™

FAIRCHILD SEMICONDUCTOR


TO-220


TO-220F


TO-3P


D²PAK (TO-263)

Farichild's proprietary, new generation of high voltage MOSFETs, Utilises an advanced charge balance mechanism for outstanding low on-resistance and lower gate charge performance. This advanced technology has been tailored to minimize conduction loss, provide superior switching performance, and withstand extreme dv/dt rate and higher avalanche energy. Consequently, SuperFET is very suitable for various AC/DC power conversion in switching mode operation for system miniaturisation and higher efficiency.

- Low gate charge
- Low on-resistance
- Superior switching performance and robustness

	$I_{D\ cont}$ @ 25°C A	$R_{DS(on)}$ Ω	P_D @ 25°C W	Package	Mftrs List No.
TO-220					
	7	0.53	83	TO-220AB	FCP7N60
	11	0.32	125	TO-220	FCP11N60
TO-220 Insulated					
	7	0.53	31	TO-220F	FCPF7N60
	11	0.32	36	TO-220F	FCPF11N60
	20	0.15	39	TO-220F	FCPF20N60
TO-3P					
	20	0.15	208	TO-3P	FCA20N60
D²Pak					
	11	0.32	125	D2-PAK	FCB11N60
	20	0.15	208	D2-PAK	FCB20N60

419670

Mftrs. List No.	Order Code	1+	25+	100+	250+	500+
		Price Each				
FCA20N60	109-4998●	4.12	3.10	2.54	1.80	1.64
FCB11N60	SMD 109-4999● RL	2.05	1.53	1.26	0.90	0.82
FCB20N60	SMD 109-5000● RL	5.11	3.83	3.16	2.23	2.04
FCP11N60	109-5003●	2.07	1.41	1.05	1.00	0.93
FCP7N60	109-5005●	1.81	1.35	1.12	0.80	0.73
FCPF11N60	109-5007●	2.65	1.98	1.64	1.15	1.06
FCPF20N60	109-5008●	3.58	2.43	1.81	1.72	1.60
FCPF7N60	109-5009●	1.67	1.14	0.82	0.76	0.70

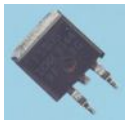
MOSFET, Infineon

New

Infineon technologies

N Channel


TO-220


TO-263


SOT-223


TO-247

Vds Typ V	Current, Id Cont A	Resistance, Rds on Ohm	Vgs th typ V	Mftrs. List No.	Order Code
TO-220					
550	23	0.14	3	IPA50R140CP	166-3985
550	17	0.199	3	IPA50R199CP	166-3986
550	13	0.25	3	IPA50R250CP	166-3988
550	12	0.299	3	IPA50R299CP	166-3989
550	10	0.35	3	IPA50R350CP	166-3990
550	9	0.399	3	IPA50R399CP	166-3991
550	7.1	0.52	3	IPA50R520CP	166-3992
650	25	0.125	3	IPA60R125CP	166-3993
650	21	0.165	3	IPA60R165CP	166-3994
650	16	0.199	3	IPA60R199CP	166-3995
650	12	0.25	3	IPA60R250CP	166-3996
650	11	0.299	3	IPA60R299CP	166-3997
650	9	0.385	3	IPA60R385CP	166-3998
650	6.8	0.52	3	IPA60R520CP	166-4000
650	6.1	0.6	3	IPA60R600CP	166-4002
900	5.7	1	3	IPA90R1K0C3	166-4003
900	5.1	1.2	3	IPA90R1K2C3	166-4004
900	15	0.34	3	IPA90R340C3	166-4005
900	11	0.5	3	IPA90R500C3	166-4006
900	6.9	0.8	3	IPA90R800C3	166-4007
550	23	0.14	3	IPP50R140CP	166-4052
550	17	0.199	3	IPP50R199CP	166-4053
550	13	0.25	3	IPP50R250CP	166-4054
550	12	0.299	3	IPP50R299CP	166-4055
550	10	0.35	3	IPP50R350CP	166-4056
560	9	0.399	3	IPP50R399CP	166-4057
550	7.1	0.52	3	IPP50R520CP	166-4058
650	31	0.099	3	IPP60R099CP	166-4059
600	31	0.099	3	IPP60R099CPA	166-4060
650	25	0.125	3	IPP60R125CP	166-4061
650	21	0.165	3	IPP60R165CP	166-4063
650	16	0.199	3	IPP60R199CP	166-4064
650	12	0.25	3	IPP60R250CP	166-4065
650	11	0.299	3	IPP60R299CP	166-4066
650	9	0.385	3	IPP60R385CP	166-4067
650	6.8	0.52	3	IPP60R520CP	166-4068
650	6.1	0.6	3	IPP60R600CP	166-4069
900	5.7	1	3	IPP90R1K0C3	166-4070
900	5.1	1.2	3	IPP90R1K2C3	166-4071
900	15	0.34	3	IPP90R340C3	166-4072
900	11	0.5	3	IPP90R500C3	166-4073
900	6.9	0.8	3	IPP90R800C3	166-4075
650	6.6	0.7	4	SPA07N60CFD	166-4093
600	11	0.44	4	SPA11N60CFD	166-4094
650	13.4	0.33	4	SPA15N60CFD	166-4095
650	15	0.28	3	SPA15N65C3	166-4096
650	11	0.44	4	SPI11N60CFD	166-4113
650	6.6	0.7	4	SPP07N60CFD	166-4121
650	13.4	0.33	4	SPP15N60CFD	166-4122
650	15	0.28	3	SPP15N65C3	166-4123
650	20.7	0.22	4	SPP20N60CFD	166-4124
650	21.7	0.185	4	SPP24N60CFD	166-4125
TO-263					
550	23	0.14	3	IPB50R140CP	166-4009
550	17	0.199	3	IPB50R199CP	166-4010
550	13	0.25	3	IPB50R250CP	166-4011
550	12	0.299	3	IPB50R299CP	166-4012
650	31	0.099	3	IPB60R099CP	166-4014
600	31	0.099	3	IPB60R099CPA	166-4015
650	25	0.125	3	IPB60R125CP	166-4016
650	21	0.165	3	IPB60R165CP	166-4017
650	16	0.199	3	IPB60R199CP	166-4018

RL Re-reeling available

Farnell

Vds Typ V	Current, Id Cont A	Resistance, Rds on Ohm	Vgs th typ V	Mftrs. List No.	Order Code
TO-220					
650	12	0.25	3	IPB60R250CP	166-4019
650	11	0.299	3	IPB60R299CP	166-4020
650	9	0.385	3	IPB60R385CP	166-4021
650	6.8	0.52	3	IPB60R520CP	166-4022
650	6.1	0.6	3	IPB60R600CP	166-4023
650	11	0.38	3	SPB11N60C3	166-4097
560	11.6	0.38	3	SPB12N50C3	166-4099
560	16	0.28	3	SPB16N50C3	166-4101
800	17	0.29	3	SPB17N80C3	166-4102
560	21	0.19	3	SPB21N50C3	166-4103
TO-252					
550	9	0.399	3	IPD50R399CP	166-4024
550	7.1	0.52	3	IPD50R520CP	166-4026
650	9	0.385	3	IPD60R385CP	166-4027
650	6.8	0.52	3	IPD60R520CP	166-4028
650	6.1	0.6	3	IPD60R600CP	166-4029
900	5.1	1.2	3	IPD90R1K2C3	166-4030
800	2	2.7	3	SPD02N80C3	166-4105
560	3.2	1.4	3	SPD03N50C3	166-4106
560	4.5	0.95	3	SPD04N50C3	166-4107
800	4	1.3	3	SPD04N80C3	166-4108
650	6.2	0.75	3	SPD06N60C3	166-4109
800	6	0.9	3	SPD06N80C3	166-4110
650	7.3	0.6	3	SPD07N60C3	166-4111
560	7.6	0.6	3	SPD08N50C3	166-4112
TO-262					
550	23	0.14	3	IPI50R140CP	166-4031
550	10	0.35	3	IPI50R350CP	166-4032
560	9	0.399	3	IPI50R399CP	166-4033
650	31	0.099	3	IPI60R099CP	166-4034
600	31	0.099	3	IPI60R099CPA	166-4035
650	25	0.125	3	IPI60R125CP	166-4036
650	21	0.165	3	IPI60R165CP	166-4038
650	16	0.199	3	IPI60R199CP	166-4039
650	12	0.25	3	IPI60R250CP	166-4040
650	11	0.299	3	IPI60R299CP	166-4041
650	9	0.385	3	IPI60R385CP	166-4042
650	6.8	0.52	3	IPI60R520CP	166-4043
650	6.1	0.6	3	IPI60R600CP	166-4044
900	5.7	1	3	IPI90R1K0C3	166-4045
900	5.1	1.2	3	IPI90R1K2C3	166-4046
900	15	0.34	3	IPI90R340C3	166-4047
900	11	0.5	3	IPI90R500C3	166-4048
900	6.9	0.8	3	IPI90R800C3	166-4051
650	13.4	0.33	4	SPI15N60CFD	166-4114
650	15	0.28	3	SPI15N65C3	166-4115
650	20.7	0.22	4	SPI20N60CFD	166-4117
TO-251					
550	7.1	0.52	3	IPS50R520CP	166-4076
650	0.8	6	3	SPS01N60C3	166-4126
650	1.8	3	3	SPS02N60C3	166-4127
650	3.2	1.4	3	SPS03N60C3	166-4129
650	4.5	0.95	3	SPS04N60C3	166-4131
650	1.8	3	3	SPU02N60C3	166-4132
650	3.2	1.4	3	SPU03N60C3	166-4133
TO-247					
550	23	0.14	3	IPW50R140CP	166-4077
550	17	0.199	3	IPW50R199CP	166-4078
550	13	0.25	3	IPW50R250CP	166-4079
550	12	0.299	3	IPW50R299CP	166-4080
550	10	0.35	3	IPW50R350CP	166-4081
560	9	0.399	3	IPW50R399CP	166-4082
650	60	0.045	3	IPW60R045CP	166-4083
650	39	0.075	3	IPW60R075CP	166-4084
650	12	0.25	3	IPW60R250CP	166-4085
900	36	0.12	3	IPW90R120C3	166-4087
900	5.7	1	3	IPW90R1K0C3	166-4088
900	5.1	1.2	3	IPW90R1K2C3	166-4089
900	15	0.34	3	IPW90R340C3	166-4090
900	11	0.5	3	IPW90R500C3	166-4091
900	6.9	0.8	3	IPW90R800C3	166-4092
650	6.6	0.7	4	SPW07N60CFD	166-4134
650	13.4	0.33	4	SPW15N60CFD	166-4135
560	16	0.28	3	SPW16N50C3	166-4136
650	21.7	0.185	4	SPW24N60CFD	166-4137
650	47	0.065	3	SPW47N65C3	166-4138
SOT-223					
650	0.3	6	3	SPN01N60C3	166-4118
650	0.4	2.5	3	SPN02N60C3	166-4119
650	0.7	1.4	3	SPN03N60C3	166-4120

527279

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
IPA50R140CP	166-3985●	3.94	3.06	2.51	2.30	1.97
IPA50R199CP	166-3986●	2.68	2.08	1.70	1.56	1.34
IPA50R250CP	166-3988●	2.14	1.66	1.36	1.24	1.07
IPA50R299CP	166-3989●	1.97	1.53	1.26	1.15	0.98
IPA50R350CP	166-3990●	1.69	1.32	1.08	0.99	0.85
IPA50R399CP	166-3991●	1.59	1.24	1.02	0.93	0.80
IPA50R520CP	166-3992●	1.29	1.00	0.82	0.76	0.64
IPA60R125CP	166-3993●	5.30	4.13	3.38	3.09	2.65
IPA60R165CP	166-3994●	3.76	2.93	2.40	2.19	1.89
IPA60R199CP	166-3995●	3.02	2.35	1.92	1.77	1.51
IPA60R250CP	166-3996●	2.75	2.14	1.75	1.60	1.38
IPA60R299CP	166-3997●	2.31	1.80	1.47	1.35	1.15
IPA60R385CP	166-3998●	1.87	1.45	1.18	1.09	0.94
IPA60R520CP	166-4000●	1.52	1.18	0.97	0.89	0.77
IPA60R600CP	166-4002●	1.37	1.06	0.87	0.80	0.68
IPA90R1K0C3	166-4003●	2.81	2.18	1.79	1.64	1.41
IPA90R1K2C3	166-4004●	2.19	1.70	1.40	1.28	1.09
IPA90R340C3	166-4005●	8.11	6.31	5.16	4.73	4.06
IPA90R500C3	166-4006●	5.65	4.40	3.59	3.30	2.83
IPA90R800C3	166-4007●	3.63	2.83	2.31	2.12	1.82
IPB50R140CP	SMD 166-4009●	3.91	3.04	2.48	2.28	1.95

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
IPB50R199CP	SMD 166-4010●	2.68	2.08	1.70	1.56	1.34
IPB50R250CP	SMD 166-4011●	2.14	1.66	1.36	1.24	1.07
IPB50R299CP	SMD 166-4012●	1.97	1.53	1.26	1.15	0.98
IPB60R099CP	SMD 166-4014●	7.32	5.70	4.66	4.27	3.66
IPB60R099CPA	SMD 166-4015●	8.84	6.89	5.63	5.16	4.43
IPB60R125CP	SMD 166-4016●	5.13	4.00	3.26	3.00	2.57
IPB60R165CP	SMD 166-4017●	3.76	2.93	2.40	2.19	1.89
IPB60R199CP	SMD 166-4018●	3.02	2.35	1.92	1.77	1.51
IPB60R250CP	SMD 166-4019●	2.75	2.14	1.75	1.60	1.38
IPB60R299CP	SMD 166-4020●	2.31	1.80	1.47	1.35	1.15
IPB60R385CP	SMD 166-4021●	1.87	1.45	1.18	1.09	0.94
IPB60R520CP	SMD 166-4022●	1.52	1.18	0.97	0.89	0.77
IPB60R600CP	SMD 166-4023●	1.37	1.06	0.87	0.80	0.68
IPD50R399CP	SMD 166-4024●	1.49	1.16	0.95	0.87	0.75
IPD50R520CP	SMD 166-4026●	1.22	0.95	0.78	0.71	0.61
IPD60R385CP	SMD 166-4027●	1.77	1.38	1.12	1.03	0.89
IPD60R520CP	SMD 166-4028●	1.42	1.10	0.91	0.83	0.71
IPD60R600CP	SMD 166-4029●	1.27	0.99	0.81	0.73	0.63
IPD90R1K2C3	SMD 166-4030●	2.12	1.65	1.35	1.23	1.06
IPI50R140CP	166-4031●	3.94	3.06	2.51	2.30	1.97
IPI50R350CP	166-4032●	1.69	1.32	1.08	0.99	0.85
IPI50R399CP	166-4033●	1.59	1.24	1.02	0.93	0.80
IPI60R099CP	166-4034●	7.32	5.70	4.66	4.27	3.66
IPI60R099CPA	166-4035●	8.84	6.89	5.63	5.16	4.43
IPI60R125CP	166-4036●	5.13	4.00	3.26	3.00	2.57
IPI60R165CP	166-4038●	3.76	2.93	2.40	2.19	1.89
IPI60R199CP	166-4039●	3.02	2.35	1.92	1.77	1.51
IPI60R250CP	166-4040●	2.75	2.14	1.75	1.60	1.38
IPI60R299CP	166-4041●	2.31	1.80	1.47	1.35	1.15
IPI60R385CP	166-4042●	1.87	1.45	1.18	1.09	0.94
IPI60R520CP	166-4043●	1.52	1.18	0.97	0.89	0.77
IPI60R600CP	166-4044●	1.37	1.06	0.87	0.80	0.68
IPI90R1K0C3	166-4045●	2.81	2.18	1.79	1.64	1.41
IPI90R1K2C3	166-4046●	2.19	1.70	1.40	1.28	1.09
IPI90R340C3	166-4047●	7.10	6.31	5.16	4.73	4.06
IPI90R500C3	166-4048●	5.65	4.40	3.59	3.30	2.83
IPI90R800C3	166-4051●	3.63	2.83	2.31	2.12	1.82
IPP50R140CP	166-4052●	3.94	3.06	2.51	2.30	1.97
IPP50R199CP	166-4053●	2.68	2.08	1.70	1.56	1.34
IPP50R250CP	166-4054●	2.14	1.66	1.36	1.24	1.07
IPP50R299CP	166-4055●	1.97	1.53	1.26	1.15	0.98
IPP50R350CP	166-4056●	1.69	1.32	1.08	0.99	0.85
IPP50R399CP	166-4057●	1.59	1.24	1.02	0.93	0.80
IPP50R520CP	166-4058●	1.29	1.00	0.82	0.76	0.64
IPP60R099CP	166-4059●	7.32	5.70	4.66	4.27	3.66
IPP60R099CPA	166-4060●	8.84	6.89	5.63	5.16	4.43
IPP60R125CP	166-4061●	4.99	4.00	3.26	3.00	2.57
IPP60R165CP	166-4063●	3.76	2.93	2.40	2.19	1.89
IPP60R199CP	166-4064●	3.02	2.35	1.92	1.77	1.51
IPP60R250CP	166-4065●	2.75	2.14	1.75	1.60	1.30
IPP60R299CP	166-4066●	2.31	1.80	1.47	1.35	1.09
IPP60R385CP	166-4067●	1.87	1.45	1.18	1.09	0.94
IPP60R520CP	166-4068●	1.52	1.18	0.97	0.89	0.77
IPP60R600CP	166-4069●	1.37	1.06	0.87	0.80	0.68
IPP90R1K0C3	166-4070●	2.81	2.18	1.79	1.64	1.41
IPP90R1K2C3	166-4071●	2.19	1.70	1.40	1.28	1.09
IPP90R340C3	166-4072●	8.11	6.31	5.16	4.73	4.06
IPP90R500C3	166-4073●	5.65	4.40	3.59	3.30	2.83
IPP90R800C3	166-4075●	3.63	2.83	2.31	2.12	1.82
IPS50R520CP	166-4076●	1.22	0.95	0.78	0.71	0.61
IPW50R140CP	166-4077●	4.45	3.46	2.84	2.60	2.22
IPW50R199CP	166-4078●	3.21	2.50	2.05	1.88	1.61
IPW50R250CP	166-4079●	2.67	2.08	1.70	1.56	1.34
IPW50R299CP	166-4080●	2.50	1.95	1.59	1.46	1.26
IPW50R350CP	166-4081●	2.22	1.73	1.42	1.30	1.11
IPW50R399CP	166-4082●	2.14	1.66	1.36	1.24	1.07
IPW60R045CP	166-4083●	16.47	14.65	11.99	10.99	8.91
IPW60R075CP	166-4084●	10.49	9.32	7.63	6.99	5.67
IPW60R250CP	166-4085●	3.28	2.56	2.09	1.92	1.64
IPW90R120C3	166-4087●	20.16	17.92	14.66	13.44	11.52
IPW90R1K0C3	166-4088●	3.21	2.50	2.05	1.88	1.61
IPW90R1K2C3	166-4089●	2.60	2.02	1.65	1.52	1.31
IPW90R340C3	166-4090●	8.76	6.81	5.58	5.11	4.39
IPW90R500C3	166-4091●	6.33	4.93	4.03	3.69	3.16
IPW90R800C3	166-4092●	4.04	3.14	2.57	2.36	2.02
SPA07N60CFD	166-4093●	1.68	1.31	1.07	0.98	0.84
SPA11N60CFD	166-4094●	2.41	1.88	1.53	1.41	1.20
SPA15N60CFD	166-4095●	3.08	2.40	1.96	1.80	1.54
SPA15N65C3	166-4096●	2.71	2.11	1.72	1.58	1.36
SPB11N60C3	SMD 166-4097●	2.20	1.71	1.41	1.29	1.10
SPB12N50C3	SMD 166-4099●	1.80	1.40	1.14	1.05	0.90
SPB16N50C3	SMD 166-4101●	2.14	1.66	1.36	1.24	1.07
SPB17N80C3	SMD 166-4102●	4.28	3.33	2.72	2.50	2.14
SPB21N50C3	SMD 166-4103●	2.98	2.54	2.01	1.73	1.60
SPD02N80C3	SMD 166-4105●	0.94	0.81	0.63	0.55	0.51
SPD03N50C3	SMD 166-4106●	0.81	0.69	0.54	0.47	0.44
SPD04N50C3	SMD 166-4107●	0.91	0.70	0.58	0.53	0.46
SPD04N80C3	SMD 166-4108●	1.51	1.20	0.97	0.81	0.75
SPD06N60C3	SMD 166-4109●	1.29	1.03	0.83	0.68	0.63
SPD06N80C3	SMD 166-4110●	1.92	1.53	1.22	1.02	0.94
SPD07N60C3	SMD 166-4111●	1.35	1.05	0.86	0.79	0.67
SPD08N50C3	SMD 166-4112●	1.33	1.06	0.85	0.70	0.65
SPI11N60CFD	166-4113●	2.41	1.88	1.53	1.41	1.20
SPI15N60CFD	166-4114●	3.01	2.35	1.92	1.75	1.51
SPI15N65C3	166-4115●	3.01	2.35	1.92	1.75	1.51
SPI20N60CFD	166-4117●	3.84	2.98	2.44	2.23	1.92
SPN01N60C3	SMD 166-4118●	0.60	0.47	0.39	0.36	0.31
SPN02N60C3	SMD 166-4119●	0.64	0.50	0.41	0.38	0.32
SPN03N60C3	SMD 166-4120●	0.78	0.60	0.49	0.45	0.39
SPP07N60CFD	166-4121●	1.95	1.52	1.24	1.14	0.98
SPP15N60CFD	166-4122●	3.08	2.40	1.96	1.80	1.54
SPP15N65C3	166-4123●	3.08	2.40	1.96	1.80	1.54
SPP20N60CFD	166-4124●	3.36	2.98	2.44	2.23	1.92
SPP24N60CFD	166-4125●	4.62	3.59	2.94	2.69	2.32
SPS01N60C3	166-4126●	0.60	0.47	0.39	0.36	0.31

RL Re-reeling available

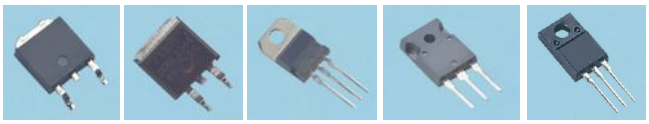
Power MOSFETs - continued

MOSFET, Infineon - continued

N Channel - continued

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
SPS02N60C3	166-4127●	0.64	0.50	0.41	0.38	0.32
SPS03N60C3	166-4129●	0.78	0.60	0.49	0.45	0.39
SPS04N60C3	166-4131●	0.98	0.76	0.62	0.57	0.49
SPU02N60C3	166-4132●	0.64	0.50	0.41	0.38	0.32
SPU03N60C3	166-4133●	0.78	0.60	0.49	0.45	0.39
SPW07N60CFD	166-4134●	2.12	1.65	1.35	1.23	1.06
SPW15N60CFD	166-4135●	3.43	2.66	2.18	2.00	1.71
SPW16N50C3	166-4136●	2.53	2.08	1.70	1.56	1.34
SPW24N60CFD	166-4137●	5.30	4.13	3.38	3.09	2.65
SPW47N65C3	166-4138●	13.56	10.55	8.63	7.91	6.78

CoolMOS™ Power MOSFETs, 60-650V



TO-252 (D-Pak) | TO-263 (D^2Pak) | TO-220 | TO-247 | TO-220 Insulated

V_{DS} V	N/P Channel	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftrs. list No.
TO-252						
60	P	8.8	35.2	4	42	SPD08P06P
60	P	18.6	74.4	4	80	SPD18P06P
600	N	7.3	14.6	5.5	83	SPD07N60S5
650	N	1.8	5.4	3.9	25	SPD02N60C3
TO-220						
560	N	21	63	3.9	208	SPP21N50C3
560	N	16	48	3.9	160	SPP16N50C3
600	N	7.3	14.6	5.5	83	SPP07N60S5
600	N	20	40	5.5	208	SPP20N60S5
650	N	4.5	13.5	3.9	50	SPP04N60C3
650	N	24.3	72.9	3.9	240	SPP24N60C3
650	N	20.7	62.1	3.9	208	SPP20N65C3
650	N	7.3	21.9	3.9	83	SPP07N60C3
650	N	20.7	62.1	3.9	208	SPP20N60C3
650	N	11	33	3.9	125	SPP11N60C3
800	N	11	33	3.9	156	SPP11N80C3
800	N	17	51	3.9	208	SPP17N80C3
Isolated TO-220 (TO-220-3-31)						
650	N	20.7	62.1	3.9	34.5	SPA20N60C3
800	N	8	24	3.9	40	SPA08N80C3
800	N	11	33	3.9	41	SPA11N80C3
800	N	17	51	3.9	42	SPA17N80C3
TO-263 (D2-Pak)						
600	N	11	22	5.5	125	SPB11N60S5
600	N	20	40	5.5	208	SPB20N60S5
650	N	20.7	62.1	3.9	208	SPB20N60C3
TO-247						
560	N	52	156	3.9	417	SPW52N50C3
560	N	32	96	3.9	284	SPW32N50C3
600	N	8.3	52	5	35	SPW20N60CFD
600	N	34.1	85	5	313	SPW35N60CFD
650	N	47	141	3.9	415	SPW47N60C3
650	N	11	28	5	125	SPW11N60CFD
650	N	20	40	5.5	208	SPW20N60S5
650	N	20.7	62.1	3.9	208	SPW20N60C3
800	N	17	51	3.9	208	SPW17N80C3

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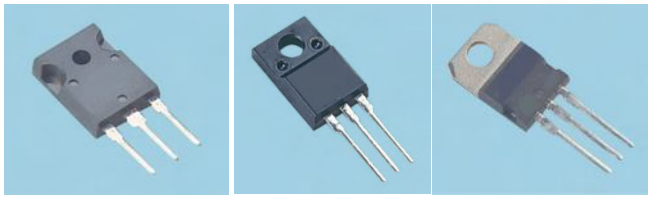
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
SPA08N80C3	109-5691●	2.70	2.15	1.65	1.21	1.16
SPA11N80C3	109-5692●	3.20	2.50	1.82	1.33	1.29
SPA17N80C3	109-5693●	4.69	3.66	2.67	2.04	1.99
SPA20N60C3	115-6420●	4.49	3.23	2.70	2.20	2.09
SPB20N60C3	SMD 105-6541● RL	4.37	3.14	2.62	1.81	1.79
SPD02N60C3	SMD 115-6419●	0.81	0.58	0.47	0.40	0.37
SPD07N60S5	SMD 115-6431● RL	4.46	2.57	2.00	1.32	1.26
SPD08P06P	SMD 105-6543● RL	0.37	0.36	0.34	– –	– –
SPD18P06P	SMD 105-6544● RL	1.42	1.00	0.82	0.54	0.52
SPP04N60C3	105-6545●	1.43	1.06	0.78	0.56	0.50
SPP07N60C3	105-6546●	1.69	1.35	1.03	0.84	0.78
SPP07N60S5	105-6547●	2.01	1.28	1.23	– –	– –
SPP11N60C3	105-6549●	2.58	2.06	1.58	– –	– –
SPP11N80C3	109-5695●	3.20	2.50	1.82	1.33	1.30
SPP16N50C3	109-5697●	2.52	2.01	1.54	1.14	1.10
SPP17N80C3	109-5698●	4.69	3.66	2.67	1.97	1.92
SPP20N60C3	105-6551●	3.82	2.99	2.18	– –	– –
SPP20N60S5	105-6552●	4.19	3.27	2.24	– –	– –
SPP20N65C3	109-5700●	4.69	3.22	2.59	1.99	1.87
SPP21N50C3	109-5701●	3.27	2.55	1.86	1.37	1.36
SPW20N60CFD	109-5706●	5.51	3.68	3.01	2.20	2.18
SPP24N60C3	109-5702●	6.11	4.08	3.35	2.43	2.36
SPB11N60S5	SMD 121-4265●	3.58	2.63	2.26	1.44	1.35
SPB20N60S5	SMD 121-4264● RL	5.09	3.80	3.07	1.89	1.63
SPW11N60CFD	109-5703●	4.64	3.08	2.53	1.83	1.78
SPW17N80C3	109-5704●	5.62	4.39	3.21	2.36	2.25
SPW20N60C3	105-6555●	4.50	3.51	2.57	– –	– –

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
SPW20N60S5	105-6556●	5.51	4.30	2.88	– –	– –
SPW32N50C3	109-5707●	11.62	7.74	6.33	4.61	4.49
SPW35N60CFD	109-5708●	11.95	7.96	6.52	4.77	4.55
SPW47N60C3	105-6557●	11.26	9.01	6.42	– –	– –
SPW52N50C3	109-5710●	10.63	8.39	6.10	4.91	4.78

Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
SPP20N60C3 TUBE 50	NEW 156-4135●	118.52	– –	– –
SPW20N60C3 TUBE 30	NEW 156-4142●	88.63	79.76	71.79

CoolMOS™ N-Channel, Power MOSFETs

560-800 V



TO-247 | TO-220 Insulated | TO-220

V_{DS} V	$R_{DS(on)}$ typ. Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftrs. list No.
TO-220						
560	0.28	16	48	3.9	160	SPP16N50C3
600	0.6	7.3	14.6	5.5	83	SPP07N60S5
600	0.19	20	40	5.5	208	SPP20N60S5
650	0.38	11	33	3.9	125	SPP11N60C3
650	0.19	20.7	62.1	3.9	208	SPP20N60C3
650	0.19	20.7	62.1	3.9	208	SPP20N65C3
560	0.19	21	63	3.9	208	SPP21N50C3
650	0.16	24.3	72.9	3.9	240	SPP24N60C3
650	0.95	4.5	13.5	3.9	50	SPP04N60C3
650	0.6	7.3	21.9	3.9	83	SPP07N60C3
800	0.65	8	24	3.9	104	SPP08N80C3
800	0.45	11	33	3.9	156	SPP11N80C3
800	0.38	11.6	34.8	3.9	125	SPP12N50C3
800	0.29	17	51	3.9	208	SPP17N80C3
TO-220 Isolated						
800	0.45	11	33	3.9	41	SPA11N80C3
800	0.65	8	24	3.9	40	SPA08N80C3
800	0.29	17	51	3.9	42	SPA17N80C3
TO-263 (D2-Pak)						
650	0.19	20.7	62.1	3.9	208	SPB20N60C3
TO-247						
560	0.11	32	96	3.9	284	SPW32N50C3
560	0.07	52	156	3.9	417	SPW52N50C3
600	0.22	8.3	52	5	35	SPW20N60CFD
600	0.118	34.1	85	5	313	SPW35N60CFD
650	0.44	11	28	5	125	SPW11N60CFD
650	0.38	11	22	5.5	125	SPW11N60S5
650	0.19	20.7	62.1	3.9	208	SPW20N60C3
650	0.19	20	40	5.5	208	SPW20N60S5
650	0.07	47	141	3.9	415	SPW47N60C3
800	0.29	17	51	3.9	208	SPW17N80C3

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
SPA11N80C3	109-5692●	3.20	2.50	1.82	1.33	1.29
SPA17N80C3	109-5693●	4.69	3.66	2.67	2.04	1.99
SPB20N60C3	SMD 105-6541● RL	4.37	3.14	2.62	1.81	1.79
SPP04N60C3	105-6545●	1.43	1.06	0.78	0.56	0.50
SPP07N60C3	105-6546●	1.69	1.35	1.03	0.84	0.78
SPP07N60S5	105-6547●	2.01	1.28	1.23	– –	– –
SPA08N80C3	109-5691●	2.70	2.15	1.65	1.21	1.16
SPP08N80C3	109-5694●	2.61	1.74	1.42	1.05	1.01
SPP11N60C3	105-6549●	2.58	2.06	1.58	– –	– –
SPP11N80C3	109-5695●	3.20	2.50	1.82	1.33	1.30
SPP12N50C3	109-5696●	0.90	0.88	0.87	0.85	0.83
SPP16N50C3	109-5697●	2.52	2.01	1.54	1.14	1.10
SPP17N80C3	109-5698●	4.69	3.66	2.67	1.97	1.92
SPP20N60C3	105-6551●	3.82	2.99	2.18	– –	– –
SPP20N60S5	105-6552●	4.19	3.27	2.24	– –	– –
SPP20N65C3	109-5700●	4.69	3.22	2.59	1.99	1.87
SPW11N60CFD	109-5703●	4.64	3.08	2.53	1.83	1.78
SPW11N60S5	105-6553●	3.14	2.41	1.99	– –	– –
SPW17N80C3	109-5704●	5.62	4.39	3.21	2.36	2.25
SPW20N60C3	105-6555●	4.50	3.51	2.57	– –	– –
SPW20N60S5	105-6556●	5.51	4.30	2.88	– –	– –
SPW47N60C3	105-6557●	11.26	9.01	6.42	– –	– –
SPP21N50C3	109-5701●	3.27	2.55	1.86	1.37	1.36
SPP24N60C3	109-5702●	6.11	4.08	3.35	2.43	2.36
SPW20N60CFD	109-5706●	5.51	3.68	3.01	2.20	2.18
SPW32N50C3	109-5707●	11.62	7.74	6.33	4.61	4.49
SPW35N60CFD	109-5708●	11.95	7.96	6.52	4.77	4.55
SPW52N50C3	109-5710●	10.63	8.39	6.10	4.91	4.78

422877

Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
SPW47N60C3 TUBE 30	NEW 156-4143●	218.28	196.45	176.81
SPW20N60C3 TUBE 30	NEW 156-4142●	88.63	79.76	71.79
SPP20N60C3 TUBE 50	NEW 156-4135●	118.52		

RL Re-reeling available

N-Channel, 500V - 1500V

V_{DS} V	Polarity	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	P_D @ 25°C W	Mftr.	Package	Order Code	Mftrs. list No.
500	N	0.19	21	208	INF	TO-247	147-1815	SPW21N50C3
500	N	0.19	21	34.5	INF	TO-220F	147-1778	SPA21N50C3
500	N	0.38	11.6	33.0	INF	TO-220F	147-1772	SPA12N50C3
500	N	0.38	11.6	33.0	INF	TO-220F	147-1772	SPA12N50C3
500	N	0.6	7.6	32.0	INF	TO-220F	147-1769	SPA08N50C3
550	N	0.1	45	417	ST	TO-247	129-1995	STW45NM50
550	N	0.19	18	140	ST	TO-247	125-2947	STW21NM50N
550	N	0.25	20	214	ST	TO-247	129-1994	STW20NM50
600	N	0.099	31	255	INF	TO-247	147-1753	IPW60R099CP
600	N	0.125	25	208	INF	TO-247	147-1754	IPW60R125CP
600	N	0.14	22	160	ST	TO-247	125-2949	STW25NM50N
600	N	0.16	24.3	240	INF	TO-247	147-1816	SPW24N60C3
600	N	0.165	21	192	INF	TO-247	147-1755	IPW60R165CP
600	N	0.22	20.7	35	INF	TO-220F	147-1775	SPA20N60CFD
600	N	0.28	15	156	INF	TO-220	147-1808	SPP15N60C3
600	N	0.28	15	156	INF	TO-247	147-1814	SPW15N60C3
600	N	0.44	11	125	INF	TO-220	147-1805	SPP11N60CFD
600	N	0.75	6.2	74	INF	TO-220	147-1802	SPP06N60C3
600	N	0.95	4.5	31	INF	TO-220F	147-1762	SPA04N60C3
600	N	1.4	3.2	29.7	INF	TO-220F	147-1760	SPA03N60C3
650	N	0.1	34.6	313	INF	TO-247	147-1817	SPW35N60C3
650	N	0.11	45	417	ST	TO-247	129-1996	STW45NM60
650	N	0.17	20	160	ST	TO-247	125-2950	STW25NM60N
650	N	0.19	20.7	34.5	INF	TO-220F	147-1777	SPA20N65C3
650	N	0.28	15	34	INF	TO-220F	147-1773	SPA15N60C3
650	N	0.38	11	033	INF	TO-220F	147-1770	SPA11N60C3
650	N	0.38	11	33.0	INF	TO-220F	147-1771	SPA11N65C3
650	N	0.6	7.3	83	INF	I-PAK	147-1812	SPU07N60C3
650	N	0.6	0.0073	32	INF	TO-220F	147-1767	SPA07N60C3
650	N	0.6	7.3	83.0	INF	I2-PAK	147-1791	SPI07N65C3
650	N	0.75	6.2	32	INF	TO-220F	147-1765	SPA06N60C3
660	N	0.22	17	30	ST	TO-220FP	129-1971	STF21NM60N
660	N	0.22	17	140	ST	TO-247	125-2948	STW21NM60N
700	N	1.2	7.5	156	ST	TO-247	129-1997	STW9NK70Z
800	N	0.13	45	600	ST	ISOTOP	129-1967	STE45NK80ZD
800	N	0.9	6	0.039	INF	TO-220F	147-1766	SPA06N80C3
800	N	0.9	6	83	INF	TO-220	147-1803	SPP06N80C3
800	N	1.3	4	38	INF	TO-220F	147-1763	SPA04N80C3
800	N	2.7	2	30.5	INF	TO-220F	147-1759	SPA02N80C3
800	N	4.5	2.5	25	ST	TO-220FP	129-1972	STF3NK80Z
900	N	0.17	40	600	ST	ISOTOP	129-1966	STE40NK90ZD
1500	N	7	4	160	ST	TO-247	125-2936	STW4N150
1500	N	7	4	40	ST	TO-220FH	125-2937	STFV4N150

491652

List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
STW4N150	ST	125-2936●	5.83	5.28	4.09	3.19
STFV4N150	ST	125-2937●	5.01	4.12	3.19	2.74
STW21NM50N	ST	125-2947●	4.26	3.42	2.66	2.13
STW21NM60N	ST	125-2948●	3.29	2.66	2.22	1.90
STW25NM50N	ST	125-2949●	5.81	4.97	3.65	2.90
STW25NM60N	ST	125-2950●	5.70	5.17	4.00	3.11
STE40NK90ZD	ST	129-1966●	41.04	36.22	32.39	29.31
STE45NK80ZD	ST	129-1967●	41.98	35.80	31.22	28.84
STF21NM60N	ST	129-1971●	3.87	2.94	2.27	1.97
STF3NK80Z	ST	129-1972●	0.84	0.63	0.51	0.43
STW20NM50	ST	129-1994●	5.36	3.89	3.32	2.88
STW45NM50	ST	129-1995●	10.21	9.36	7.59	6.74
STW45NM60	ST	129-1996●	12.51	10.44	8.35	7.61
STW9NK70Z	ST	129-1997●	1.68	1.23	1.03	0.91
IPW60R099CP	INF	SMD 147-1753●	7.24	5.63	5.07	4.78
IPW60R125CP	INF	SMD 147-1754●	5.35	4.16	3.74	3.53
IPW60R165CP	INF	SMD 147-1755●	4.05	3.15	2.84	2.67
SPA02N80C3	INF	147-1759●	1.08	0.84	0.76	0.71
SPA03N60C3	INF	147-1760●	0.82	0.63	0.57	0.54
SPA04N60C3	INF	147-1762●	1.32	1.12	0.83	0.80
SPA04N80C3	INF	147-1763●	1.47	1.23	1.03	– –
SPA06N60C3	INF	147-1765●	1.23	0.96	0.87	0.81
SPA06N80C3	INF	147-1766●	1.92	1.61	1.34	– –
SPA07N60C3	INF	147-1767●	1.57	1.22	1.09	1.03
SPA08N50C3	INF	147-1769●	1.40	1.17	0.94	– –
SPA11N60C3	INF	147-1770●	2.19	1.82	1.53	– –
SPA11N65C3	INF	147-1771●	2.32	1.80	1.62	1.52
SPA12N50C3	INF	147-1772●	1.81	1.50	1.26	– –
SPA12N50C3	INF	147-1772●	1.81	1.50	1.26	– –
SPA15N60C3	INF	147-1773●	2.67	2.07	1.87	1.77
SPA20N60CFD	INF	147-1775●	3.85	3.00	2.69	2.54
SPA20N65C3	INF	147-1777●	3.71	2.89	2.59	2.45
SPA21N50C3	INF	147-1778●	2.62	2.27	1.77	– –
SPI07N65C3	INF	147-1791●	1.61	1.26	1.12	1.06
SPP06N60C3	INF	147-1802●	1.19	0.94	0.84	0.79
SPP06N80C3	INF	147-1803●	1.86	1.54	1.30	– –
SPP11N60CFD	INF	147-1805●	2.29	1.78	1.60	1.51
SPP15N60C3	INF	147-1808●	2.58	2.02	1.81	1.71
SPU07N60C3	INF	147-1812●	1.24	0.97	0.88	0.82
SPW15N60C3	INF	SMD 147-1814●	3.37	2.62	2.36	2.21
SPW21N50C3	INF	SMD 147-1815●	3.56	2.99	2.18	– –
SPW24N60C3	INF	SMD 147-1816●	4.67	3.63	3.27	3.09
SPW35N60C3	INF	SMD 147-1817●	7.41	5.75	5.18	4.89

TO-220, N Channel 600V to 1500V



V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. list No.
600	0.42	17	68	340	VISH	IRFB17N60KPBF
600	0.55	13	52	150	ST	STP13NK60Z
600	0.75	9.2	37	170	VISH	IRFB9N60APBF
600	1.2	6	24	110	ST	STP6NK60Z
600	1.2	6	24	110	ST	STP6NK60Z
600	1.2	6.2	25	125	VISH	IRFBC40APBF
600	1.2	6.2	25	125	VISH	IRFBC40PBF
600	1.2	6.2	25	125	VISH	IRFBC40LCPBF
600	2	4	16	70	ST	STP4NK60Z
600	2.2	3.6	12	74	VISH	IRFBC30PBF
600	2.2	3.6	14	74	VISH	IRFBC30APBF
600	3.6	2.4	9.6	45	ST	STP3NK60Z
600	3.6	2.4	9.6	45	ST	STP3NK60Z
800	2.4	4.3	17.2	110	ST	STP5NK80Z
800	3	4.1	16	125	VISH	IRFBE30PBF
800	3	3	12	75	INF	SPP04N80C3
800	8	1.5	6	40	INF	SPP02N80C3
900	2	5.8	23.2	140	ST	STP6NK90Z
900	4.8	3	12	90	ST	STP3NK90Z
900	8	1.7	3.1	54	VISH	IRFBF20PBF
1000	3.8	4	12	100	TOSH	2SK1119(F)
1000	5	3.1	12	125	VISH	IRFBG30PBF
1000	11.5	1.3	5.2	50	VISH	IRFBG20PBF
1500	10	2	4	35	SY	2SK3745
TO-220FP						
600	1.2	6	24	32	ST	STP6NK60ZFP

211277

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
SPP02N80C3	INF	120-1594●	1.41	0.94	0.78	0.64
SPP04N80C3	INF	120-1589●	1.62	1.24	0.99	0.88
IRFB17N60KPBF	VISH	865-7912●	4.32	2.45	1.88	1.64
IRFB9N60APBF	VISH	864-8808●	2.12	1.16	0.86	0.76
IRFBC30PBF	VISH	910-3015●	1.94	1.10	0.82	0.77
IRFBC40APBF	VISH	864-8824●	2.05	1.13	0.84	0.70
IRFBC40LCPBF	VISH	864-8832●	4.16	2.43	1.87	1.37
IRFBC40PBF	VISH	864-8840●	2.07	1.13	0.84	0.70
IRFBE30PBF	VISH	864-8859●	2.38	1.30	0.97	0.80
IRFBF20PBF	VISH	864-8867●	1.84	1.01	0.75	0.62
IRFBG20PBF	VISH	864-8891●	2.13	1.17	0.87	0.73
IRFBG30PBF	VISH	864-8905●	2.66	1.45	1.08	0.90
STP3NK90Z	ST	980-3122●	0.63	0.48	0.36	0.33
STP4NK60Z	ST	980-3203●	1.00	0.78	0.62	0.50
STP5NK80Z	ST	951-2764●	1.40	1.06	0.82	0.71
STP6NK60ZFP	ST	980-3289●	1.25	0.94	0.75	0.60
STP6NK90Z	ST	980-3297●	1.81	1.33	1.09	0.89
STP9NK90Z	ST	816-5319●	2.41	1.52	1.20	0.97
STP13NK60Z	ST	993-5541●	2.08	1.59	1.31	1.06
2SK1119(F)	TOSH	121-8511●	3.87	3.22	2.97	2.14
IRFBC30APBF	VISH	864-8816●	2.40	1.32	0.98	0.81
2SK3745	SY	120-8646●	3.26	2.62	2.06	1.86

TO-220, N-Channel Fast Switching



- Fast switching
- Advanced cell structure
- Low input capacitance
- 100% avalanche tested

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ A	I_D pulsed A	$V_{GS(th)}$ max. V	t_r typ. ns	t_f typ. ns	P_D @ 25°C W	Mftr.	Mftrs List No.
400	0.55	10	32	4	31	30	125	VISH	IRF740LCPBF
500	0.85	8	28	4	25	19	125	VISH	IRF840LCPBF
600	1.2	6.2	25	4	20	17	125	VISH	IRFBC40LCPBF

211150

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
IRF740LCPBF	864-8476●	3.02	1.66	1.24	1.02	1.00
IRF840LCPBF	864-8573●	2.23	1.22	0.91	0.87	0.85
IRFBC40LCPBF	864-8832●	4.16	2.43	1.87	1.37	1.32

RL Re-reeling available

Farnell

RoHS ● Compliant ▲ Non-compliant

Power MOSFETs - continued

TO-220, P Channel 20V to 200V V_{DS}



V_{DS} V	$R_{DS(on)}$ Ω	I_D cont. @ 25°C A	P_D @ 25°C W	Mftr.	Mftrs List No.
20	0.075	24	50	FCH	NDP6020P
30	0.007	70	187	SLX	SUP75P03-07
50	0.008	75	250	SLX	SUP75P05-08
55	0.02	64	150	IR	IRF4905PBF
55	0.06	31	110	IR	IRF5305PBF
55	0.1	17	56	IR	IRF9Z34NPBF
55	0.172	12	45	IR	IRF9Z24NPBF
	0.06	40	200	IR	IRF5210PBF.
60	0.13	18.6	80	INF	SPP18P06P
60	0.14	18	88	VISH	IRF9Z34PBF
60	0.02	60	150	SLX	SUP65P06-20
60	0.3	8.8	42	INF	SPP08P06P
60	0.5	4.7	20	VISH	IRF9Z14PBF
100	0.06	40	200	IR	IRF5210PBF.
100	0.117	19	94	IR	IRF9540NPBF
100	0.19	16.5	100	FCH	FQP17P10
100	0.2	13	75	IR	IRF9530NPBF
100	0.2	19	—	VISH	IRF9540PBF
100	0.3	12	—	VISH	IRF9530PBF
100	0.41	8	65	FCH	FQP8P10
100	0.48	6.8	48	IR	IRF9520NPBF
100	0.6	6	40	VISH	IRF9520PBF
100	1.2	3	20	VISH	IRF9510PBF
150	0.29	13	110	IR	IRF6215PBF
200	0.36	11.5	120	FCH	FQP12P20
200	0.5	11	125	VISH	IRF9640PBF
200	1.5	3.5	40	VISH	IRF9620PBF
200	3	1.75	20	VISH	IRF9610PBF

211272

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
FQP12P20	984-6492●	1.31	0.92	0.72	– –	– –
FQP17P10	984-6514●	0.84	0.59	0.46	– –	– –
FQP8P10	984-6565●	0.49	0.35	0.26	– –	– –
IRF4905PBF	864-8190●	4.81	2.80	2.14	1.63	1.55
IRF5210PBF.	864-8247●	3.89	2.18	1.56	1.22	1.11
IRF5305PBF	864-8255●	1.78	0.98	0.73	0.60	0.58
IRF6215PBF	101-3514●	1.81	0.99	0.74	0.61	– –
IRF9510PBF	910-3546●	1.22	0.64	0.46	0.37	0.33
IRF9520PBF	910-3554●	1.09	0.59	0.49	0.48	0.47
IRF9520NPBF	910-3520●	1.55	0.83	0.59	0.48	0.39
IRF9530NPBF	864-8603●	1.59	0.87	0.65	0.54	0.48
IRF9530PBF	864-8611●	1.77	0.94	0.67	0.54	0.53
IRF9540NPBF	864-8620●	2.08	1.14	0.85	0.70	0.69
IRF9540PBF	864-8638●	1.64	0.93	0.78	0.76	0.74
IRF9610PBF	910-3562●	1.21	1.00	0.79	0.58	0.37
IRF9620PBF	910-3570●	1.53	1.10	1.04	0.79	0.74
IRF9640PBF	864-8654●	2.03	1.11	0.83	0.68	0.64
IRF9Z14PBF	864-8662●	1.35	0.73	0.57	0.41	0.35
IRF9Z24NPBF	864-8670●	1.51	0.81	0.57	0.46	0.45
IRF9Z34NPBF	864-8689●	1.67	0.89	0.63	0.51	0.46
IRF9Z34PBF	864-8697●	1.61	0.88	0.72	0.70	0.69
NDP6020P	101-7724●	2.72	1.70	1.33	0.73	0.71
SPP08P06P	105-6548●	0.84	0.63	0.46	– –	– –
SPP18P06P	105-6550●	0.96	0.78	0.63	– –	– –
SUP65P06-20	955-1565●	5.21	4.48	4.03	2.68	2.43
SUP75P03-07	955-1590●	3.08	2.84	2.69	2.00	1.84
SUP75P05-08	955-1603●	4.77	3.42	2.73	2.00	1.95

Tubes of 50

Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
SUP65P06-20	NEW 156-4147●	191.14	129.94	118.92
IRF4905PBF	NEW 156-4157●	178.64	139.24	133.71
IRF5210PBF.	NEW 156-4159●	89.04	71.34	65.11
IRF5305PBF	NEW 156-4161●	45.65	35.68	34.88
IRF9530NPBF	NEW 156-4162●	29.30	24.74	22.09
IRF9530PBF	NEW 156-4163●	36.49	28.26	27.90
IRF9640PBF	NEW 156-4165●	54.72	37.89	35.69
IRF9520NPBF	NEW 156-4166●	28.17	20.14	18.04
SPP08P06P	NEW 156-4172●	20.59	18.54	17.61
IRF9540NPBF	NEW 156-4164●	55.22	42.58	41.86
SUP75P03-07	NEW 156-4148●	127.76	96.82	90.09
SUP75P05-08	NEW 156-4149●	129.75	96.82	95.24

TO-220 Logic Level



- Low gate drive
- Ideal for direct logic interfacing
- 2.54 lead spacing

V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. (*min.) V	P_D @ 25°C W	Mftr.	Mftrs. List No.
N Channel							
20	0.004	180	720	3	210	IR	IRL3716PBF
20	0.007	110	420	0.7*	140	IR	IRL3502PBF
20	0.01	85	340	0.7*	110	IR	IRL3402PBF
20	0.016	36	140	2.5	35	IR	IRL3714ZPBF
20	0.02	35	140	3	43	IR	IRL3714PBF
30	0.003	200	1040	2.5	200	IR	IRL3713PBF
30	0.0035	80	320	—	300	ST	STP80NF03L-04
30	0.0038	150	600	2.3	140	IR	IRL7833PBF
30	0.006	105	420	2.25	110	IR	IRL8113PBF
30	0.006	120*	480	1*	150	IR	IRL3803PBF
30	0.007	100	400	1*	130	IR	IRL2203NPBF
30	0.01	75	240	2.5	120	NXP	PHP71NQ03LT
30	0.0095	60	240	2.5.0	100	ST	STP60NF03L
30	0.009	60	180	3.0	65	FCH	FDP7030BL
30	0.012	56	220	1*	83	IR	IRL3103PBF
30	0.014	48	180	3.0	58	FCH	FDP6035AL
30	0.022	40	160	2.5	70	ST	STP40NF03L
30	0.026	34	140	1*	56	IR	IRL3303PBF
30	0.05	22	88	1*	45	ST	STP22NF03L
30	0.4	24	96	1*	45	IR	IRL2703PBF
30	5.5	75	240	2.5	166	NXP	PHP101NQ03LT
40	0.0031	200	790	2.7	230	IR	IRL1404ZPBF
40	0.004	160	640	3	200	IR	IRL1404PBF
40	0.0065	130	520	1*	200	IR	IRL1004PBF
40	0.008	104	416	1*	167	IR	IRL1104PBF
55	0.008	104	360	2	—	IR	IRL2505PBF
55	0.008	86	340	3	130	IR	IRL3705ZPBF
55	0.01	77	310	2.5	130	IR	IRL3705NPBF
55	0.0135	51	204	3	80	IR	IRLZ44ZPBF
55	0.022	41	160	—	83	IR	IRLZ44NPBF
55	0.035	27	110	2	56	IR	IRLZ34NPBF
55	0.06	18	72	2	45	IR	IRLZ24NPBF
55	0.0063	75	240	4	230	NXP	PSMN005-75P
60	0.014ohm	60	240	—	110	ST	STP60NF06L
60	0.028	50	200	2	150	VISH	IRLZ44PBF
60	0.04ohm	30	120	—	70	ST	STP36NF06L
60	0.047	30	100	2.0	96	FCH	RFP30N06LE
60	0.05	30	110	2	88	VISH	IRLZ34PBF
60	0.1	16	64	1*	45	ST	STP16NF06L..
60	0.1	17	68	—	60	VISH	IRLZ24PBF
60	0.15	12	—	2.0	48	FCH	RFP3055LE
60	0.2	10	40	2	43	VISH	IRLZ14PBF
60	0.025	48	144	2	100	FCH	NDP6060L
100	0.0075	75	400	—	230	NXP	PSMN009-100P
100	16mohm	10	35	—	48	IR	IRL520NPBF
100	0.2	12	30	2.0	60	FCH	RFP12N10L
100	0.026	55	190	2	200	IR	IRL2910PBF
100	0.033	40	160	2.5	150	ST	STP40NF10L
100	0.044	30	120	2	94	IR	IRL540NPBF
100	0.077	28	110	2.0	150	VISH	IRL540PBF
100	0.1	15	60	2.0	63	IR	IRL530NPBF
100	0.16	14	52	2.0	79	VISH	IRL530PBF
100	0.27	9.2	31	2.0	60	VISH	IRL520PBF
100	0.54	5.6	18	2.0	43	VISH	IRL510PBF
150	14mohm	79	430	—	310	FCH	FDP2532
200	0.18	17	68	2	125	VISH	IRL640PBF
200	0.4	7	28	2.5	40	INF	BUZ73L
200	0.4	9	36	2	74	VISH	IRL630PBF
P Channel							
100	0.22	20	80	-2	75	REN	2SJ221-E

*Exceeds package current handling capacity ● Denotes tables TO-220 package

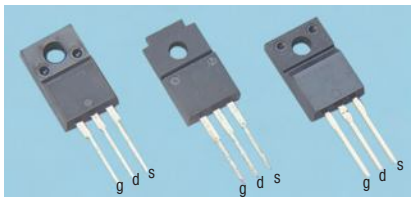
211101

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
BUZ73L	INF	105-6533●	1.09	0.80	0.59	– –
FDP2532	FCH	109-5014●	2.71	1.85	1.37	1.30
FDP6035AL	FCH	101-7695●	0.67	0.50	0.38	0.30
FDP7030BL	FCH	984-5151●	0.94	0.68	0.52	0.35
IRL520NPBF	IR	101-3499●	1.54	0.82	0.58	0.47
IRL1004PBF	IR	865-0853●	2.94	1.67	1.28	1.12
IRL1104PBF	IR	865-0870●	2.71	1.48	1.10	0.91
IRL1404PBF	IR	101-3454●	3.20	1.82	1.39	1.22
IRL1404ZPBF	IR	865-9729●	3.27	1.86	1.42	1.24
IRL2203NPBF	IR	865-0896●	3.50	2.08	1.57	1.18
IRL2505PBF	IR	865-0918●	3.98	3.19	2.66	2.22
IRL2703PBF	IR	865-0934●	1.40	0.75	0.53	0.39
IRL2910PBF	IR	865-0942●	3.54	2.28	1.76	1.37
IRL3103PBF	IR	865-0969●	1.74	0.95	0.71	0.59
IRL3202PBF	IR	101-3498●	1.28	0.97	0.72	0.60
IRL3303PBF	IR	865-0993●	1.63	0.94	0.70	0.59
IRL3402PBF	IR	865-1000●	1.74	0.98	0.74	0.66
IRL3502PBF	IR	910-2728●	2.02	1.18	0.90	0.83
IRL3705NPBF	IR	865-1019●	2.94	1.74	1.33	1.09
IRL3705ZPBF	IR	865-9761●	2.50	1.37	1.02	0.85
IRL3713PBF	IR	865-9788●	3.52	2.00	1.53	1.34
IRL3714PBF	IR	865-9800●	1.24	0.67	0.47	0.38
IRL3714ZPBF	IR	865-9826●	1.24	0.67	0.47	0.38
IRL3716PBF	IR	865-9885●	2.59	1.42	1.06	0.87
IRL3803PBF	IR	865-1035●	9.72	6.23	4.78	3.63
IRL510PBF	VISH	910-2779●	1.09	0.58	0.41	0.33
IRL520PBF	VISH	910-2744●	1.13	0.57	0.36	0.32
IRL530PBF	VISH	910-2752●	1.11	0.59	0.42	0.38
IRL530NPBF	IR	910-2787●	1.76	0.94	0.66	0.54
IRL540PBF	VISH	910-2760●	1.72	0.91	0.70	0.68
IRL540NPBF	IR	865-1078●	2.07	1.13	0.84	0.70
IRL630PBF	VISH	865-1108●	1.37	0.79	0.60	0.59
IRL640PBF	VISH	865-9923●	2.05	1.13	0.84	0.70

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
IRL7833PBF	IR	101-3456	1.65	1.15	0.89	0.71
IRL8113PBF	IR	865-9931	2.16	1.18	0.88	0.73
IRLZ24NPBF	IR	865-1388	1.50	0.80	0.57	0.46
IRLZ14PBF	VISH	865-1370	1.11	0.73	0.57	0.41
IRLZ24PBF	VISH	101-3457	1.04	0.55	0.42	0.41
IRLZ34NPBF	IR	865-1396	1.66	0.88	0.63	0.51
IRLZ34PBF	VISH	865-1400	1.32	0.70	0.56	0.54
IRLZ44NPBF	IR	865-1418	1.76	0.96	0.72	0.59
IRLZ44PBF	VISH	865-1434	1.80	1.02	0.79	0.77
IRLZ44ZPBF	IR	866-0360	1.80	0.99	0.73	0.61
NDP6060L	FCH	101-7726	1.23	0.84	0.60	0.56
PHP101NQ03LT	NXP	108-1451	1.52	0.97	0.77	0.56
PHP71NQ03LT	NXP	108-1454	1.04	0.67	0.55	0.39
PSMN005-75P	NXP	108-1488	4.02	2.57	2.06	1.46
PSMN009-100P	NXP	108-1489	3.71	2.38	1.90	1.38
RFP12N10L	FCH	101-7795	0.86	0.55	0.40	0.29
RFP30N06LE	FCH	101-7798	0.80	0.56	0.43	0.32
RFP3055LE	FCH	101-7797	0.70	0.45	0.32	0.24
STP16NF06L..	ST	980-3068	0.86	0.64	0.48	0.41
STP22NF03L	ST	980-3092	0.62	0.48	0.36	0.31
STP36NF06L	ST	993-5614	0.91	0.67	0.53	0.43
STP40NF03L	ST	980-3149	1.35	1.02	0.84	0.66
STP40NF10L	ST	980-3165	1.80	1.38	1.07	0.86
STP60NF03L	ST	980-3254	2.41	1.76	1.21	0.80
STP60NF06L	ST	993-5657	1.65	1.27	1.03	0.86
STP80NF03L-04	ST	951-2578	3.19	2.46	1.74	1.51
2SJ221-E	REN	117-4962	5.51	4.14	3.54	2.23

Tubes of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRL2203NPBF	NEW 156-4054	89.04	68.48	67.44
IRL540NPBF	NEW 156-4056	47.34	36.26	36.04
IRLZ24NPBF	NEW 156-4098	33.82	28.20	26.16
FDP6035AL	NEW 156-4133	18.27	14.39	14.00
2SJ221-E	NEW 156-4173	168.13	108.34	103.96
FDP2532	NEW 156-4136	84.81	84.60	– –

TO-220 Isolated



(a) TO-220 FULLPAK Isolation voltage 2.5kV (b) TO-220FP/ ISOWATT220 Isolation voltage 2kV (c) TO-220FM/ SOT-186 Isolation voltage 2kV

Isolated packages offer simplified heatsink mounting, without the need for additional isolating washers, mica etc.

N Channel, V_{DS} <100V

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Package	Mftr.	Mftrs. list No.
55	0.005	60	240	45	(b)	ST	STP80NF55-06FP
55	0.008	64	390	63	(c)	IR	IRFI3205PBF
55	0.016	36	210	42	(b)	IR	IRFIZ48NPBF
55	0.024	28	160	38	(c)	IR	IRFIZ44NPBF
55	0.04	19	100	31	(c)	IR	IRFIZ34NPBF
55	0.07	14	68	29	(c)	IR	IRFIZ24NPBF
60	0.01	53	212	62	(a)	FCH	FQPF85N06
60	0.012	39	290	43	(c)	IR	IRFIZ48VPBF
60	0.014	14	56	37	(c)	VISH	IRFIZ24GPBF
60	0.018	50	200	30	(c)	ST	STP55NF06FP
60	0.016	40	160	56	(a)	FCH	FQPF65N06
60	0.018	37	150	50	(c)	VISH	IRFIZ48GPBF
60	0.022	31	124	47	(a)	FCH	FQPF50N06
60	0.028	20	120	30	(c)	IR	IRFIZ34VPBF
60	0.04	18	72	25	(b)	ST	STP36NF06FP
60	0.042	21	100	37	(c)	IR	IRFIZ34EPBF
60	0.05	20	56	42	(c)	VISH	IRFIZ34GPBF

383288

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
FQPF50N06	984-5879	0.84	0.59	0.46	0.30	0.25
FQPF65N06	984-5887	0.91	0.66	0.50	0.33	0.32
FQPF85N06	984-5917	1.42	1.02	0.73	0.67	0.62
IRFI3205PBF	864-8921	3.66	2.40	1.86	1.64	1.60
IRFIZ24GPBF	865-8250	1.05	0.59	0.46	0.45	0.44
IRFIZ24NPBF	926-4388	1.72	0.94	0.70	0.58	0.57
IRFIZ34EPBF	865-8269	1.84	1.16	0.86	0.65	0.58
IRFIZ34GPBF	865-8277	1.78	0.97	0.80	0.77	0.75
IRFIZ34NPBF	864-9111	1.90	1.04	0.77	0.64	0.63
IRFIZ34VPBF	865-8285	1.78	0.97	0.72	0.60	0.53
IRFIZ44NPBF	864-9120	2.21	1.21	0.90	0.75	0.72
IRFIZ48GPBF	865-8293	1.85	1.09	0.94	0.92	0.90
IRFIZ48VPBF	865-8307	2.77	1.57	1.20	1.05	0.97
STP36NF06FP	993-5606	0.92	0.68	0.53	0.48	0.41
STP55NF06FP	980-3220	1.30	1.00	0.84	0.62	0.59
STP80NF55-06FP	993-5690	2.90	2.20	1.72	1.47	1.29

N Channel, V_{DS} 100-500V



V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. list No.
100	0.036	22	140	45	IR	IRFI1310NPBF
100	0.052	18	110	42	IR	IRFI540NPBF
100	0.077	17	68	48	VISH	IRFI540GPBF
100	0.108	11	60	33	IR	IRFI530NPBF
100	0.2	7.6	38	30	IR	IRFI520NPBF
150	0.045	41	164	200	IR	IRFIB41N15DPBF
200	0.066	39	156	37	FCH	FDPF39N20
200	0.075	17.5	70	55	FCH	FQPF34N20
200	0.15	11.8	48	50	FCH	FQPF19N20
200	0.18	9.8	39	40	VISH	IRFI640GPBF
200	0.4	5.9	24	32	VISH	IRFI630GPBF
250	0.28	7.9	32	40	VISH	IRFI644GPBF
400	0.55	9	36	30	ST	STP11NK40ZFP
400	0.55	5.4	22	40	VISH	IRFI740GPBF
400	0.25	5.4	21.6	25	ST	STP17NK40ZFP
400	1.8	2.6	10	30	VISH	IRFI720GPBF
500	0.85	4.6	18	40	VISH	IRFI840GPBF
500	1.5	3.1	12	32	VISH	IRFI830GPBF
500	3	2.1	8.4	30	VISH	IRFI820GPBF

383295

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
FDPF39N20	FCH	NEW 149-5245	1.20	0.82	0.59	0.55
FQPF19N20	FCH	984-5801	0.86	0.61	0.47	0.39
FQPF34N20	FCH	984-5844	2.00	1.43	1.10	0.74
IRFIB41N15DPBF	IR	865-8188	3.66	2.07	1.59	1.39
IRFI520NPBF	IR	101-3500	1.74	0.95	0.71	0.59
IRFI1310NPBF	IR	864-8913	3.12	1.75	1.28	1.13
IRFI530NPBF	IR	910-2469	1.96	1.07	0.80	0.66
IRFI540GPBF	VISH	864-8930	2.43	1.33	0.99	0.82
IRFI540NPBF	IR	864-8948	2.40	1.32	0.98	0.81
IRFI630GPBF	VISH	864-8956	1.94	1.10	0.82	0.77
IRFI640GPBF	VISH	910-2450	2.54	1.39	1.04	0.86
IRFI644GPBF	VISH	864-8964	3.44	1.96	1.50	1.31
IRFI720GPBF	VISH	864-8972	2.00	1.09	0.81	0.67
IRFI740GPBF	VISH	864-8999	2.17	1.28	0.99	0.81
IRFI820GPBF	VISH	864-9006	1.63	0.93	0.69	0.55
IRFI830GPBF	VISH	864-9014	1.81	0.99	0.74	0.61
IRFI840GPBF	VISH	864-9022	2.90	1.59	1.18	0.98
STP11NK40ZFP	ST	980-3041	1.30	0.99	0.78	0.64
STP17NK40ZFP	ST	980-3076	2.09	1.66	1.38	1.17

TO-220F



TO-220F Lead spacing=2.54

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	$I_{DM\ pulse}$ @ 25°C A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftrs List No.
N Channel						
500	0.8	9	36	4	44	FQPF9N50C

496479

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
FQPF9N50C	144-0062	0.92	0.66	0.51	0.35

N Channel, V_{DS} 500 V to 1000 V



V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	P_D @ 25°C W	Mftr.	Mftrs. list No.
500	0.35	6.7	27	45	TO-220FP	VISH	IRFIB8N50KPBF
500	0.38	16	64	38.5	TO-220F	FCH	FDPF16N50
500	0.38	6.8	27	46	TO-220FP	VISH	IRFIB7N50LPBF
500	0.52	10	40	30	TO-220FP	ST	STP11NK50ZFP
500	0.52	6.6	44	60	TO-220FP	VISH	IRFIB7N50APBF
500	0.85	7.2	28.8	30	TO-220FP	ST	STP9NK50ZFP
500	0.85	4.6	18	40	TO-220FP	VISH	IRFI840GPBF
500	1.5	4.4	17.6	25	TO-220FP	ST	STP5NK50ZFP
500	1.5	3.1	12	32	TO-220FP	VISH	IRFI830GPBF
500	3	2.1	8.4	30	TO-220FP	VISH	IRFI820GPBF
600	0.75	10	36	35	TO-220FP	ST	STP10NK60ZFP
600	0.75	5.5	37	60	TO-220FP	VISH	IRFIB6N60APBF
600	0.8	9	36	50	TO-220F	FCH	FQPF10N60CF
600	1.2	6	24	32	TO-220FP	ST	STP6NK60ZFP
600	1.2	3.5	14	40	TO-220FP	VISH	IRFIBC40GPBF

RL Re-reeling available

Power MOSFETs - continued

N Channel, V_{DS} 500 V to 1000 V - continued

V_{DS}	$R_{DS(on)}$	I_D cont @ 25°C	I_D pulsed	P_D @ 25°C	P_D @ 25°C		
600	3.6	2.4	9.6	20	TO-220FP	ST	STP3NK60ZFP
600	4.4	1.7	6.8	30	TO-220FP	VISH	IRFIBC20GPBF
650	0.93	5.1	21	60	TO-220FP	VISH	IRFIB5N65APBF
800	0.9	9	36	40	TO-220FP	ST	STP10NK80ZFP
800	1.8	5.2	20.8	30	TO-220FP	ST	STP7NK80ZFP
800	2.4	4.3	17.2	30	TO-220FP	ST	STP5NK80ZFP
800	6.3	1.5	6	35	TO-220F	FCH	FQPF2N80
800	6.5	1.4	5.6	30	TO-220FP	VISH	IRFIBE20GPBF
800	3	2.1	8.4	35	TO-220FP	VISH	IRFIBE30GPBF
900	4.8	3	12		TO-220FP	ST	STP3NK90ZFP

383296

Mftrs. List No.		Order Code	1+	25+	100+	250+	1K+
			Price Each				
FDPF16N50	NEW	149-8959	1.98	1.60	1.34	1.22	1.13
FQPF2N80		984-5828	0.55	0.39	0.31	0.21	0.20
FQPF10N60CF	NEW	149-5249	1.10	0.88	0.74	0.67	0.62
IRFI820GPBF		864-9006	1.63	0.93	0.69	0.55	0.54
IRFI830GPBF		864-9014	1.81	0.99	0.74	0.61	0.56
IRFI840GPBF		864-9022	2.90	1.59	1.18	0.98	0.96
IRFIBC20GPBF		865-8226	1.69	0.97	0.71	0.68	0.66
IRFIBC40GPBF		864-9090	2.16	1.28	1.11	1.08	1.06
IRFIBE20GPBF		865-8234	2.37	2.02	1.67	1.32	0.97
IRFIBE30GPBF		101-3501	2.54	1.57	1.17	– –	– –
IRFIB5N65APBF		864-9065	2.73	1.55	1.19	1.04	1.00
IRFIB6N60APBF		864-9073	2.77	1.57	1.20	1.05	1.00
IRFIB7N50APBF		864-9081	2.97	1.62	1.21	1.00	0.99
IRFIB7N50LPBF		865-8200	2.77	1.57	1.20	1.05	0.97
IRFIB8N50KPBF		865-8218	4.66	2.64	2.02	1.77	1.72
STP10NK80ZFP		980-3025	3.63	2.43	1.97	1.76	1.55
STP3NK60ZFP		980-3114	0.96	0.65	0.53	0.47	0.42
STP3NK90ZFP		980-3130	1.08	0.82	0.63	0.57	0.47
STP5NK50ZFP		993-5649	0.86	0.64	0.51	0.44	0.37
STP5NK80ZFP		980-3246	1.49	1.14	0.87	0.75	0.66
STP6NK60ZFP		980-3289	1.25	0.94	0.75	0.60	0.51
STP7NK80ZFP		980-3327	2.05	1.58	1.23	0.97	0.93
STP9NK50ZFP		980-3343	1.29	0.97	0.75	0.64	0.58
STP10NK60ZFP		993-5517	1.81	1.39	1.07	0.93	0.81
STP11NK50ZFP		993-5525	1.88	1.27	1.03	0.93	0.82

500V, 600V TO-220 Isolated



Lead spacing = 2.54

V_{DS}	$R_{DS(on)}$	I_D cont @ 25°C	I_D pulsed	P_D @ 25°C		
V	Ω	A	A	W	Mftr.	Mftrs. list No.
500	0.14	22	88	40	ST	STF25NM50N
500	0.19	18	72	30	ST	STF21NM50N
500	2.7	3	12	20	ST	STF4NK50ZD
600	0.38	11	44	25	ST	STF12NM50N
600	0.17	20	80	40	ST	STF25NM60N
600	0.95	7	28	30	ST	STF9NK60ZD

451005

Mftrs. List No.	Mftr.	Order Code	1+	25+	100+	250+
			Price Each			
STF4NK50ZD	ST	129-1974	0.67	0.52	0.41	0.34
STF12NM50N	ST	125-2952	3.75	2.67	2.07	1.76
STF21NM50N	ST	125-2953	3.53	2.71	1.93	1.65
STF25NM50N	ST	125-2955	6.67	5.13	3.66	3.13
STF25NM60N	ST	125-2956	4.71	4.01	3.11	2.56
SuperMESH, Zener Protected						
STF9NK60ZD	ST	129-1975	2.28	1.70	1.38	1.12

100 V_{DS} to 250 V_{DS}, P-Channel



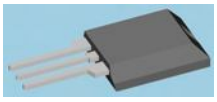
V_{DS}	$R_{DS(on)}$	I_D cont @ 25°C	I_D pulsed	P_D @ 25°C		
V	Ω	A	A	W	Mftr.	Mftrs. list No.
60	0.14	12	48	42	VISH	IRFI9Z34GPBF
100	0.2	13	44	42	VISH	IRFI9540GPBF
100	0.3	7.7	31	38	VISH	IRFI9530GPBF
100	0.6	5.2	21	37	VISH	IRFI9520GPBF
200	0.5	6.1	24	40	VISH	IRFI9640GPBF
200	0.8	4.3	17	35	VISH	IRFI9630GPBF
250	1	4.1	16	35	VISH	IRFI9634GPBF

383298

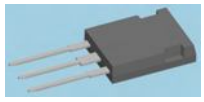
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
		Price Each				
IRFI9520GPBF	910-3295	1.77	0.97	0.72	0.57	0.55
IRFI9530GPBF	864-9030	2.21	1.21	0.90	0.75	0.73
IRFI9540GPBF	865-8145	2.94	1.68	1.28	1.12	1.08
IRFI9630GPBF	864-9049	2.11	1.16	0.86	0.71	0.69
IRFI9634GPBF	865-8161	1.94	1.10	0.82	0.77	0.75
IRFI9640GPBF	864-9057	1.85	1.09	0.95	0.92	0.90
IRFI9Z34GPBF	865-8170	2.52	1.39	1.03	0.85	0.84

55V to 800V ISOPLUS ™

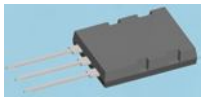
IXYS



ISOPLUS-220



ISOPLUS-247



ISOPLUS-264

- Silicon chip on Direct-Copper-Bond substrate
- High power density
- Electrically isolated back surface
- Fast assembly - clip mounted package
- 2500 V electrical isolation

V_{DS}	I_D cont @ 25°C	$R_{DS(on)}$	Q_{gs}	P_D @ 25°C	T_{RR}	Rth_J		
V	A	Ω	nC	W	ns	K/W	Case	Mftrs. list No.
100	165	0.008	65	400	250	0.3	ISOPLUS-247	IXFR180N10
100	133	0.009	235	300	150	0.5	ISOPLUS-247	IXFR200N10P
150	100	0.013	240	300	200	0.5	ISOPLUS-247	IXFR180N15P
200	90	0.022	240	300	200	0.5	ISOPLUS-247	IXFR140N20P
300	82	0.026	185	360	200	0.35	ISOPLUS-247	IXFR140N30P
500	70	0.052	240	625	200	0.2	ISOPLUS-264	IXFL100N50P
500	45	0.072	197	360	200	0.35	ISOPLUS-247	IXFR80N50P
500	35	0.095	150	300	200	0.42	ISOPLUS-247	IXFR64N50P
500	19	0.19	93	156	200	0.75	ISOPLUS-247	IXFR36N50P
600	38	0.07	250	280	650	0.45	ISOPLUS-247	IXKR40N60C
600	20	0.2	102	208	200	0.6	ISOPLUS-247	IXFR36N60P
800	25	0.15	170	250	550	0.5	ISOPLUS-247	IXKR25N80C
800	13	0.29	83	130	550	0.96	ISOPLUS-220	IXKC13N80C

451039

Mftrs. List No.	Order Code	1+	25+	100+	250+
		Price Each			
IXFL100N50P	130-0085	11.62	9.73	8.43	7.63
IXFR140N20P	130-0089	6.46	5.41	4.68	4.24
IXFR140N30P	130-0091	7.79	6.50	5.66	5.11
IXFR180N10	130-0094	10.92	9.14	7.92	7.17
IXFR180N15P	130-0095	6.24	5.22	4.53	4.09
IXFR200N10P	130-0096	6.19	5.18	4.50	4.06
IXFR36N50P	130-0098	4.55	3.80	3.30	2.99
IXFR36N60P	130-0099	5.39	4.51	3.91	3.52
IXFR64N50P	130-0100	6.91	5.77	4.99	4.53
IXFR80N50P	130-0103	5.66	4.74	4.55	4.44
IXKC13N80C	130-0125	8.04	6.73	5.84	5.28
IXKR25N80C	130-0129	10.27	8.60	7.46	6.75
IXKR40N60C	130-0130	10.15	8.49	7.36	6.66

TO-220 Isolated, Logic Level

International IOR Rectifier

TOSHIBA

VISHAY



- 2kV dc min. isolation
- Fully compatible with TO-220
- High thermal conductivity moulded resin
- No additional isolation required
- Excellent hermeticity

V_{DS}	$R_{DS(on)}$	I_D cont @ 25°C	I_D pulsed	$V_{GS(th)}$ max (* min)	P_D @ 25°C		
V	Ω	A	A	V	W	Mftr.	Mftrs. list No.
N channel							
30	0.007	61	400	1*	47	IR	IRLI2203NPBF
55	0.008	58	360	2	63	IR	IRLI2505PBF
55	0.01	47	310	2	47	IR	IRLI3705NPBF
55	0.022	28	160	2	38	IR	IRLIZ44NPBF
55	0.035	20	110	2	31	IR	IRLIZ34NPBF
55	0.06	14	77	2	26	IR	IRLIZ24NPBF
60	0.018	50	200	—	30	ST	STP55NF06FP
60	0.028	30	120	2	48	VISH	IRLIZ44GPBF
60	0.05	20	80	2	42	VISH	IRLIZ34GPBF
60	0.08	25	100	2	35	TOSH	2SK2232(F)
100	0.026	31	190	2	63	IR	IRLI2910PBF
100	0.044	20	120	2	42	IR	IRLI540NPBF
100	0.1	11	60	2	33	IR	IRLI530NPBF
100	0.18	7.7	35	2	27	IR	IRLI520NPBF
150	0.085	14	56	2	45	IR	IRLI3615PBF
200	0.18	9.8	40	2	40	VISH	IRLI640GPBF
200	0.8	4.1	16	2	30	VISH	IRLI620GPBF
P channel							
100	0.32	12	48	2	35	TOSH	2SJ380(F)

RL Re-reeling available

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
IRLI2203NPBF	IR	865-1124●	4.14	2.35	1.80	1.58
IRLI2505PBF	IR	865-9982●	3.88	2.20	1.68	1.47
IRLI2910PBF	IR	865-1132●	4.28	2.43	1.86	1.48
IRLI3615PBF	IR	865-9990●	2.71	1.48	1.10	0.91
IRLI3705NPBF	IR	910-2558●	2.85	1.62	1.24	1.08
IRLI520NPBF	IR	865-1140●	1.45	0.96	0.71	0.53
IRLI530NPBF	IR	865-1159●	1.81	1.04	0.77	0.65
IRLI540NPBF	IR	865-1167●	1.81	1.03	0.77	0.69
IRLI620GPBF	VISH	866-0026●	1.97	1.08	0.80	0.66
IRLI640GPBF	VISH	866-0042●	2.48	1.47	1.12	0.92
IRLIZ24NPBF	IR	865-1175●	1.85	1.01	0.75	0.62
IRLIZ34GPBF	VISH	866-0069●	2.43	1.33	0.99	0.82
IRLIZ34NPBF	IR	910-2566●	1.88	1.02	0.76	0.63
IRLIZ44GPBF	VISH	866-0077●	1.59	0.94	0.82	0.80
IRLIZ44NPBF	IR	910-2540●	2.28	1.25	0.93	0.77
STP55NF06FP	ST	980-3220●	1.30	1.00	0.84	0.62
2SJ380(F)	TOSH	121-8512●	2.18	1.92	1.69	1.50
2SK2232(F)	TOSH	121-8513●	1.50	1.19	1.03	0.81

211244

Tubes of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRLI3705NPBF	NEW 156-4059●	55.22	46.61	45.92
2SJ380(F)	NEW 156-4169●	80.35	72.87	70.01

N Channel 12 to 1500V πMOSVI

For Switching Applications

TOSHIBA



TO-220SIS
H=15, W=10, D=4.5
2.7mm stand-off
2.54 lead spacing

- Ideal for switching applications
- Low drain-source ON resistance
- High forward transfer admittance
- Low leakage current

V_{DS} V	$R_{DS(on)}$ Ω	I_D cont @ 25°C A	I_D pulsed A	P_D @ 25°C W	Order Code	Mftrs. list No.
450	0.25	17	68	50	130-0770	2SK3935
450	0.68	10	40	40	130-0769	2SK3869
500	0.3	15	60	50	130-0773	2SK3934
500	0.85	8	32	40	130-0772	2SK3561
500	1.5	5	20	35	130-0771	2SK3563
600	0.43	13	52	50	130-0780	2SK3797
600	0.75	10	40	45	130-0779	2SK3569
600	1	7.5	30	45	130-0778	2SK3667
600	1.25	6	24	40	130-0777	2SK3562
600	2.2	3.5	14	35	130-0776	2SK3567
600	4.5	2	5	25	130-0774	2SK3767
800	1.7	6	18	45	130-0781	2SK4013
900	1.3	8	—	50	130-0784	2SK3799
900	2.5	5	15	45	130-0783	2SK3565
900	6.4	2.5	7.5	40	130-0782	2SK3566

450993

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
2SK3869	130-0769●	0.75	0.53	0.47	0.45
2SK3935	130-0770●	1.98	1.38	1.26	1.19
2SK3563	130-0771●	0.75	0.43	0.36	0.35
2SK3561	130-0772●	1.14	0.80	0.62	0.57
2SK3934	130-0773●	1.59	1.11	1.01	0.96
2SK3767	130-0774●	0.57	0.41	0.33	0.31
2SK3567	130-0776●	0.81	0.68	0.55	0.39
2SK3562	130-0777●	1.16	0.82	0.63	0.57
2SK3667	130-0778●	1.14	0.69	0.59	0.54
2SK3569	130-0779●	1.93	1.35	1.22	1.15
2SK3797	130-0780●	1.73	1.20	1.10	1.04
2SK4013	130-0781●	1.03	0.72	0.66	0.62
2SK3566	130-0782●	0.81	0.63	0.50	0.38
2SK3565	130-0783●	1.44	1.01	0.92	0.88
2SK3799	130-0784●	2.85	2.00	1.82	1.72

Standard Power MOSFETs

N Channel

IXYS



TO-247



Mini-Bloc (SOT-227B)



TO-3

V_{DS} V	$R_{DS(on)}$ max. Ω	I_D cont @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftrs. List No.
TO-247						
100	0.02	75	300	4	300	IXTH75N10
200	0.045	50	200	4	300	IXTH50N20
500	0.23	24	96	4	300	IXTH24N50
1000	0.82	14	56	4.5	360	IXTH14N100
Mini-Bloc (SOT-227B)						
500	0.12	36	133	5	400	IXTN36N50
1000	0.55	21	84	4.5	520	IXTN21N100
1000	0.6	15	60	5	400	IXTN15N100
TO-3 (TO-204)						
300	0.085	40	160	4	300	IXTH40N30
500	0.23	24	96	4	300	IXTM24N50

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
IXTH14N100	935-9303●	10.92	8.89	7.71	6.97	6.62
IXTH24N50	935-9524●	8.02	6.54	5.68	5.13	4.87
IXTH40N30	935-9532●	9.60	7.40	6.19	5.00	4.87
IXTH50N20	935-9540●	9.28	7.56	6.56	5.94	5.62
IXTH75N10	935-9320●	10.04	8.17	7.08	6.42	6.08
IXTM24N50	935-9575●	15.39	12.54	10.88	9.85	9.33
		1+	5+	10+	25+	50+
IXTN15N100	935-9559●	26.84	21.87	18.96	17.16	16.27
IXTN21N100	935-9311●	31.49	25.66	22.25	20.16	19.11
IXTN36N50	935-9214●	22.58	18.39	15.95	14.44	13.69

211356

Tube of 10 Mftrs. List No.	Order Code	Price Per Tube 1+	3+	8+
IXTN21N100	NEW 156-4078●	234.67	182.87	179.20

HiPerFET™ Power MOSFETs

N Channel

IXYS



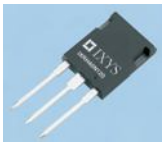
TO-247



Mini-Bloc (SOT-227B)



TO-264



Super 247

The HiPerFET™ range feature a high performance, intrinsic fast-recovery diode, significantly improving dv/dt ruggedness, and eliminating the need for additional 'freewheeling' diodes

V_{DS} V	$R_{DS(on)}$ max. Ω	I_D cont @ 25°C A	I_D pulsed A	$V_{GS(th)}$ max. V	P_D @ 25°C W	Mftrs. list No.
TO- 247						
70	0.011	76	304	3.4	360	IXFH76N07-11
100	0.02	75	300	4	300	IXFH75N10
100	0.01	170	680	4	600	IXFN170N10
200	0.045	50	200	4	300	IXFH50N20
200	0.04	58	232	4	300	IXFH58N20
300	0.06	52	205	4	360	IXFH52N30Q
300	0.045	73	292	4	500	IXFK73N30
300	0.045	73	292	4	520	IXFN73N30
300	0.085	40	160	4	300	IXFH40N30
500	0.25	21	84	4	300	IXFH21N50
500	0.23	24	96	4	300	IXFH24N50
500	0.2	26	104	4	300	IXFH26N50
500	0.2	26	104	4.5	300	IXFH26N50Q
500	0.16	30	120	4	360	IXFH30N50
500	0.15	32	128	4	360	IXFH32N50
500	0.14	40	160	5	500	IXFH40N50Q2
500	0.1	48	192	4	520	IXFN48N50
600	0.35	20	60	4.5	300	IXFH20N60
600	0.25	26	104	4.5	360	IXFH26N60Q
800	0.6	15	60	4.5	300	IXFH15N80
800	0.42	20	80	4.5	360	IXFH20N80Q
1000	2	6	24	4.5	180	IXFH6N100
1000	1.05	12	48	4.5	300	IXFH12N100
1000	1.05	12	48	5.5	300	IXFH12N100Q
1000	0.9	14	56	5	500	IXFH14N100Q2
1000	0.7	15	60	4.5	360	IXFH15N100
Mini-Bloc (SOT-227B)						
70	0.006	200	600	4	520	IXFN200N07
100	0.008	180	720	4	600	IXFN180N10
100	0.006	230	920	4	700	IXFN230N10
150	0.0125	150	600	4	600	IXFN150N15
200	0.017	120	480	4	600	IXFN120N20
200	0.01	180	720	4	700	IXFN180N20.
300	0.022	130	520	4	700	IXFN130N30
500	0.12	44	176	4	500	IXFN44N50Q
500	0.1	48	192	4	500	IXFK48N50
500	0.08	55	220	4.5	600	IXFN55N50
500	0.055	80	320	4.5	780	IXFN80N50
600	0.130	44	176	4	600	IXFN44N60
600	0.075	60	240	4.5	600	IXFN60N60
800	0.32	27	108	4.5	520	IXFN27N80Q
800	0.165	44	800	4	700	IXFN44N80
900	0.3	26	104	5	600	IXFN26N90
1000	0.39	24	96	5	600	IXFN24N100
1000	0.24	36	144	5.5	700	IXFN36N100
1200	0.35	32	128	5	780	IXFN32N120
TO-264						
200	0.02	90	360	4	500	IXFK90N20
600	0.18	36	144	4.5	500	IXFK36N60
1000	0.4	30	120	5	735	IXFK30N100Q2
PLUS-247						
1200	0.75	20	80	5	780	IXFX20N120

RL Re-reeling available

Farnell

Power MOSFETs - continued

HiPerFET™ Power MOSFETs - continued

N Channel - continued

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
IXFH12N100	935-9249●	12.57	9.69	8.10	6.84	6.67
IXFH12N100Q	734-7839●	6.40	5.31	5.16	5.03	4.90
IXFH14N100Q2	734-7847●	9.92	8.10	7.02	6.35	6.03
IXFH15N80	734-7855●	12.41	9.56	7.99	6.88	6.11
IXFH15N100	935-9583●	16.29	13.29	11.52	10.42	9.89
IXFH20N60	734-7863●	8.36	6.56	5.48	4.73	4.21
IXFH20N80Q	734-7871●	13.73	10.59	8.84	7.62	6.77
IXFH21N50	935-9133●	6.47	4.98	4.23	3.60	3.23
IXFH24N50	734-7898●	7.07	5.45	4.55	4.08	3.97
IXFH26N50	935-9141●	7.47	5.75	4.81	4.34	4.23
IXFH26N50Q	734-7901●	7.47	5.75	4.81	4.41	4.30
IXFH26N60Q	734-7910●	9.11	7.43	7.00	6.03	5.36
IXFH30N50	734-7936●	10.29	8.39	7.26	6.58	6.24
IXFH32N50	935-9206●	12.12	9.35	7.81	6.73	5.97
IXFH40N30	935-9150●	7.45	5.74	5.12	4.99	4.86
IXFH40N50Q2	734-7944●	9.16	7.46	6.47	5.85	5.55
IXFN48N50	935-9230●	32.45	23.04	17.63	13.13	11.72
IXFK48N50	935-9176●	24.00	17.04	13.04	9.71	8.28
IXFH50N20	935-9168●	7.30	5.63	4.70	4.21	4.10
IXFH52N30Q	734-7952●	11.33	8.73	7.29	6.28	5.58
IXFH58N20	935-9516●	7.61	5.87	5.41	5.26	5.13
IXFH6N100	935-9508●	6.67	5.13	4.29	3.62	3.53
IXFK30N100Q2	734-7960●	20.27	16.52	14.32	12.96	12.29
IXFK36N60	734-7979●	10.29	8.39	7.77	7.57	7.37
IXFK73N30	935-9273●	17.10	13.08	11.85	8.62	8.40
IXFH76N07-11	935-9265●	7.30	5.69	5.54	5.40	5.26
IXFH75N10	935-9192●	10.53	8.59	7.44	6.73	6.38
IXFK90N20	935-9184●	14.80	11.41	9.76	8.33	7.40
IXFX20N120	734-8037●	10.41	8.47	7.35	6.66	6.32
		1+	5+	10+	25+	50+
IXFN73N30	935-9281●	24.57	20.03	17.37	15.71	14.91
IXFN120N20	935-9257●	24.63	20.06	17.40	15.75	14.94
IXFN130N30	734-7995●	50.26	41.01	34.80	25.93	22.09
IXFN150N15	490-5660●	23.01	21.39	18.63	16.68	16.26
IXFN170N10	935-9222●	22.82	18.60	16.13	14.60	13.84
IXFN180N10	490-5672●	25.57	20.86	18.07	16.36	15.52
IXFN180N20.	490-5684●	58.46	41.50	31.76	23.66	20.16
IXFN200N07	490-5659●	34.78	24.69	18.89	12.97	12.64
IXFN230N10	358-2073●	30.36	28.24	24.58	– –	– –
IXFN24N100	490-5568●	36.34	32.13	24.58	18.32	15.60
IXFN26N90	490-5570●	38.15	31.08	24.80	18.48	15.74
IXFN27N80Q	490-5593●	25.33	20.64	17.90	16.21	15.36
IXFN32N120	734-8002●	26.59	21.67	18.78	17.00	16.13
IXFN36N100	490-5556●	67.30	55.24	42.27	31.49	26.83
IXFN44N50Q	490-5635●	22.32	18.19	15.77	14.27	13.54
IXFN44N60	490-5611●	28.33	23.09	20.02	18.13	17.18
IXFN44N80	734-8010●	36.12	29.43	25.51	23.09	21.90
IXFN55N50	490-5647●	27.96	22.79	19.75	17.89	16.97
IXFN60N60	490-5623●	36.33	29.59	24.26	23.61	23.00
IXFN80N50	734-8029●	56.26	45.73	34.99	26.07	22.21

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Mftrs. List No.		Order Code	Price Per Tube 1+	3+	8+
IXFN230N10	TUBE 10	NEW 156-4072●	240.93	216.84	– –
IXFN130N30	TUBE 10	NEW 156-4073●	278.46	197.11	– –
IXFN44N80	TUBE 10	NEW 156-4074●	313.29	245.25	240.34
IXFN170N10	TUBE 10	NEW 156-4075●	207.41	154.93	151.83
IXFN48N50	TUBE 10	NEW 156-4076●	156.29	– –	– –
IXFN120N20	TUBE 10	NEW 156-4077●	212.84	167.21	163.85
IXFH20N80Q	TUBE 30	NEW 156-4107●	329.51	248.26	238.86
IXFH26N50	TUBE 30	NEW 156-4116●	156.84	152.85	148.88
IXFH40N30	TUBE 30	NEW 156-4117●	180.33	175.62	171.29
IXFH32N50	TUBE 30	NEW 156-4118●	212.13	199.11	194.05
IXFK48N50	TUBE 25	NEW 156-4124●	280.36	220.84	217.51

PolarFET™ Power MOSFETs

IXYS

V_{DS} Max. (V)	I_D Max. (A)	R_{DS} Max. (Ω)	Ciss (pF)	Q_g (nC)	Thermal Resistance, R_{th} (°C/W)	Power P_D (W)	Case Style	Mftrs. List No.
100	75	0.025	2250	74	0.42	0.42	TO-220	IXTP75N10P
100	110	0.015	3550	110	0.31	0.31	TO-247	IXFH110N10P
100	140	0.011	4700	155	0.25	0.25	TO-268	IXFT140N10P
100	170	0.009	6000	198	0.21	0.21	TO-247	IXFH170N10P
100	170	0.009	6000	198	0.21	0.21	TO-3P	IXTQ170N10P
100	200	0.0075	7600	235	0.22	0.22	ISOTOP	IXFN200N10P
100	200	0.0075	7600	240	0.18	0.18	TO-264	IXTK200N10P
120	3	4.5	1050	39	0.62	0.62	TO-220	IXFP3N120
120	3	4.5	1050	39	0.8	0.8	TO-220	IXTP3N120
150	120	0.016	4900	150	0.25	0.25	TO-247	IXFH120N15P
150	150	0.013	5800	190	0.21	0.21	TO-3P	IXTQ150N15P
150	180	0.011	7000	240	0.18	0.18	TO-264	IXFK180N15P
150	180	0.011	7000	240	0.22	0.22	ISOTOP	IXFN180N15P
150	180	0.01	7000	240	0.18	0.18	TO-264	IXTK180N15P
200	96	0.024	4800	145	0.25	0.25	TO-268	IXFT96N20P
200	96	0.024	4800	145	0.25	0.25	TO-247	IXTH96N20P
200	120	0.022	6000	152	0.21	0.21	TO-247	IXFH120N20P
200	140	0.018	7500	240	0.22	0.22	ISOTOP	IXFN140N20P
200	140	0.018	7500	240	0.18	0.18	TO-264	IXTK140N20P
250	42	0.084	2300	70	0.42	0.42	TO-220	IXTP42N25P
250	100	0.027	6300	185	0.21	0.21	TO-3P	IXTQ100N25P
250	120	0.024	8000	185	0.18	0.18	TO-264	IXTK120N25P
300	88	0.04	6300	180	0.21	0.21	TO-247	IXFH88N30P
300	88	0.04	6300	180	0.21	0.21	TO-3P	IXTQ88N30P
300	102	0.033	7500	224	0.18	0.18	TO-264	IXTK102N30P
300	140	0.024	14000	185	0.18	0.18	ISOTOP	IXFN140N30P
300	140	0.024	14000	185	0.12	0.12	TO-264	IXFK140N30P
500	16	0.4	2250	43	0.42	0.42	D2-PAK	IXFA16N50P
500	16	0.4	2250	43	0.42	0.42	TO-220	IXTP16N50P
500	26	0.23	3600	60	0.31	0.31	PLUS220	IXFV26N50PS
500	30	0.2	4150	70	0.27	0.27	TO-247	IXFH30N50P
500	36	0.17	5500	93	0.23	0.23	TO-268	IXFT36N50P
500	36	0.17	4700	82	0.23	0.23	TO-247	IXTH36N50P
500	44	0.14	5440	98	0.19	0.19	TO-247	IXFH44N50P
500	64	0.085	8700	150	0.15	0.15	TO-264	IXFK64N50P
500	64	0.085	8700	150	0.18	0.18	ISOTOP	IXFN64N50P
500	100	0.049	20000	240	0.12	0.12	ISOTOP	IXFN100N50P
550	110	0.0135	2210	76	0.38	0.38	TO-3P	IXTQ110N055P
600	3	2.9	411	9.8	1.8	1.8	TO-220	IXTP3N60P
600	10	0.74	1610	32	0.62	0.62	TO-220	IXFP10N60P
600	26	0.27	4150	72	0.27	0.27	TO-268	IXFT26N60P
600	36	0.19	5800	102	0.19	0.19	TO-268	IXFT36N60P
600	36	0.19	5800	102	0.19	0.19	TO-247	IXFH36N60P
600	48	0.135	8860	150	0.15	0.15	TO-264	IXFK48N60P
600	64	0.096	12000	200	0.12	0.12	TO-264	IXFK64N60P
600	64	0.096	12000	200	0.18	0.18	ISOTOP	IXFN64N60P
600	82	0.75	23000	240	0.12	0.12	ISOTOP	IXFN82N60P
800	4	3	750	15	1.25	1.25	TO-220	IXTP4N80P
800	10	1.1	2300	40	0.42	0.42	D2-PAK	IXFA10N80P
800	16	0.6	4000	70	0.27	0.27	TO-247	IXFH16N80P
800	24	0.4	5800	100	0.19	0.19	TO-247	IXFH24N80P
800	32	0.27	8800	150	0.15	0.15	TO-264	IXFK32N80P
800	44	0.19	12000	198	0.12	0.12	TO-264	IXFK44N80P
800	44	0.19	12000	200	0.12	0.12	ISOTOP	IXFN44N80P
800	60	0.14	18000	250	0.12	0.12	ISOTOP	IXFN60N80P
1000	4	3	1050	39	0.8	0.8	TO-220	IXFP4N100Q

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Mftrs. List No.	Mftrs. List No.		Order Code	Price Each 1+	25+	100+
IXFA10N80P	D2-PAK	SMD	142-7281●	1.63	1.33	1.16
IXFA16N50P	D2-PAK	SMD	142-7284●	1.80	1.47	1.28
IXFH110N10P	TO-247		142-7285●	3.04	2.47	2.14
IXFH120N15P	TO-247		142-7286●	3.87	3.15	2.73
IXFH120N20P	TO-247		142-7287●	5.52	4.50	3.91
IXFH16N80P	TO-247		142-7291●	3.59	2.92	2.54
IXFH170N10P	TO-247		142-7292●	5.52	4.50	3.91
IXFH24N80P	TO-247		142-7296●	5.08	4.12	3.58
IXFH30N50P	TO-247		142-7297●	3.64	2.96	2.57
IXFH36N60P	TO-247		142-7299●	5.22	4.25	3.70
IXFH44N50P	TO-247		142-7300●	5.22	4.25	3.70
IXFH88N30P	TO-247		142-7303●	5.52	4.50	3.91
IXFK140N30P	TO-264		142-7306●	10.55	8.60	7.46
IXFK180N15P	TO-264		142-7308●	7.23	5.89	5.11
IXFK32N80P	TO-264		142-7309●	7.44	6.07	5.26
IXFK44N80P	TO-264		142-7311●	10.09	8.22	7.12
IXFK48N60P	TO-264		142-7312●	7.80	6.36	5.51
IXFK64N50P	TO-264		142-7314●	7.80	6.36	5.51
IXFK64N60P	TO-264		142-7315●	10.55	8.60	7.46
IXFK88N30P	TO-264		142-7317●	5.94	4.84	4.21
IXFN100N50P	ISOTOP		142-7318●	20.91	17.04	14.78
IXFN140N20P	ISOTOP		142-7319●	13.97	11.38	9.87
IXFN140N30P	ISOTOP		142-7320●	17.17	13.99	12.15
IXFN180N15P	ISOTOP		142-7321●	13.97	11.38	9.87
IXFN200N10P	ISOTOP		142-7322●	13.97	11.38	9.87
IXFN44N80P	ISOTOP		142-7323●	16.68	13.59	11.78
IXFN60N80P	ISOTOP		142-7326●	20.27	16.52	14.32
IXFN64N50P	ISOTOP		142-7327●	14.57	11.88	10.30
IXFN64N60P	ISOTOP		142-7328●	17.17	13.99	12.15
IXFN82N60P	ISOTOP		142-7329●	20.91	17.04	14.78
IXFP10N60P	TO-220		142-7330●	1.44	1.17	1.02
IXFP3N120	TO-220		142-7334●	3.36	2.73	2.37
IXFP4N100Q	TO-220		142-7335●	3.09	2.52	2.19
IXFT140N10P	TO-268	SMD	142-7336●	4.36	3.56	3.09
IXFT26N60P	TO-268	SMD	142-7339●	3.85	3.14	2.71
IXFT36N50P	TO-268	SMD	142-7340●	4.45	3.62	3.14
IXFT36N60P	TO-268	SMD	142-7341●	5.47	4.46	3.87
IXFT96N20P	TO-268	SMD	142-7342●	4.36	3.56	3.09
IXFV26N50PS	PLUS220	SMD	142-7348●	3.44	2.81	2.43
IXTH36N50P	TO-247		142-7355●	4.22	3.44	2.98
IXTH96N20P	TO-247		142-7356●	3.87	3.15	2.73
IXTK102N30P	TO-264		142-7357●	7.05	5.75	4.97
IXTK120N25P	TO-264		142-7358●	7.05	5.75	4.97
IXTK140N20P	TO-264		142-7359●	7.05	5.75	4.97
IXTK180N15P	TO-264		142-7360●	7.23	5.89	5.11
IXTK200N10P	TO-264		142-7361●	7.05	5.75	4.97
IXTP16N50P	TO-220		142-7365●	1.69	1.38	1.19
IXTP3N120	TO-220		142-7369●	3.27	2.66	2.30
IXTP3N60P	TO-220		142-7370●	0.56	0.45	0.39
IXTP42N25P	TO-220		142-7371●	1.74	1.41	1.22
IXTP4N80P	TO-220		142-7372●	0.68	0.56	0.48
IXTP75N10P	TO-220		142-7375●	1.74	1.41	1.22
IXTQ100N25P	TO-3P		142-7379●	5.26	4.30	3.73
IXTQ110N055P	TO-3P		142-7380●	1.93	1.59	1.36
IXTQ150N15P	TO-3P		142-7382●	5.26	4.30	3.73
IXTQ170N10P	TO-3P		142-7383●	4.82	3.93	3.41
IXTQ88N30P	TO-3P		142-7392●	5.26	4.30	3.73

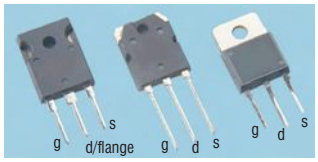
RL Re-reeling available

Farnell

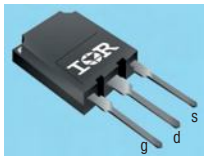
TO-3P, TO-218, TO-247, Super 247

N Channel, V_{DS} ≤100V

FAIRCHILD SEMICONDUCTOR · International IOR Rectifier · VISHAY



TO-247 TO-3P SOT-93/TO-218



Super-247

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Package	Mftr.	Mftrs List No.
30	0.0028	210	1000	230	TO-247AC	IR	IRFP3703PBF
40	1.35 mohm	350	1390	380	TO-247AC	IR	IRFP4004PBF
55	0.0053	160	640	310	TO-247AC	IR	IRFP1405PBF
55	0.007	75	—	215	TO-247	FCH	HUF75345G3
55	0.008	98	390	150	TO-247AC	IR	IRFP064NPBF
55	0.012	72	290	130	TO-247AC	IR	IRFP054NPBF
55	0.016	62	210	130	TO-247AC	IR	IRFP048NPBF
60	0.0055	130	520	250	TO-247AC	IR	IRFP064VPBF
60	0.0056	170	680	375	TO-3P	FCH	FQA170N06
60	0.01	100	350	214	TO-3P	FCH	FQA85N06
60	0.028	57	230	180	TO-247AC	VISH	IRFP044PBF
60	2.4mohm	120	840	280	TO-247AC	IR	IRFP3206PBF
60	3.3mohm	120	620	220	TO-247AC	IR	IRFP3306PBF
60	0.026	55	220	214	TO-3P	FCH	FQA47P06
75	0.0045	209	840	330	TO-247AC	IR	IRFP2907PBF
75	0.0045	170	680	310	TO-247AC	IR	IRFP2907ZPBF
75	2.8mohm	120	850	340	TO-247AC	IR	IRFP3077PBF
75	1.46 mohm	350	1280	520	TO-247AC	IR	IRFP4368PBF
100	0.009	141	230	441	Super-247	IR	IRFPS3810PBF
100	0.014	72	300	190	TO-247AC	IR	IRFP4710PBF
100	0.023	70	280	214	TO-3P	FCH	FQA70N10
100	0.024	46	230	140	TO-247AC	IR	IRFP150VPBF
100	0.025	57	180	200	TO-247AC	IR	IRFP3710PBF
100	0.026	61	244	190	TO-3P	FCH	FQA55N10
100	0.03	48	192	180	TO-3P	FCH	FQA44N10
100	0.036	39	140	140	TO-247AC	IR	IRFP150NPBF
100	3.7mohm	120	670	370	TO-247AC	IR	IRFP4110PBF
100	4.8mohm	120	560	280	TO-247AC	IR	IRFP4310ZPBF
100	7.2mohm	97	390	230	TO-247AC	IR	IRFP4410ZPBF
100	2 mohm	290	1120	520	TO-247AC	IR	IRFP4468PBF
150	4.8 mohm	171	684	517	TO-247AC	IR	IRFP4568PBF
200	8 mohm	130	520	520	TO-247AC	IR	IRFP4668PBF

			Price Each 1+	25+	100+	250+	1K+
FQA170N06	FCH	984-5976●	6.63	4.74	3.65	2.40	2.04
FQA44N10	FCH	984-6034●	1.69	1.21	0.92	—	—
FQA47P06	FCH	984-6581●	1.78	1.21	0.87	0.81	0.75
FQA55N10	FCH	984-6050●	1.90	1.38	1.05	0.69	0.58
FQA70N10	FCH	984-6085●	2.42	1.73	1.33	0.88	0.75
FQA85N06	FCH	984-6093●	2.50	1.78	1.37	0.90	0.77
HUF75345G3	FCH	107-6348●	8.35	4.76	3.65	2.04	2.01
IRFPS3810PBF	IR	865-8668●	9.14	5.76	4.47	4.02	3.91
IRFP044PBF	VISH	865-8340●	2.77	1.57	1.20	1.08	1.06
IRFP048NPBF	IR	910-3074●	3.47	2.04	1.56	1.41	1.37
IRFP054NPBF	IR	910-3082●	3.25	1.85	1.41	1.24	1.21
IRFP064NPBF	IR	864-9227●	3.67	3.46	3.30	1.40	1.32
IRFP064VPBF	IR	865-8374●	4.69	2.66	2.03	1.78	1.64
IRFP1405PBF	IR	865-8382●	5.58	3.17	2.42	1.95	1.79
IRFP150NPBF	IR	864-9235●	2.77	1.57	1.20	1.05	0.96
IRFP150VPBF	IR	865-8390●	4.17	2.37	1.81	1.59	1.48
IRFP2907PBF	IR	864-9316●	7.86	4.96	3.84	3.46	3.35
IRFP2907ZPBF	IR	865-8510●	5.58	3.51	2.72	2.45	2.40
IRFP3703PBF	IR	864-9367●	5.35	3.04	2.32	2.23	2.18
IRFP3710PBF	IR	864-9375●	6.69	4.80	3.75	2.70	2.29
IRFP4710PBF	IR	865-8609●	4.12	2.34	1.79	1.42	1.39
IRFP3077PBF	IR	NEW 160-2241●	2.49	1.75	1.50	1.34	1.21
IRFP3206PBF	IR	NEW 160-2242●	1.71	1.19	1.04	0.92	0.84
IRFP3306PBF	IR	NEW 160-2243●	1.63	1.15	0.98	0.88	0.80
IRFP4110PBF	IR	NEW 160-2244●	2.49	1.75	1.50	1.34	1.21
IRFP4310ZPBF	IR	NEW 160-2245●	1.92	1.34	1.17	1.03	0.94
IRFP4410ZPBF	IR	NEW 160-2246●	1.46	1.03	0.88	0.79	0.71
IRFP4568PBF	IR	NEW 168-4525●	8.90	6.36	4.95	4.04	3.43
IRFP4668PBF	IR	NEW 168-4526●	9.07	6.48	5.04	4.12	3.48
IRFP4004PBF	IR	NEW 168-4527●	6.34	4.54	3.52	2.88	2.45
IRFP4368PBF	IR	NEW 168-4529●	8.74	6.25	4.86	3.98	3.36
IRFP4468PBF	IR	NEW 168-4531●	8.74	6.25	4.86	3.98	3.36

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Tubes of 25

Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
IRFP064NPBF	NEW 156-4108●	183.15	68.18	65.11
IRFP2907PBF	NEW 156-4112●	89.32	68.18	66.57
IRFP054NPBF	NEW 156-4115●	70.72	63.29	62.50
IRFP3703PBF	NEW 156-4113●	70.17	64.16	61.92

£ € **40,000 PRICES REDUCED**

N Channel, V_{DS} 150-500V

VISHAY · TOSHIBA · FAIRCHILD SEMICONDUCTOR · ST

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Package/ Pin-Out	Mftr.	Mftrs List No.
150	0.012	78	330	310	TO-247AC	IR	IRFP4321PBF
150	0.018	90	360	375	TO-3P	FCH	FQA90N15
150	0.03	79	316	417	TO-3P	FCH	FDA79N15
150	0.042	43	150	200	TO-247AC	IR	IRFP3415PBF
200	0.023	94	380	580	TO-247AC	IR	IRFP90N20DPBF
200	0.032	65	260	310	TO-3P	FCH	FQA65N20
200	0.035	70	280	417	TO-3P	FCH	FDA70N20
200	0.04	50	200	300	TO-247AC	IR	IRFP260NPBF
200	0.05	48	192	280	TO-3P	FCH	FQA48N20
200	0.075	34	136	210	TO-3P	FCH	FQA34N20
200	0.075	30	120	214	TO-247AC	IR	IRFP250NPBF
200	0.085	30	120	180	TO-247AC	VISH	IRFP250PBF
200	0.18	20	80	150	TO-247AC	VISH	IRFP240PBF
200	0.47	12.6	50.4	150	TO-3P	FCH	FQA12P20
300	0.029	57	230	120	TO-247AC	IR	IRFP4332PBF
300	0.038	44	180	310	TO-247AC	IR	IRFP4229PBF
250	0.04	55	220	310	TO-3P	FCH	FQA55N25
250	0.049	59	236	392	TO-3P	FCH	FDA59N25
250	0.06	44	170	380	TO-247AC	VISH	IRFP264NPBF
250	0.075	38	150	280	TO-247AC	VISH	IRFP264PBF
250	0.125	23	92	220	TO-247AC	VISH	IRFP254NPBF
280	0.041	75	300	520	TO-3P	FCH	FDA75N28
280	0.051	62	248	500	TO-3P	FCH	FDA62N28
300	0.056	59	236	500	TO-3P	FCH	FDA59N30
400	0.2	23	92	250	TO-247AC	VISH	IRFP360PBF
400	0.2	23	92	280	TO-247AC	VISH	IRFP360LCPBF
400	0.3	16	64	190	TO-247AC	VISH	IRFP350PBF
400	0.55	11	44	150	TO-247AC	VISH	IRFP340PBF
500	0.078	47	190	450	Super-247	VISH	IRFPS43N50KPBF
500	0.1	40	180	450	Super-247	VISH	IRFPS40N50LPBF
500	0.11	52	208	600	TO-247	FE	2SK3680-01
500	0.13	36	144	446	Super-247	VISH	IRFPS37N50APBF
500	0.16	28.4	113.6	310	TO-3P	FCH	FQA28N50
500	0.16	32	130	460	TO-247AC	VISH	IRFP32N50KPBF
500	0.18	31	124	460	TO-247AC	VISH	IRFP31N50LPBF
500	0.2	24	96	290	TO-3P	FCH	FQA24N50
500	0.23	22	88	277	TO-247AC	VISH	IRFP22N50APBF
500	0.27	17	68	190	TO-247	ST	STW20NK50Z
500	0.23	22	88	280	TO-3P	FCH	FDA20N50
500	0.235	23	92	370	TO-247AC	VISH	IRFP23N50LPBF
500	0.24	20	80	280	TO-247AC	VISH	IRFP460NPBF
500	0.25	20	80	214	TO-247	ST	STW20NM50FD
500	0.27	20	80	280	TO-247AC	VISH	IRFP460PBF
500	0.27	20	80	280	TO-247AC	VISH	IRFP460APBF
500	0.27	20	80	280	TO-247AC	VISH	IRFP460LCPBF
500	0.38	14	48	150	TO-247	ST	STW14NK50Z
500	0.37	14	56	200	TO-247AC	VISH	IRFP450NPBF
500	0.4	14	56	190	TO-247AC	VISH	IRFP450APBF
500	0.4	14	56	190	TO-247AC	VISH	IRFP450PBF
500	0.4	15	—	150	TO-3P	TOSH	2SK2698(F)
500	0.4	14	56	190	TO-247AC	VISH	IRFP450LCPBF
500	0.4	14	56	175	TO-247	ST	STW14NM50FD
500	0.05	60	240	560	TO-247MAX	ST	STY60NM50
500	0.6	9.5	38	125	SOT-93	INF	SPW12N50C3
500	0.85	8.8	35	150	TO-247AC	VISH	IRFP440PBF

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+	1K+
FDA75N28	FCH	149-5286●	3.36	2.47	1.93	1.78	1.74
FQA12P20	FCH	984-6573●	1.30	0.92	0.72	0.48	0.39
FQA24N50	FCH	984-5992●	3.72	2.67	2.05	1.33	1.30
FQA28N50	FCH	984-6018●	6.21	4.43	3.41	2.25	1.90
FQA34N20	FCH	984-6026●	2.03	1.46	1.12	0.75	0.62
FQA48N20	FCH	984-6042●	3.43	2.47	1.88	1.25	1.06
FQA55N25	FCH	984-6069●	5.12	3.66	2.80	1.86	1.58
FQA65N20	FCH	984-6077●	5.32	3.79	2.92	1.94	1.64
FQA90N15	FCH	984-6107●	4.97	3.56	2.73	1.77	1.73
IRFP22N50APBF	VISH	864-9243●	4.63	2.63	2.30	2.24	2.18
IRFP23N50LPBF	VISH	865-8455●	6.41	3.64	2.79	2.44	2.39
IRFP31N50LPBF	VISH	865-8528●	8.02	5.06	3.92	3.53	3.44
IRFP32N50KPBF	VISH	865-8536●	7.48	4.72	3.66	3.29	3.15
IRFPS37N50APBF	VISH	910-2990●	7.94	5.01	3.88	3.49	3.35
IRFPS40N50LPBF	VISH	865-8684●	11.29	7.48	5.93	5.31	5.10
IRFPS43N50KPBF	VISH	864-9596●	10.79	7.15	5.66	5.02	4.90
IRFP240PBF	VISH	864-9251●	2.86	1.62	1.29	1.25	1.22
IRFP250NPBF	IR	864-9260●	3.15	2.14	1.87	1.79	1.74
IRFP250PBF	VISH	864-9278●	2.97	1.70	1.59	1.55	1.51
IRFP254NPBF	VISH	865-8471●	1.80	1.48	1.29	1.25	1.22
IRFP260NPBF	IR	864-9294●	4.97	2.82	2.16	1.89	1.73
IRFP264NPBF	VISH	865-8480●	3.21	2.00	1.75	1.70	1.66
IRFP264PBF	VISH	864-9308●	6.02	3.42	2.62	2.29	2.24
IRFP340PBF	VISH	864-9324●	2.89	1.70	1.48	1.44	1.40
IRFP3415PBF	IR	865-8544●	4.24	2.41	1.85	1.44	1.39
IRFP350PBF	VISH	864-9332●	4.06	2.31	1.77	1.55	1.51
IRFP360LCPBF	VISH	864-9340●	10.92	6.88	5.34	4.80	4.59
IRFP360PBF	VISH	864-9359●	8.26	4.66	3.34	1.86	1.83
IRFP4229PBF	IR	143-6964●	5.73	4.11	3.61	3.21	2.90
IRFP4321PBF	IR	143-6965●	6.01	4.31	3.77	3.37	3.04
IRFP4332PBF	IR	143-6966●	5.94	4.26	3.74	3.34	3.02
IRFP440PBF	VISH	864-9383●	3.40	1.90	1.48	1.44	1.40
IRFP450APBF	VISH	864-9391●	3.71	2.11	1.61	1.41	1.37
IRFP450PBF	VISH	864-9413●	3.81	2.17	1.66	1.45	1.42
IRFP450LCPBF	VISH	864-9405●	5.83	3.32	2.54	2.22	2.17
IRFP450NPBF	VISH	865-8579●	4.70	2.67	2.04	1.79	1.75
IRFP460APBF	VISH	864-9421●	5.93	3.37	2.58	2.25	2.20
IRFP460LCPBF	VISH	864-9430●	5.43	3.47	3.38	3.29	3.20

RL Re-reeling available

Farnell

Power MOSFETs - continued

N Channel, V_{DS} 150-500V - continued

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+	1K+
IRFP460NPBF	VISH	865-8587	6.13	3.48	2.66	2.33	2.26
IRFP460PBF	VISH	864-9448	3.37	2.29	2.23	2.17	2.12
IRFP90N20DPBF	IR	865-8617	8.05	5.07	3.93	3.01	2.95
IRFP9240PBF	VISH	864-9456	4.24	2.41	1.84	1.61	1.58
IRFP4242PBF	IR	129-8480	6.24	4.59	3.78	3.07	2.79
IRFP4227PBF	IR	129-8553	5.56	4.10	3.19	2.59	2.36
SPW12N50C3	INF	120-1590	2.71	2.17	1.66	1.39	1.30
STW14NK50Z	ST	980-3882	2.95	2.25	1.83	1.50	1.23
STW14NM50FD	ST	993-6009	3.48	2.70	2.20	1.81	1.79
STW20NK50Z	ST	980-3890	3.64	2.85	2.22	1.74	1.67
STW20NM50FD	ST	993-6017	4.86	3.91	2.97	2.49	2.22
STW5NK100Z	ST	951-2810	3.72	2.58	2.11	1.78	1.73
STY60NM50	ST	993-6068	15.38	12.59	9.45	– –	– –
2SK2698(F)	TOSH	121-8520	2.29	1.84	1.48	1.32	1.24
2SK3680-01	FE	120-8661	9.37	7.43	5.81	5.23	– –
FDA79N15	FCH	122-8357	2.50	1.75	1.47	1.32	1.26
FDA70N20	FCH	122-8356	3.14	2.21	1.88	1.67	1.60
FDA59N25	FCH	122-8352	2.88	2.02	1.74	1.52	1.46
FDA62N28	FCH	122-8355	3.28	2.30	1.96	1.74	1.66
FDA59N30	FCH	122-8354	3.28	2.30	1.96	1.74	1.66
FDA20N50	FCH	122-8351	3.67	2.57	2.18	1.95	1.86

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Mftrs. List No.		Order Code	Price Per Tube 1+	4+	10+
IRFP90N20DPBF	TUBE 25	NEW 156-4058	87.06	78.25	77.32
IRFP260NPBF	TUBE 25	NEW 156-4111	59.45	46.03	42.74
IRFP460LCPBF	TUBE 25	NEW 156-4114	114.48	102.75	101.22
IRFP240PBF	TUBE 25	NEW 156-4119	46.85	39.17	38.61
IRFP450PBF	TUBE 25	NEW 156-4120	50.95	42.71	42.18
IRFP460PBF	TUBE 25	NEW 156-4121	60.63	54.46	53.72
FQA48N20	TUBE 30	NEW 156-4125	56.36	37.58	31.65
FQA90N15	TUBE 30	NEW 156-4126	106.14	70.21	59.33

N Channel, V_{DS} >500V

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Package/ Pin-Out	Mftr.	Mftrs List No.
N Channel							
600	0.07	47	141	417	TO-247	FCH	FCH47N60
600	0.16	43	172	600	TO-247	FE	2SK3681-01
600	0.19	30	120	450	Super-247	VISH	IRFPS30N60KPBF
600	0.22	27	110	500	TO-247AC	VISH	IRFP27N60KPBF
600	0.24	23.5	94	310	TO-3P	FCH	FQA24N60
600	0.28	22	88	370	TO-247AC	VISH	IRFP22N60KPBF
600	0.32	21	84	330	TO-247AC	VISH	IRFP21N60LPBF
600	0.38	18.5	74	300	TO-3P	FCH	FQA19N60
600	0.46	15	60	280	TO-247AC	VISH	IRFP15N60LPBF
600	0.55	13	52	150	TO-247	ST	STW13NK60Z
600	0.58	11	44	180	TO-247AC	VISH	IRFPC50APBF
600	0.6	11	44	180	TO-247AC	VISH	IRFPC50PBF
600	0.75	10	36	156	TO-247	ST	STW10NK60Z
600	1.2	6.8	27	150	TO-247AC	VISH	IRFPC40PBF
600	0.145	30	120	312	TO-247 (SOT-249)	ST	STW30NM60D
600	0.135	30	120	313	TO-247	ST	STW26NM60
800	0.75	10.5	42	190	TO-247	ST	STW12NK80Z
800	0.9	9	36	160	TO-247	ST	STW10NK80Z
800	1.2	7.8	32.4	190	TO-247AC	VISH	IRFPE50PBF
800	1.5	6	24	125	SOT-93	INF	SPW11N80C3
800	1.5	6.2	24.8	140	TO-247	ST	STW8NK80Z
800	2	5.4	22	150	TO-247AC	VISH	IRFPE40PBF
900	0.96	11.4	45.6	300	TO-3P	FCH	FQA11N90
900	1.6	6.7	27	190	TO-247AC	VISH	IRFPF50PBF
1000	2	6	24	180	TO-247AC	VISH	IRFPG50PBF
1000	3.5	4.3	17	150	TO-247AC	VISH	IRFPG40PBF
1000	3.7	3.5	14	125	TO-247	ST	STW5NK100Z
1500	10	2	4	100	TO-3PB	SY	2SK3746
1500	12	2.5	7	100	TO-3P	REN	2SK1317-E

Mftrs. List No.	Mfr.	Order Code	Price Each 1+	25+	100+
2SK1317-E	REN	117-4965	17.51	13.12	11.30
2SK3681-01	FE	120-8662	9.37	7.43	5.81
2SK3746	SY	120-8647	3.26	2.62	2.06
FQA11N90	FCH	984-5941	3.24	2.31	1.78
FQA19N60	FCH	984-5984	2.74	1.96	1.50
FQA24N60	FCH	984-6000	3.57	2.54	1.96
IRFPC40PBF	VISH	864-9464	3.52	2.00	1.53
IRFPC50PBF	VISH	864-9480	6.14	3.49	2.67
IRFPC50APBF	VISH	864-9472	5.51	3.22	2.45
IRFPE40PBF	VISH	864-9529	5.62	3.17	2.95
IRFPE50PBF	VISH	864-9537	6.01	3.41	2.61
IRFPF50PBF	VISH	864-9553	7.98	4.58	3.36
IRFPG40PBF	VISH	864-9570	3.58	2.31	1.80
IRFPG50PBF	VISH	864-9588	7.18	4.53	3.51
IRFP15N60LPBF	VISH	865-8404	5.47	3.11	2.38
IRFP21N60LPBF	VISH	865-8420	6.64	3.78	2.89
IRFP22N60KPBF	VISH	865-8439	5.72	3.61	2.80
IRFP27N60KPBF	VISH	865-8501	7.48	4.72	3.66
IRFPS30N60KPBF	VISH	865-8641	8.71	5.49	4.26

Mftrs. List No.	Mfr.	Order Code	Price Each 1+	25+	100+
SPW11N80C3	INF	120-1592	3.79	2.96	2.16
STW5NK100Z	ST	951-2810	3.72	2.58	2.11
STW8NK80Z	ST	993-6041	2.53	1.91	1.49
STW10NK60Z	ST	816-5327	2.16	1.64	1.28
STW10NK80Z	ST	980-3840	2.66	2.05	1.45
STW12NK80Z	ST	980-3858	3.96	3.03	2.45
STW13NK60Z	ST	980-3866	2.12	1.66	1.32
STW26NM60	ST	993-6025	6.91	5.37	4.40
STW30NM60D	ST	951-2691	10.41	8.47	6.13

382895

Mftrs. List No.		Order Code	Price Per Tube 1+	4+	10+
IRFPG50PBF	TUBE 25	NEW 156-4123	88.56	65.50	63.07
IRFI640GPBF	TUBE 50	NEW 156-4065	74.85	48.80	48.00

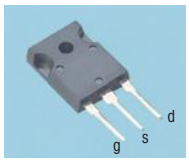
P Channel, V_{DS} 60V - 200V

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Package/ Pin-Out	Mftr.	Mftrs List No.
60	0.026	55	220	214	TO-3P	FCH	FQA47P06
200	0.5	12	48	150	TO-247AC	VISH	IRFP9240PBF
200	0.47	12.6	50.4	150	TO-3P	FCH	FQA12P20

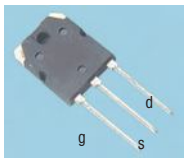
383795

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
FQA12P20	984-6573	1.30	0.92	0.72	0.48	0.39
FQA47P06	984-6581	1.78	1.21	0.87	0.81	0.75
IRFP9240PBF	864-9456	4.24	2.41	1.84	1.61	1.58

Audio FETs



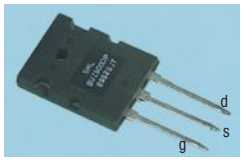
TO-247



TO-3P



TO-3



TO-264

P_D @ 25°C	$I_{D\ cont.}$ @ 25°C	$R_{DS(on)}$	V_{DS} V	Package	Mftr.	N-Channel	P-Channel
33 W	14 A	93 mohm	55 V	TO-220FP	IR	—	IRLIB9343PBF
39 W	19 A	42 mohm	55 V	TO-220FP	IR	IRLIB4343PBF	—
100 W	8 A	1.5 ohm	180 V	TO-3P	REN	2SK2220-E	—
125 W	8 A	1.5 ohm	160 V	TO-3	SEM	BUZ900	BUZ905
125 W	8 A	1.5 ohm	160 V	TO-247	SEM	BUZ900P	BUZ905P
125 W	8 A	1.5 ohm	200 V	TO-3	SEM	BUZ901	BUZ906
125 W	8 A	1.5 ohm	200 V	TO-247	SEM	BUZ901P	BUZ906P
250 W	16 A	0.75 ohm	160 V	TO-3	SEM	BUZ900D	BUZ905D
250 W	16 A	0.75 ohm	200 V	TO-3	SEM	BUZ901D	BUZ906D
250 W	16 A	0.75 ohm	200 V	TO-264	SEM	—	BUZ906DP

211220

Mftrs. List No.	Mftr	Order Code	Price Each 1+	25+	100+	250+
BUZ900	SEM	118-2824	6.64	5.89	5.09	4.81
BUZ900D	SEM	120-8651	12.69	10.02	7.94	7.01
BUZ900P	SEM	120-8682	8.18	6.45	5.12	4.51
BUZ901	SEM	118-2825	10.29	8.12	6.44	5.67
BUZ901D	SEM	120-8653	14.59	11.49	9.12	8.02
BUZ901P	SEM	120-8683	10.29	8.12	6.44	5.67
BUZ905	SEM	118-2826	6.14	4.83	3.83	3.37
BUZ905D	SEM	120-8654	12.69	10.02	7.93	7.00
BUZ905P	SEM	120-8684	8.18	6.45	5.10	4.50
BUZ906	SEM	118-2827	10.29	8.12	6.43	5.66
BUZ906D	SEM	120-8655	14.59	11.49	9.12	8.02
BUZ906DP	SEM	120-8694	16.00	10.08	8.56	7.53
BUZ906P	SEM	120-8685	10.29	8.12	6.43	5.66
IRLIB4343PBF	IR	993-3859	0.84	0.77	0.59	0.56
IRLIB9343PBF	IR	993-3867	1.22	1.12	0.87	0.72
2SK2220-E	REN	117-4977	13.94	10.44	8.80	5.09

£ € 40,000 PRICES REDUCED

RL Re-reeling available

Farnell

Isolated, TO-3PFM, TO-3PML and TO-220FP

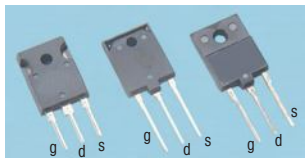
RENESAS



TO-3P



TO-220FP



TO-247 TO-3PFM ISOWATT218

Isolated packages offer simplified heatsink mounting, without the need for additional isolating washers, mica etc. Isolation voltage 4kV, lead spacing 5.45.

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Pack-age	Mftr.	Mftrs List No.
N Channel							
400	0.25	5.4	21.6	25	TO-220FP	ST	STP17NK40ZFP
800	0.9	9	36	40	TO-220FP	ST	STP10NK80ZFP
1500	8	2	4	60	TO-3PML	SY	2SK1413
1500	10	2	4	50	TO-3PML	SY	2SK3747
1500	5.5	4	8	80	TO-3PML	SY	2SK3748
P Channel							
60	0.06	45	180	60	TO-3PFM	REN	2SJ218-E

211103

		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
STP10NK80ZFP	**980-3025**●	3.63	2.43	1.97	1.76	1.55
STP17NK40ZFP	**980-3076**●	2.09	1.66	1.38	1.17	1.15
2SJ218-E	**117-4966**●	17.59	12.94	10.97	6.31	6.13
2SK1413	**120-8650**●	3.92	3.13	2.46	2.23	– –
2SK3747	**120-8648**●	3.26	2.62	2.06	1.86	– –
2SK3748	**120-8649**●	5.00	3.99	3.13	2.87	– –

TO-3

International IOR Rectifier



- High reliability
- Rugged, hermetically sealed package
- Repetitive avalanche rated
- Dynamic dv/dt rating
- Simple drive requirements
- Ease of paralleling

Lead spacing=11,
Fixing centres=30

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs. List No.
N Channel						
200	0.4	9	36	75	IR	IRF230
200	0.18	18	72	125	IR	IRF240*
200	0.085	30	120	150	IR	IRF250*
400	0.55	10	40	125	IR	IRF340
400	1	5.5	22	75	IR	IRF330
500	0.27	21	84	300	IR	IRF460*
500	0.4	14.5	58	198	SEM	BFD82
500	0.85	8	32	125	IR	IRF440
1000	0.125	6	24	198	SEM	BFD63
P Channel						
100	0.2	19	76	125	IR	IRF9140
100	0.3	11	50	75	IR	IRF9130

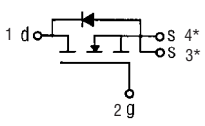
Pin ∅ 1.0 nom., except where * ∅ 1.6 max.

211098

Mftrs. List No./ JEDEC Ref.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
BFD63	SEM	**120-8689**●	23.07	20.53	18.97	12.62
BFD82	SEM	**120-8687**●	14.96	11.69	10.52	6.53
IRF230	IR	**419-0609**▲	13.07	8.25	6.29	5.13
IRF240	IR	**419-0610**▲	13.72	8.81	6.81	5.22
IRF250	IR	**664-080**▲	22.80	18.71	14.66	10.53
IRF330	IR	**419-0622**▲	9.33	6.88	5.44	4.50
IRF340	IR	**419-0634**▲	14.07	9.14	7.32	6.32
IRF440	IR	**301-1045**▲	14.95	9.53	6.79	5.77
IRF460	IR	**419-0671**▲	20.03	12.65	9.64	7.80
IRF9130	IR	**419-0683**▲	9.66	5.79	4.44	3.39
IRF9140	IR	**664-110**▲	10.39	5.54	4.23	3.44

ISOTOP™ (SOT-227B), N Channel





- High power modules
- Isolated base
- 2.5kV rms isolation voltage
- 4mm screw terminals

H=12.2, W=25.4, D=38,
Fixing centres=31.6

Internal schematic diagram

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	P_D @ 25°C W	Mftr.	Mftrs List No.
100	0.006	180	540	360	ST	STE180NE10
500	0.08	53	212	460	ST	STE53NC50

		Price Each				
Mftrs. List No.	Order Code	1+	5+	10+	25+	50+
STE53NC50	**994-6390**●	27.71	21.01	20.43	19.91	19.40
STE180NE10	**980-3009**●	37.07	29.66	26.69	25.02	23.95

211087

Tube of 10		Price Per Tube		
Mftrs. List No.	Order Code	1+	3+	8+
STE180NE10	NEW **156-4081**●	261.63	232.34	227.69

SEMITRANS Modules

SEMIKRON innovation+service

N Channel



A: H=12, W=40.5, D=28

Mounting holes=2 dia,
Fixing centres=38



B: H=12, W=40.5, D=28

- Compact design
- One Screw Mounting
- Isolated copper base plate
- Trench-gate technology
- Short internal connections and low inductance case

V_{DS} V	$R_{DS(on)}$ Ω	$I_{D\ cont.}$ @ 25°C A	I_D pulsed A	Case Style	Mftrs List No.
100	0.007	80	120	A	SK85MH10T
100	0.0075	80	120	A	SK115MB10
100	0.005	100	140	A	SK70MD075

423774

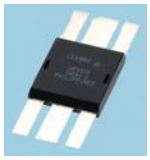
		Price Each		
Mftrs. List No.	Order Code	1+	5+	15+
SK85MH10T	NEW **156-8686**●	36.26	26.37	24.18
SK115MD10	**109-5558**●	39.68	28.30	24.61
SK70MD075	**109-5557**●	34.24	24.42	21.24

MOSFET/IGBT Drivers

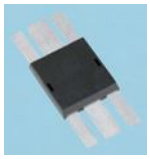
Ultrafast RF MOSFET Drivers

IXYS

New



DEIC515



DEIC420

CMOS high speed, high current gate drivers specifically designed to drive MOSFETs in class D and E in high frequency applications upto 45MHz, as well as any other application that demands ultra-fast rise and fall times (<4ns).
The input of the drivers are fully immune to latch up over the entire operating range. Designed with small internal delays, cross conduction/current shoot-through is virtually eliminated.

- Latch-up protected
- High peak currents
- Wide operating range: 8V to 30V
- Ultrafast rise and fall times
- Highly capacitive load drive capable
- Matched rise and fall times
- 18ns Input to output delay times
- Low output impedance
- Low quiescent supply current

I_D Peak. A	F_{max} MHz	Op, Temp Range V	V_{supply} max. V	Package	Mftrs. List No.
15	45	-40 to 85	30	DEIC515	DEIC515
20	45	-40 to 85	30	DEIC420	DEIC420

464762

		Price Each		
Mftrs. List No.	Order Code	1+	10+	25+
DEIC515	SMD **134-7727**●	20.14	18.31	16.58
DEIC420	SMD **134-7728**●	19.03	17.31	15.66

Off-Line SMPS Current Mode Controller

With integrated 800V CoolMOS™

Infineon



P_D W	$R_{DS(ON)}$ Ω	$V_{DS(MAX)}$ V	Mftrs. List No.
17	3	800	ICE2A180Z
31	0.8	800	ICE2A280Z

The second generation CoolSET™ - F2, provides several special enhancements to satisfy the needs for low power standby and protection features.
In standby mode, frequency reduction is used to lower the power consumption and support a stable output voltage in this mode.
The frequency reduction is limited to 20Khz/21.5 Khz to avoid audioble noise.

MOSFET/IGBT Drivers - continued

Off-Line SMPS Current Mode Controller - continued

With integrated 800V CoolMOS™ - continued

In case of failure modes like open loop, overvoltage or overload due to short circuit, the device switches in Auto Restart mode which is controlled by the internal protection unit.
By means of the internal precise peak current limitation, the dimension of the transformer and the secondary diode can be sized lower which means a more cost effective overall system.

- No Heat Sink Required
- Lowest standby power dissipation - to meet European commision requirements
- Enhanced protection functions with Auto Restart Mode
- Few additional components required
- Thermal shutdown with auto-restart
- Overload and open loop protection
- Overvoltage protection during auto restart
- Adjustable peak current limitation via external resistor
- 5% current limiting tolerance, 72% max duty cycle
- User defined soft-start and soft driving for low EMI

425217

Mftrs. List No.	Order Code	Price Each 1+	25+	100+
ICE2A180Z	109-5674	1.55	1.15	0.93
ICE2A280Z	109-5676	2.52	1.88	1.54

Off-Line SMPS Current Mode Controller

With integrated 650V Startup Cell/Depletion CoolMOS™



- Active burst mode to reach the lowest standby power requirements
- Protection features (Auto Restart Mode) to increase robustness and safety of the system
- Adjustable blanking window for high load jumps to increase system reliability
- 67/100Khz fixed switching frequency
- Few external components required
- 5% current limiting tolerance with a max Duty Cycle of 72%
- Soft driving for low EMI

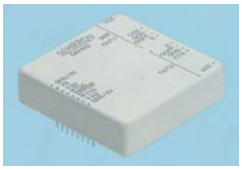
The Third generation CoolSET™ - F3, provides active burst mode to reach the lowest standby power requirements.Less than 100 mW at no load. As the controller is always active during Active burst mode, there is an imediate response on load jumps without any black out in SMPS. In active Burst Mode, the ripple of the output voltage can be reduced, less than 1%. Futhermore, to increase the robustness and safety of the system, the device enters into Auto restart mode in the cases of over-temperature, VCC overvoltage, output open loop or overload and VCC undervoltage. By means of the internal precise peak current diode can be lowered which leads to more cost effeciency. An adjustable blanking window prevents the IC from entering Auto jumps. The CoolSET™ - F3 family consists a wide power class range of products for various applications.

P_D W	$R_{DS(ON)}$ Ω	$V_{DS(MAX)}$ V	Mftrs. List No.
20	1.7	650	ICE3A1565
33	0.65	650	ICE3A2565
120	0.79	650	ICE3A5565P

425220

Mftrs. List No.	Order Code	Price Each 1+	25+	100+
ICE3A1565	109-5677	1.70	1.12	0.93
ICE3A2565	109-5678	1.38	0.92	0.75
ICE3A5565P	109-5679	3.42	2.29	1.87

MOSFET/IGBT Driver Module



H=14, W=55, D=55

- Double driver for Semikron half bridge modules
- Produces negative V_{GE} at switch-off
- Drives MOSFETS $V_{ds(on)}$ <10V
- CMOS compatible inputs
- Short circuit protected
- Drive interlock top/bottom
- Internal isolation transformers
- Supply undervoltage protection (13V)

V_S V	V_{IH} V	I_{IH} mA	$I_{O\ (max)}$ A	f_{max} kHz	V_{CE} V	dv/dt kV/µs	V_{ISOL} kV	Mftrs. List No.
18	18.3	0.29	8	100	1700	50	2500	SKHI22AR

211187

Mftrs. List No.	Order Code	Price Each 1+	10+	50+
SKHI22AR	118-2752	155.00	116.25	89.36

SKYPER™ 32 and 32 PRO



SKYPER 32 and SKYPER 32PRO

- Two output channels
- Integrated potential free power supply
- Under voltage protection
- Drive interlock top / bottom
- Dynamic short cirucit protection DSCP
- Failure management
- IEC 60068-1 (climate) 40/085/56

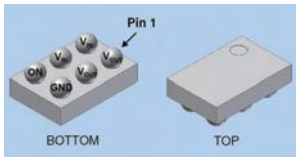
Channels Number of	V_{CE} Max. V	Input Signal High V	Input Signal Low V	Output Charge µC	Supply Voltage(V_S) V	Output I_{PEAK} V	F_{MAX} kHz	Mftrs. list No.
2	1700	V_s +0.3	GND - V_s	2.5	16	V_s +0.3	50	SKYPER 32 R
2	1700	V_s +0.3	GND - V_s	6.3	15	V_s +0.3	50	SKYPER 32PRO R

451525

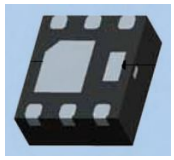
Mftrs. List No.	Order Code	Price Each 1+	3+	+
SKYPER 32 R	130-0530	55.37	46.81	– –
SKYPER 32PRO R	130-0531	70.26	59.41	– –

Smart Power MOSFETs

IntelliMAX Advanced Load Management Products



CSP-6



MLP 3x3

- Controlled turn-on
- Low R_{DS}
- Fast switching

The FPF1003 is a low-RDS and low input voltage load switch with controlled turn-on.
The FPF2174 is a load switch which combines the functionality of the IntelliMAX™ series, with a very low forward current drop schottky barrier rectifier and a zener diode clamp at the output. Each part contains thermal shutdown protection which shuts off the switch to prevent damage to the part when a continuous over-current condition causes excessive heating.
On all devices switch control is by a logic input (ON) capable of interfacing directly with low-voltage control signals.

Supply Voltage Range	R_{DS} Ω	Polarity O/P Transistor	I_{OUT} max. (A)	Package	Mftrs List No.	Order Code
1.2 to 5.5V	0.035	P	2	CSP-6	FPF1003	132-4833
1.8 to 5.5V	0.125	P	0.4	MLP-3x3	FPF2174	132-4835

456415

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
Load Switches					
FPF1003	SMD 132-4833	0.93	0.70	0.53	0.40
FPF2174	SMD 132-4835	0.66	0.55	0.43	0.36

650V, CoolSET™ Generation 2 and 3

For PWM Fixed - 100kHz operation



P-DIP-8-6

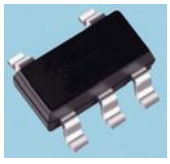
ICE3xA Series:

- 650V avalanche rugged CoolMOS™ with built in switchable Startup Cell
- Active Burst Mode for lowest Standby Power @ light load
- Fast load jump response in Active Burst Mode
- 100 kHz fixed switching frequency
- Auto Restart Mode for Overtemperature Detection, Overvoltage Detection, Overload and Open Loop, and VCC Undervoltage
- Blanking Window for short duration high current
- User defined Soft Start
- Minimum of external components required
- Max Duty Cycle 72%
- Overall tolerance of Current Limiting < ±5%
- Internal Leading Edge Blanking
- Soft switching for low EMI

498136

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
ICE3xA Series, P-DIP-8					
ICE3AS02	147-1718	1.07	0.83	0.76	0.71
ICE3A0365	147-1706	0.82	0.63	0.58	0.55
ICE3A0565	147-1707	0.91	0.69	0.63	0.60
ICE3A1065	147-1709	0.99	0.78	0.69	0.65
ICE3xA Series, P-DIP-7					
ICE3A2065Z	147-1713	1.47	1.14	1.03	0.97
ICE3xA Series, P-TO-220-6-47					
ICE3A5065P	147-1717	2.07	1.60	1.45	1.36
ICE2xA Series, P-DIP-8					
ICE2A165	147-1705	1.30	1.02	0.81	0.49

FPF21XX IntelliMAX™ Series Load Management - SOT-23 (5-Pin)



H=1.7, W=6.7, D=7.3

A family of load switches which provide full protection to systems and loads which may encounter large current conditions. These devices contain a 0.125W current-limited MOSFET. Switch control is by a logic input (ON) capable of interfacing directly with low voltage control signals.Thermal shutdown protection which shuts off the switch to prevent damage to the part when a continuous over-current condition causes excessive heating.When the switch current reaches the current limit, the part operates in a constant-current mode to prohibit excessive currents from causing damage, instantaneous, delayed and reverse current blocking options

are available.

Note: 1228312(FPF1005) - MLP package.

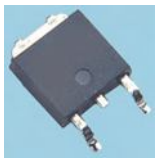
- 1.8 to 5.5V input voltage range
- Controlled turn-on
- Current limit options
- Undervoltage lockout
- Less than 1uA shutdown current, with auto-restart ability
- Fast current limit response time, with fault blanking

419109

Mftrs. List No.	Order Code	Price Each 1+	10+	100+	250+	500+
FPF1005	SMD 122-8312●	0.770	0.630	0.490	0.350	0.210
FPF2100	SMD 108-4435● RL	0.820	0.690	0.560	0.430	0.300
FPF2103	SMD 108-4438● RL	0.810	0.580	0.440	0.290	0.260
FPF2104	SMD 108-4439● RL	0.880	0.630	0.480	0.320	0.260
FPF2106	SMD 108-4441● RL	0.880	0.630	0.480	0.320	0.260
FPF2108	SMD 108-4443● RL	0.820	0.620	0.490	0.370	0.330
FPF2109	SMD 108-4444● RL	0.880	0.630	0.480	0.320	0.290
FPF2110	SMD 108-4445● RL	0.880	0.630	0.480	0.320	0.280
FPF2116	SMD 122-8313●	0.430	0.330	0.250	0.193	0.188
FPF2123	SMD 122-8314●	0.930	0.660	0.510	0.340	0.310
FPF2124	SMD 122-8315●	0.580	0.490	0.400	0.310	0.270
FPF2125	SMD 122-8317●	0.900	0.680	0.530	0.390	0.370

N-Channel Smart MOS

ON Semiconductor

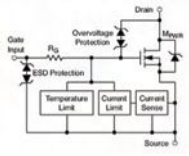


D-PAK (TO-252)

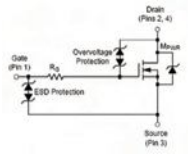


SOT-223

- Protected MOSFETs
- Voltage clamped.
- Various protection options.
- Surface mount.



Config A



Config B

V_{CLAMP} Max, (V)	$R_{DS(on)}$ (Ω)	I_D (Limited) @ 25°C (A)	Shutdown Temp (°C)	P_D @ 25°C (W)	Circuit	Package	Order Code	Mftrs. list No.
40	0.11	6.5	200	1.3	A	D-PAK	145-3666	NID5004NT4G
40	0.1	6	175	1.1	A	SOT-223	145-3672	NIF62514T1G
42	0.023	33	175	64	A	D-PAK	145-3664	NID5001NT4G
42	0.042	20	175	1.3	A	D-PAK	145-3665	NID5003NT4G
42	0.165	2	N/A	1.1	A	SOT-223	145-3669	NIF5002NT1G
42	0.053	14	N/A	1.25	A	SOT-223	145-3670	NIF5003NT1G
52	0.181	9	N/A	28.8	B	D-PAK	145-3668	NID9N05CLT4G
52	0.125	2.6	N/A	1.69	B	SOT-223	145-3673	NIF9N05CLT1G
65	0.21	6.5	200	1.3	A	D-PAK	145-3667	NID6002NT4G

497203

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
NID5001NT4G	SMD 145-3664●	2.10	1.50	1.16	0.92
NID5003NT4G	SMD 145-3665●	1.38	0.97	0.76	0.59
NID5004NT4G	SMD 145-3666●	1.67	1.19	0.92	0.72
NID6002NT4G	SMD 145-3667●	1.67	1.19	0.92	0.72
NID9N05CLT4G	SMD 145-3668●	1.06	0.77	0.58	0.47
NIF5002NT1G	SMD 145-3669●	0.99	0.72	0.55	0.50
NIF5003NT1G	SMD 145-3670●	1.37	0.96	0.75	0.59
NIF62514T1G	SMD 145-3672●	0.93	0.67	0.52	0.49
NIF9N05CLT1G	SMD 145-3673●	0.49	0.34	0.27	0.21

Fully Protected MOSFET Switches

165 °C trip

International IOR Rectifier



TO-220/5



SOT-223



SO-8



TO-220

- Short-circuit protected
- Over-temperature protected
- Negative clamped output
- Reverse battery protection
- Open-circuit ground protection
- V_{CC} short-circuit protection
- Low noise charge pump
- Sleep mode supply current
- 4kV ESD protected
- Diagnostic feedback

$R_{DS(on)}$ Ω	V_{clamp} V	V_{in} High min. V	V_{in} Low max. V	Shut-down A	P_D @ 25°C W	Package	Mftrs. List No.
Single Low Sided Switch							
0.25	39	6	-0.3	2.8	2	SOT-223	IPS1051LPBF
0.13	68	6	-0.3	5	1	SOT-223	IPS2041LPBF
0.1	39	6	-0.3	4.5	2	SOT-223	IPS1041LPBF
0.05	36	6	0.3	18	25	TO-220	IPS1031PBF
0.05	36	0.3	6	18	3.1	D2-PAK	IPS1031SPBF
0.05	36	0.3	6	18	2.5	D-PAK	IPS1031RPBF
0.025	36	0.3	6	35	25	TO-220	IPS1021PBF
0.025	36	0.3	6	35	3.1	D2-PAK	IPS1021SPBF
0.025	36	0.3	6	35	2.5	D-PAK	IPS1021RPBF
0.013	36	0.3	6	85	25	TO-220	IPS1011PBF
0.013	36	0.3	6	85	3.1	D2-PAK	IPS1011SPBF
130mohm	68	-0.3	6	5	1	D-PAK	IPS2041RPBF
100mohm	39	-0.3	6	4.5	2	D-PAK	IPS1041RPBF
Dual Low Sided Switch							
0.25	39	-0.3	6	2.8	1.25	SOIC	IPS1052GPBF
0.1	39	-0.3	6	4.5	1.25	SOIC	IPS1042GPBF

$R_{DS(on)}$ Ω	V_{clamp} V	Package	Mftrs. List No.
High Sided Switch			
0.13	39	SOIC	IPS6041GPBF
0.13	39	D-PAK	IPS6041RPBF
0.06	39	TO-220	IPS6031PBF
0.06	39	D-PAK	IPS6031RPBF
0.06	39	D2-PAK	IPS6031SPBF
0.03	39	TO-220	IPS6021PBF
0.03	39	D-PAK	IPS6021RPBF
0.03	39	D2-PAK	IPS6021SPBF
0.02	40	TO-220	IR3315PBF
0.014	39	TO-220	IPS6011PBF
0.014	39	D-PAK	IPS6011RPBF
0.014	39	D2-PAK	IPS6011SPBF
0.012	40	TO-220	IR3314PBF
0.007	40	TO-220	IR3313PBF
70mohm	70	TO-220AB	IPS7081PBF
70mohm	70	D-PAK	IPS7081RPBF
70mohm	70	D2-PAK	IPS7081SPBF
110mohm	70	SO	IPS7071GPBF
120mohm	70	SO	IPS7091GPBF
120mohm	70	TO-220AB	IPS7091PBF
120mohm	70	D2-PAK	IPS7091SPBF
130mohm	39	TO-220	IPS6041PBF
130mohm	39	TO-220	IPS6041PBF
130mohm	39	D2-PAK	IPS6041SPBF

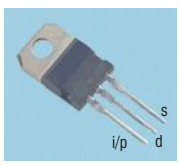
211340

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
IPS1011PBF	138-8572●	6.42	4.72	4.28	3.70	3.32
IPS1011SPBF	SMD 138-8573●	6.66	4.89	4.43	3.85	3.44
IPS1021PBF	138-8576●	4.02	2.96	2.70	2.33	2.09
IPS1021RPBF	SMD 138-8578●	3.77	2.78	2.52	2.18	1.95
IPS1021SPBF	SMD 138-8577●	4.24	3.11	2.82	2.45	2.19
IPS1031PBF	138-8579●	3.34	2.45	2.23	1.92	1.73
IPS1031RPBF	SMD 138-8581●	3.05	2.24	2.05	1.77	1.58
IPS1031SPBF	SMD 138-8580●	3.54	2.59	2.36	2.06	1.84
IPS1041LPBF	SMD 138-5472●	1.88	0.91	0.76	0.63	0.61
IPS1042GPBF	SMD 138-5478●	2.71	1.32	1.11	0.94	0.92
IPS1051LPBF	SMD 138-5480●	1.59	0.77	0.65	0.54	0.53
IPS1052GPBF	SMD 138-5484●	2.35	1.14	0.95	0.79	0.76
IPS2041LPBF	SMD 138-5487●	2.28	1.11	0.93	0.77	0.75
IPS6011PBF	138-5490●	5.32	2.88	2.48	2.16	2.09
IPS6011RPBF	SMD 138-5491●	4.78	2.51	2.08	1.82	1.77
IPS6011SPBF	SMD 138-5492●	5.24	2.84	2.44	2.13	2.06
IPS6021PBF	138-5493●	3.66	1.98	1.72	1.50	1.44
IPS6021RPBF	SMD 138-5494●	3.16	1.72	1.48	1.28	1.24
IPS6021SPBF	SMD 138-5496●	3.61	1.90	1.57	1.37	1.32
IPS6031PBF	138-5497●	3.11	1.68	1.45	1.26	1.22
IPS6031RPBF	SMD 138-5498●	2.97	1.44	1.21	1.00	0.96
IPS6031SPBF	SMD 138-5499●	3.02	1.63	1.41	1.23	1.19
IPS6041GPBF	SMD 138-5500●	2.03	0.99	0.83	0.70	0.68
IPS6041RPBF	SMD 138-5502●	2.50	1.56	1.33	1.16	1.12
IR3313PBF	138-8589●	5.40	2.68	2.35	2.05	1.83
IR3314PBF	138-8590●	4.69	2.46	2.03	1.78	1.61
IR3315PBF	138-8591●	4.06	2.13	1.77	1.55	1.38
IPS1041RPBF	SMD 160-2247●	1.25	0.87	0.74	0.66	0.61
IPS2041RPBF	SMD 160-2248●	1.49	1.04	0.90	0.81	0.72
IPS6041PBF	160-2249●	1.89	1.31	1.14	1.01	0.91
IPS6041PBF	160-2249●	1.89	1.31	1.14	1.01	0.91
IPS6041SPBF	SMD 160-2250●	1.87	1.31	1.13	1.01	0.91
IPS7071GPBF	SMD 160-2252●	3.56	2.49	2.15	1.92	1.74
IPS7081PBF	160-2253●	2.56	1.79	1.54	1.38	1.25
IPS7081RPBF	SMD 160-2254●	2.13	1.50	1.28	1.15	1.03
IPS7081SPBF	SMD 160-2255●	2.50	1.76	1.51	1.35	1.22
IPS7091GPBF	SMD 160-2256●	1.67	1.18	1.01	0.90	0.82
IPS7091PBF	160-2257●	2.25	1.58	1.36	1.22	1.11
IPS7091SPBF	SMD 160-2258●	2.21	1.54	1.33	1.19	1.07

OmniFET™ Fully Protected MOSFET Switches



SO-8



TO-220

- Current limited
- Thermal shut-down
- Short-circuit protected
- Integral clamp

RL Re-reeling available

Smart Power MOSFETs - continued

OmniFET™ Fully Protected MOSFET Switches - continued

- High input impedance
- ESD protected to 2KV

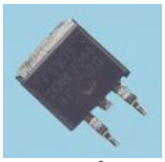
V_{clamp} V	$R_{DS(on)}$ Ω	I_{lim} A	P_{tot} mW		Mftrs. List No.
70	0.2	5	31	TO-220	VNP5N07
45	0.25	1.7	4	SOIC	VNS1NV04D

211243

		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
VNP5N07	980-4501▲	1.38	1.03	0.85	0.66	– –
VNS1NV04D	SMD 816-5483●	1.42	1.03	0.80	0.63	0.59

Intelligent Switches, 50 V_{CLAMP}

Temperature and Overload Protected



TO-263 (D^2Pak)

High sided switches as inherently protected against overtemperature, short circuits and overvoltage. Full ESD protection to 2kV. Offers direct gate access, a fault reporting flag and an independent protection circuit supply.
Suitable for low voltage high reliability switching and linear applications, and for use in harsh environments.

I_D A	$R_{DS(on)}$ Ω	V_{DS} V	P_D @ 25°C W	V_{in} min	V_{in} max	Package	Mftrs. List No.
34	20	50	98	1.5	3.0	D2-PAK	PIP3213-R

211117

		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
PIP3213-R	SMD 108-1471●	3.44	2.50	2.08	1.54	1.48

Self-Protected Low-Side Intellifet MOSFET Switch



SOT-223

- Short circuit protected through auto restart
- Low Rds
- surge protected
- Entry protection (ESD)
- High DC current
- Load drop protection (protects active load)

Self protected low side MOSFET. Monolithic over temperature, over current, surge and ESD protected logic level entry functionality. Suitable as an all purpose switch for a variaty of different uses.

Supply Voltage Range	R_{DS} Ω	Polarity O/P Transistor	I_{OUT} max. (A)	Package	Mftrs List No.	Order Code
-0.2 to 10V	0.5	N	1.1	SOT-223	BSP75N	125-1242
-0.2 bis 10V	0.55	N	1.4	SOT-223	BSP75G	125-1243

458168

		Price Each			
Mftrs. List No.	Order Code	1+	25+	100+	250+
BSP75N	SMD 125-1242● RL	0.95	0.73	0.49	0.40
BSP75G	SMD 125-1243● RL	1.62	1.22	0.73	0.56

High-Side Power Switches



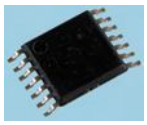
P-DSO-20



TO-220-5



TO-220-7



P-DSO-14



PG-SOT223-4



P-TO252-5



PG-DSO-8

Infineon has expanded their Smart High Side Power Switches portfolio with PROFET for industrial requirements. For cost optimization, Infineon provides today an industrial optimized solution. . Similar to their BTS/BSP-equivalent the ITS- and ISP-family is capable to drive heavy loads, embedding several protection functions, which make them ideally for use in industrial applications, such as lift or door control, printers, sensors, level metering etc.

- Replaces electromechanical relays, fuses and discrete circuits
- Integrated Inductive load clamping
- Voltage and current limiting
- Low on-state resistances
- Thermal Shutdown
- ESD protected devices
- Single and multiple output options
- Proportional load current sense and current limited
- Loss of ground protection

ReverSave™featured devices include a protection feature that causes the power transistors to switch on in case of reverse polarity, resulting in reduced power dissipation.

On-state Res per Ch, typ. @ 25°C, mΩ	P_D W	Current Limit A	V_{SUPPLY} V	Overvoltage Protection, max V	Package	Order Code	Mftrs. List No.
10	59	33	5.5 to 38	67	P-TO252-5	144-0811	BTS6133D*
10	59	33	5.5 to 38	67	P-TO252-5	144-0813	BTS6143D*
12	50	27	5.5 to 24	39	P-TO252-5	144-0812	BTS6142D*
16	42	25	5 to 36	68	P-TO252-5	144-0808	BTS443P*
25	1.4	6	4.7 to 28	41	PG-DSO-12	144-0806	BTS5242-2L
35	75	40	4.75 to 43	52	TO-220-5	142-6196	ITS436L2S
30	85	24	4.7 to 43	43	TO-220-7	142-6201	ITS640S2
50	75	17	4.75 to 41	52	TO-252-5	142-6195	ITS428L2
60	1.6	3.5	0 to 28	41	PG-DSO-12	144-0803	BTS5235-2L
60	1.4	3.3	4.5 to 28	41	PG-DSO-20	144-0804	BTS5235-2G
90	3.1	12	4.7 to 43	52	P-DSO-12	142-6197	ITS5215L
90	3.6	12	4.7 to 43	52	DSO	142-6204	ITS724G
100	75	8	4.7 to 43	43	TO-220-7	142-6200	ITS621L1
140	3.6	6.5	4.7 to 43	52	DSO	142-6203	ITS716G
140	0.9	3.5	4.5 to 28	—	PG-DSO-14	144-0802	BTS5231-2GS
200	36	4	4.7 to 43	43	TO-220-7	142-6198	ITS612N1
200	3.6	4	4.7 to 43	43	P-DSO-20	142-6202	ITS711L1
200	1.4	1.4	12 to 45	47	PG-SOT223-4	144-0815	ITS4141N
200	1.4	3	12 to 45	48	PG-SOT223-4	144-0816	ITS4142N
200	1.5	1.3	6 to 52	62	PG-DSO-8	144-0817	ISP752R
200	3.3		11 to 45	47	PG-DSO-36	144-0818	ITS4880R
220	50	5	4.7 to 42	65	TO-220-5	142-6194	ITS410E2
1,500	1.7	1.2	4.9 to 60	62	PG-SOT223-4	144-0814	ITS4140N

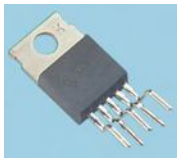
*Devices featuring ReverSave™

478210

		Price Each			
Mftrs. List No.	Order Code	1+	25+	100+	250+
ITS410E2	142-6194●	2.88	2.20	1.93	1.57
ITS428L2	SMD 142-6195●	1.99	1.51	1.34	1.08
ITS436L2S	142-6196●	2.73	2.09	1.82	1.49
ITS5215L	SMD 142-6197●	2.20	1.68	1.47	1.18
ITS612N1	142-6198●	2.92	2.23	1.95	1.60
ITS621L1	142-6200●	3.61	2.75	2.42	1.97
ITS640S2	142-6201●	3.13	2.40	2.10	1.70
ITS711L1	SMD 142-6202●	4.23	3.22	2.82	2.31
ITS716G	SMD 142-6203●	3.42	2.59	2.29	1.85
ITS724G	SMD 142-6204●	3.86	2.92	2.56	2.09
BTS5231-2GS	SMD 144-0802●	1.97	1.50	1.32	1.07
BTS5235-2L	SMD 144-0803●	3.11	2.38	2.07	1.69
BTS5235-2G	SMD 144-0804●	3.04	2.31	2.01	1.64
BTS5242-2L	SMD 144-0806●	4.28	3.26	2.86	2.34
BTS443P	SMD 144-0808●	2.77	2.11	1.84	1.51
BTS6133D	SMD 144-0811●	2.90	2.21	1.93	1.58
BTS6142D	SMD 144-0812●	2.54	1.93	1.69	1.38
BTS6143D	SMD 144-0813●	2.62	2.00	1.74	1.44
ITS4140N	SMD 144-0814●	0.94	0.70	0.63	0.52
ITS4141N	SMD 144-0815●	1.45	1.10	0.97	0.79
ITS4142N	SMD 144-0816●	1.45	1.10	0.96	0.79
ISP752R	SMD 144-0817●	1.37	1.03	0.92	0.75
ITS4880R	SMD 144-0818●	8.94	6.80	5.96	4.86

PROFET™ High Sided Switches

Non RoHS for Automotive applications



TO-220/5



TO-220/5 SMD



DSO-20

- 2nd Generation PROFET with additional protection
- Overload/current limited
- Overvoltage protection (inc. load dump)
- Reverse battery protected
- Over/undervoltage shutdown, with auto-restart and hysteresis
- Loss of ground and V_{bb} protection
- ESD protected
- Fast demagnetisation of inductive loads
- Diagnostic feedback
- Open load detection
- CMOS and TTL compatible input

V_{bb} V	$R_{DS(on)}$* mΩ	$I_{L\ (iso)}$* A	$I_{L\ (sc)}$* A	Package	Mftrs. List No.
Single Channel					
42	2.9	158	400	TO-218AB	BTS555.
60	38	11	35	TO-220	BTS432E2.
60	220	1.8	5	TO-220	BTS410E2.
Dual Channel					
43	30	5.5	24	P-DSO-20-9	BTS740S2.
43	200	2.3	4	TO-220	BTS612N1 E3230.
Quad Channel					
40	210	1.9	3.7	DSO-20	BTS711L1.

* per channel

211067

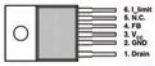
		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	500+
BTS410E2.	743-318▲	8.34	6.04	4.43	2.23	2.19
BTS612N1 E3230.	410-9296▲	3.08	2.24	1.87	1.30	1.23
BTS711L1.	SMD 743-380▲	17.22	9.93	8.44	4.43	4.32
BTS740S2.	SMD 410-9314▲	8.03	5.81	4.81	3.33	3.22
BTS432E2.	743-343▲	5.48	3.89	3.12	2.01	1.90
BTS555.	410-9260▲	16.34	11.77	10.71	8.07	7.83

RL Re-reeling available

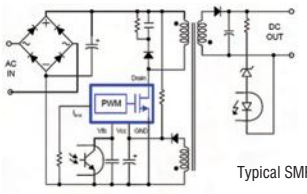
Green Mode Power Switch

FAIRCHILD SEMICONDUCTOR

SMD



TO-220-6L



Typical SMPS circuit

Designed specifically for high performance switch mode power supplies, these designs incorporate a integrated pulse width modulated (PWM) controller and sense FET.

- Internal avalanche rugged sense FET
- Low power consumption
- Precision fixed operating frequency
- Auto-restart Mode
- Built in soft start

Supply Voltage Range	R_{DS} Ω	Polarity O/P Transistor	I_{OUT} max. (A)	Package	Mftrs List No.	Order Code
10V	32	N	0.365	LSOP-7	FSD200BMX	132-4844
20V	2.2	N	5	TO-220	FSCM0565RGTU	132-4843
20V	6	N	1.7	DIP	FSDH0265RL	132-4845
85 to 265 Vac	2.6	P	4	TO-220	FSCM0465RGWDTU	132-4841

456472

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
FSCM0465RGWDTU	132-4841	1.20	0.89	0.70	0.58
FSCM0565RGTU	132-4843	0.97	0.77	0.63	0.61
FSD200BMX	SMD 132-4844	0.60	0.51	0.40	0.27
FSDH0265RL	132-4845	0.65	0.53	0.41	0.35

Smart Power Solid State Relays



- Intelligent power MOSFET switch
- On-board control, protection and diagnostic circuitry
- Protection against thermal overload, overcurrent, overvoltage and short circuit
- ESD protected
- Electromechanical relay substitute
- 5 and 7 pin TO-220 packages

V_{CC} V	V_{DSS} V	$R_{DS(on)}$ /Chnl. Ω	I_O @ 25°C A	P_{tot} W	Package	Mftrs. List No.	Features 1	2	3	4	5	6
High Side, Quad Channel												
6-36	41	0.27	0.25	16	SO-20	VNQ860	●	●	●	●	●	●

Features Key:

1. Load fast demagnetisation
2. Open load detection OFF state "stuck ON"
3. Open load detection ON state
4. Over temperature and short cct. protection
5. Under voltage detection (V_{cc})
6. Open load and over load discrimination (on status pin)

211270

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
VNQ860	SMD 816-5467	4.49	3.46	2.46	2.10	1.94

FSB Series, Smart Power Modules

FAIRCHILD SEMICONDUCTOR

V_{DS} = 500 V



- 500 V, 3 Phase FRFET invertor, including HV-IC
- 3 dc-link terminals for current sensing
- Undervoltage protection, CMOS/TTL 3/5V compatable
- Isolation voltage:1500V rms (1 min)

Based on FRFET technology as a compact invertor solution for small power motor drive applications such as fan motors and water suppliers. It is composed of 6 fast recovery MOSFET (FRFET) and 3 half-bridge HVICs for FRFET gate driving. They provide low electromagnetic interference (EMI) characteristics with optimized switching speed. Moreover, since it employs FRFET as a power switch, it has much better ruggedness and larger safe operation area (SOA) than that of an IGBT-based power module or one-chip solution.

I_D per MOS (A)	I_{DM} per MOS (A)	P_D (W)	R_{DS} Ω	Mftrs List No.	Order Code
1	2	10	4	FSB50250S	132-4838
1.5	3	10	2.4	FSB50450S	132-4840
SMD					
1.8	3.5	4.5	1.3	FSB50550T	149-5133

424859

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
FSB50550T	149-5133	6.62	4.68	3.77	3.63	3.39
FSB50250S	SMD 132-4838	7.78	5.77	4.53	3.77	3.57
FSB50450S	SMD 132-4840	5.42	3.83	3.09	2.97	2.78

RF MOSFETs

465416

Introduction to High Electron Mobility Transistors(HEMT)
Also called a HFET, these transistors do not use impurities at the source and drain as in a normal FET but instead use GaAs and AlGaAs in the channel, forming a thin layer with fermi levels above the conduction band, allowing for much lower resistances and gate thresholds then conventional FETs.

High Linearity, Low Noise Enhancement Mode

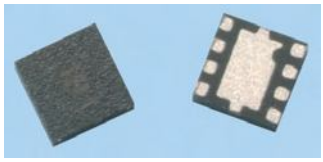
AVAGO TECHNOLOGIES

SMD

E-pHEMT Technology



SOT-89



LPCC



These pseudo high electron mobility transistors(pHEMT) offer lower resistances and superior RF performance then traditional MOSFETs by exclusion of speed degrading impurities by implimenting GaAs with fermi-levels above the conduction band.

- Excellent high frequency performance
- Thermally efficient design
- Excellent MTTF (> 300 years)
- Leadless plastic carrier package option

SOT-343 (SC-70) Range min, typ(GHz)	I_C max. (mA)	P_D max. (W)	V_{DS} max. (V)	Package	Mftrs. List No.
0.4, 2	1	2.25	7	SOT-89	ATF-50189-BLK
0.4, 2	1	3.5	7	LPCC	ATF-501P8-BLK
0.05, 6	1	3	7	LPCC	ATF-511P8-BLK
0.05, 6	0.5	1.5	7	SOT-89	ATF-52189-BLK
0.05, 6	0.5	1.5	7	LPCC	ATF-521P8-BLK
0.05, 6	0.3	1	7	SOT-89	ATF-53189-BLK
0.05, 6	0.3	1	7	LPCC	ATF-531P8-BLK
0.45, 10	0.305	0.6	5.5	SOT-343	ATF-33143-BLKG
0.45, 10	0.06	0.725	5.5	SOT-343	ATF-34143-BLKG
1.5, 12	0.04	0.18	3	SOT-363	ATF-36163-BLKG

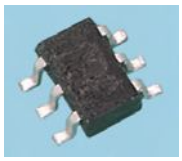
373010

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
ATF-33143-BLKG	SMD 134-7222	3.18	2.28	1.96	1.73	1.67
ATF-34143-BLKG	SMD 134-7223	2.71	1.93	1.67	1.47	1.42
ATF-36163-BLKG	SMD 134-7224	0.80	0.57	0.48	0.43	0.41
ATF-50189-BLK	SMD 134-7225	5.09	3.61	3.12	2.76	2.67
ATF-501P8-BLK	SMD 134-7227	5.68	4.04	3.50	3.09	2.99
ATF-511P8-BLK	SMD 134-7228	5.58	3.97	3.44	3.04	2.93
ATF-52189-BLK	SMD 134-7229	5.27	3.75	3.24	2.87	2.77
ATF-521P8-BLK	SMD 134-7230	5.27	3.75	3.24	2.87	2.77
ATF-53189-BLK	SMD 134-7231	4.30	3.07	2.66	2.36	2.28
ATF-531P8-BLK	SMD 134-7232	4.34	3.08	2.67	2.37	2.29

Low Noise, Pseudomorphic HEMT

AVAGO TECHNOLOGIES

SMD



SOT-363



SOT-343

V_{DS} max. V	I_d/I_{dss} max. mA	P_D max. mW	P_{in} max. dBm	F typ. dB	G_a typ. dB	OIP3 typ. dBm	Test Freq. GHz	Package	Device Marking	Mftrs. List No.
450MHz - 10GHz										
5	100	270	7	0.6	17.7	24.2	2	SOT-343	5F	ATF-55143-TR1G
5	120	360	10	0.5	16.6	36.2	2	SOT-343	4F	ATF-54143-TR1G
5.5	80	300	14	0.4	18.0	19.0	2	SOT-343	5PX	ATF-35143-TR1G
5.5	145	725	17	0.5	17.5	31.5	2	SOT-343	4PX	ATF-34143-TR1G

N.B. Device marking X denotes date code

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
ATF-34143-TR1G	SMD 105-6820 RL	4.98	3.58	2.89	2.13	2.08
ATF-35143-TR1G	SMD 105-6821 RL	2.35	1.67	1.34	1.00	0.98
ATF-54143-TR1G	SMD 105-6824 RL	4.84	3.38	2.82	2.41	2.23
ATF-55143-TR1G	SMD 105-6825 RL	2.86	2.03	1.60	1.34	1.19

211333

Reels of 3000 Mftrs. List No.	Order Code	Price Per Reel 1+
ATF-54143-TR1G	NEW SMD 156-2559	4,685.30
ATF-55143-TR1G	NEW SMD 156-2560	1,339.92

RL Re-reeling available

£ € 40,000 PRICES REDUCED

RF MOSFETs - continued

Dual Gate MOSFETs

With protected Input



SOT-143, H=3, W=1.4, D=1.1

Enhancement and depletion type dual gate MOSFETs, with protection diodes guarding against excessive input voltage surges between gate and source.
Ideal for use in applications such as VHF television tuners, FM tuners and professional communications equipment.
The BF904 is specifically designed to be used with a 5V supply, with super low noise up to 1GHz

V_{DS} V	$I_{D\ cont}$ @ 25°C A	P_D @ 25°C W	Type	Order Code	Mftrs. List No.
7	0.03	0.2	Enhancement	134-9657	BF904
20	0.02	0.2	Depletion	134-9658	BF991

465703

Mftrs. List No.	Mfr.	Order Code	Price Each 5+	25+	100+	250+	1K+
BF904	NXP	SMD 134-9657●	0.370	0.270	0.200	0.178	0.160
BF991	NXP	SMD 134-9658●	0.530	0.370	0.290	0.260	0.220

SOT-103 and SOT-143

V_{DS} max. V	Channel	I_D max. mA	I_{dss} min. mA	G_{fs} min. mA/V	P_{tot} @ 25°C mW	Zener Protected Gate	App'n Code	Package and Pin-Out	Mftr.	Mftrs. List No.
12	N	10.5	4	24	200	×	●●	SOT-103	SLX	BF988A
12	N	18	2	21	200	×	●●	SOT-143	NXP	BF998

Application Code:
◆ High frequency switch/chopper/communicator (RF/VHF/UHF) — ●● Dual gate (HF) MOSFET

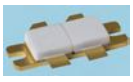
211283

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
BF988A	SMD 107-5753●	0.820	0.480	0.360	0.200	0.168
BF998	SMD 108-1286● RL	0.670	0.430	0.250	0.159	0.154

High Power VHF



SOT-123



SOT-262

- Superior quality, professional HF-VHF MOS transistor
- High power gain
- Low noise figure
- Good thermal stability
- Full load mismatch tolerent
- Gold metallisation ensures excellent reliability

Silicon N-channel enhancement mode vertical D-MOS transistor designed for professional transmitter applications in the HF/VHF frequency range. The transistor is encapsulated in a 4-lead, SOT123A flange package, with a ceramic cap. All leads are isolated from the flange.

V_{DS} max V	I_D A	P_{tot} W	f* MHz	Package	Mftrs. List No.
65	1	5	175	SOT-123	BLF242
65	6	68	175	SOT-123	BLF245
125	4	68	32	SOT-123	BLF175
125	16	220	28	SOT-121	BLF177
125	18	500	—	SOT-262A1	BLF278

*Should only be used as approx guide, as test conditions may vary

422830

Mftrs. List No.	Order Code	Price Each 1+	5+	10+
BLF175	134-9664●	37.38	29.72	26.40
BLF177	134-9665●	54.31	43.17	38.35
BLF242	109-7183●	29.36	23.35	20.74
BLF245	134-9666●	30.50	24.24	21.53
BLF278	NEW 162-6496●	88.22	82.88	75.97

PowerFLAT™ LDMOST plastic Family



Common Source N-Channel, enhancement mode lateral field effect RF power transistor. Designed for high gain, broad band commercial and industrial applications.

- Excellent thermal stability
- Common source configuration
- RF Plastic package
- ESD protected
- In compliance with the 2002/93/EC European directive

1317091: 8W, 15dB @ 500 MHz
1317093: 8W, 17dB @ 500 MHz
1317089: 3W, 20dB @ 500MHz
1317092: 3W, 17dB @ 500 MHz

Current, I_D @ 25 °C A	V_{DS} V	Marking	Mftrs List No.	Order Code
2.5	40	55003	PD55003L-E	131-7092
4	25	54003	PD54003L-E	131-7089

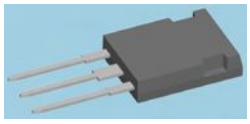
453626

Mftrs. List No.	Order Code	Price Each 1+	10+	25+	100+	+
PD54003L-E	SMD 131-7089●	9.57	6.31	5.17	4.44	– –
PD55003L-E	SMD 131-7092●	6.82	4.50	3.69	3.18	– –

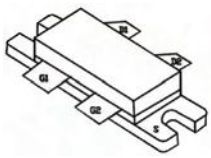
RF MOSFETs

N-Channel Enhancement

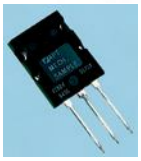
Ultra-fast enhancement mode MOSFETs for use in a multitude of high frequency applications.



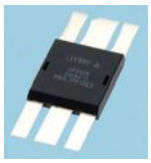
ISOPLUS-247A/B



GE-754



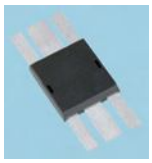
TO-264



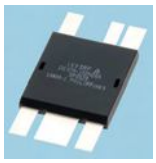
DE-150



TO-247



DE-275



DE-475



DEIC-515



SOT-227B - miniBLOC

- Optomised for RF operation
- Low capacitance
- Ultra fast rise and fall times
- Various package options available

V_{DS} V	R_{DS} (on) Ω	$I_{D\ cont}$ @ 25°C A	@ 25°C W	C_{iss} typ. (pf)	t_{rise} typ. (ns)	Package	Mftrs. List No.
Single Transistor Package							
125	0.3	15	TBA	425	4	DE-275	IXZ215N12L
200	0.08	25	590	2500	5	DE-275	DE275-201N25A
500	0.085	55	600	6700	20	ISOTOP	IXFN55N50F
500	0.11	44	1800	5500	5	DE-475	DE475-501N44A
500	0.12	44	500	5500	18	TO-264	IXFK44N50F
500	0.19	28	315	3000	13	TO-268	IXFT28N50F
500	0.25	21	300	2600	12	TO-247AD	IXFH21N50F
500	0.4	16	590	1800	2	DE-275	DE275-501N16A
500	0.4	12	180	1870	14	TO-247AD	IXFH12N50F
500	0.6	11	540	790	4	DE-275	IXZ211N50
500	1	10	470	622	4	DE-275	IXZ210N50L
500	1.5	4.5	200	700	4	150	DE150-501N04A
600	0.44	18	TBA	1930	4	ISOPLUS-247	IXZR16N60B
1000	0.39	24	560	6600	18	TO-264	IXFK24N100F
1000	0.39	24	600	6600	18	ISOTOP	IXFN24N100F
1000	0.41	24	1800	5500	5	DE-475	DE475-102N21A
1000	0.5	21	500	5500	16	TO-264	IXFK21N100F
1000	0.95	12	940	2000	3	DE-375	DE375-102N12A
1000	1.05	12	300	2700	12	TO-268	IXFT12N100F
1000	1.9	6	180	1870	14	TO-247AD	IXFH6N100F
1200	2.1	8	880	1960	5	DE-375	IXZ308N120
1200	2.1	8	TBA	1960	5	ISOPLUS-247	IXZR08N120A
1200	2.1	8	300	1960	4	TO-247AD	IXZH08N120
Complimentary Push-Pull							
500	1	10	360	383	16	754	IXZ2210N50L
1000	0.8	16	1180	1800	2	DE-275X2	DE275X2-102N06A

455973

Mftrs. List No.	Order Code	Price Each 1+	10+	25+	50+
IXZ2210N50L	134-7729●	24.31	22.10	20.01	18.48
DE150-501N04A	134-7730●	19.14	17.40	15.75	14.54
IXZ210N50L	134-7732●	17.40	15.82	14.31	13.22
IXZ215N12L	134-7733●	25.29	22.99	20.82	19.21
IXZ211N50	134-7734●	17.42	15.84	14.34	13.23
DE275-201N25A	134-7735●	22.05	20.05	18.14	16.75
DE275-501N16A	134-7736●	22.05	20.05	18.14	16.75
DE275X2-102N06A	134-7738●	33.66	30.61	27.71	25.58
IXZ308N120	134-7739●	25.19	22.89	20.73	19.14
DE375-102N12A	134-7740●	27.56	25.06	22.69	20.94
DE475-501N44A	134-7741●	38.50	35.00	31.69	29.25
DE475-102N21A	134-7742●	38.50	35.00	31.69	29.25
IXZR16N60B	134-7744●	18.98	17.26	15.63	14.42
IXZR08N120A	134-7745●	22.24	20.21	18.30	16.89
IXFN55N50F	134-7748●	18.81	17.51	16.38	15.39
IXFN24N100F	134-7749●	24.33	22.12	20.03	18.49
IXZH08N120	134-7751●	21.61	19.64	17.78	16.42
IXFH12N50F	134-7752●	4.48	4.08	3.70	3.41
IXFH21N50F	134-7753●	6.18	5.62	5.09	4.70

RL Re-reeling available

Mftrs. List No.	Order Code	Price Each 1+	10+	25+	50+
IXFH6N100F	134-7754●	4.48	4.08	3.70	3.41
IXFK21N100F	134-7758●	13.35	12.14	10.99	10.14
IXFK24N100F	134-7759●	16.66	15.14	13.71	12.66
IXFT28N50F	SMD 134-7760●	8.03	7.30	6.60	6.10
IXFT12N100F	SMD 134-7761●	5.75	5.36	5.01	4.71

MOSFET PLD-1.5

freescale semiconductor

New



Designed for broadband commercial and industrial applications. The high gain and broadband performance of this device make it ideal for large -signal, common source amplifier applications

The MRFG35002N6AT1 is designed for WLL/MMDS/BWA or UMTS driver applications. Characterised from 500 to 5000 MHz. Device is unmatched and is suitable for use in Class AB Customer Premise Equipment (CPE) applications.

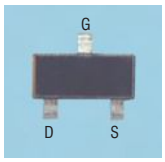
Specified Performance: @	Gain dB	Power Output W	Case Style	Mftrs List No.
175 MHz	13	8	PLD-1.5	MRF1511NT1
520 MHz	15	3	PLD-1.5	MRF1513NT1
520 MHz	14	8	PLD-1.5	MRF1517NT1
—	10	1.5	PLD-1.5	MRFG35002N6AT1

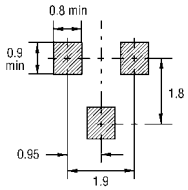
509284

Order Multiple=1 Mftrs. List No.	Order Code	Price Each 1+	10+	25+	100+	250+
MRF1511NT1	SMD 157-7893●	8.53	6.23	5.42	4.98	4.61
MRF1513NT1	SMD 157-7894●	7.47	5.45	4.76	4.36	4.02
MRF1517NT1	SMD 157-7895●	8.04	5.86	5.11	4.69	4.33
MRFG35002N6AT1	SMD 157-7896●	10.02	7.30	6.37	5.85	5.39

Junction FETs

SOT-23





ON Semiconductor

ON

SMD

VISHAY

V_{DS} max. V	Channel Polarity	$V_{GS(off)}$ min. V	$V_{GS(off)}$ max. V	I_{DSS} min. mA	I_{DSS} max. mA	C_{iss} max. pF	$R_{DS(on)}$ max. (*typ.) Ω	Device Marking	Mftr.	Mftrs. List No.
Amplifiers										
25	N	—	5	4	10	5	—	M1	ON	BFR30LT1G
25	N	-0.3	-3	1	5	5	—	M6B	ON	MMBF5484LT1G
25	N	-0.5	-6	1	5	7	—	6	ON	MMBF5457LT1G
25	N	-2.5	-6	24	60	5	—	6C	ON	MMBFU310LT1G
25	N	-2	-6.5	24	60	5	—	6x	ON	MMBFJ310LT1G
25	N	-1	-4	12	30	5	—	6x	ON	MMBFJ309LT1G
30	N	-0.5	-3	50	150	14	—	6G	ON	MMBF4393LT1G
30	N	-2	-5	50	150	14	—	6K	ON	MMBF4392LT1G
30	N	-4	-10	50	150	14	30	6J	ON	MMBF4391LT1G
30	P-depletion	0.8	2.5	1.5	20	11	—	6Y	ON	MMBFJ177LT1G
30	P-depletion	3	6	7	60	11	125	6W	ON	MMBFJ175LT1G
40	N-depletion	-0.8	-4	8	80	28	—	M6M	ON	BSR58LT1G
40	P	0.75	6	-1	-5	7	—	M6E	ON	MMBF5460LT1G

211251

Order Multiple=5 Mftrs. List No.	Mftr.	Order Code	Price Each 5+	25+	100+	250+	1K+
BFR30LT1G	ON	SMD 955-8632● RL	0.470	0.310	0.210	0.161	0.135
BSR58LT1G	ON	SMD 143-1327●	0.300	0.210	0.164	0.130	0.107
MMBF4393LT1G	ON	SMD 143-1332●	0.200	0.147	0.120	0.109	0.093
MMBFJ177LT1G	ON	SMD 143-1338●	0.260	0.182	0.151	0.133	0.116
MMBF5484LT1G	ON	SMD 143-1336●	0.260	0.182	0.151	0.133	0.116
MMBF5457LT1G	ON	SMD 143-1334●	0.240	0.166	0.138	0.121	0.106
MMBFU310LT1G	ON	SMD 143-1342●	0.260	0.182	0.151	0.133	0.116
MMBFJ175LT1G	ON	SMD 143-1337●	0.320	0.195	0.140	0.109	0.089
MMBF4392LT1G	ON	SMD 143-1331●	0.280	0.172	0.123	0.096	0.078
MMBF5460LT1G	ON	SMD 143-1335●	0.260	0.182	0.151	0.133	0.116
MMBFJ310LT1G	ON	SMD 143-1340●	0.320	0.195	0.140	0.109	0.089
MMBF4391LT1G	ON	SMD 143-1329●	0.220	0.161	0.132	0.120	0.102
MMBFJ309LT1G	ON	SMD 143-1339●	0.320	0.195	0.140	0.109	0.089

TO-92

FAIRCHILD SEMICONDUCTOR



TO-92 (k),(m),(n),(p)

Applications Key:
GPA = General Purpose Amplifier,
HFA = High Frequency Amplifier,
LNA = Low Noise Amplifier,

V_{DS} max. V	I_G (*I_D) max. mA	$V_{GS(off)}$ max. V	I_{dss} min. mA	I_{dss} max. mA	G_{fs} min. mA/V	G_{fs} max. mA/V	P_{tot} @ 25°C mW	Package	Pin-Out	App'n Code	Mftr.	Mftrs. List No.
N Channel												
25	10	8	2	20	2	6.5	200	TO-92	k	GPA	FCH	2N3819
30	10	8	2	6.5	3	6.5	350	TO-92	k	HFA	FCH	BF244A
30	10	8	6	15	3	6.5	350	TO-92	k	HFA	FCH	BF244B
30	10	8	2	6.5	3	6.5	350	TO-92	r	HFA	FCH	BF245A
30	10	8	6	15	3	6.5	350	TO-92	r	HFA	FCH	BF245B
30	10	8	12	25	3	6.5	350	TO-92	r	HFA	FCH	BF245C
P Channel												
40	16	9	4	16	2	6	310	TO-92	n	LNA	FCH	2N5462

211291

Mftrs. List No. Order Multiple=5	Mftr.	Order Code	Price Each 5+	25+	100+	1K+
2N5462	FCH	101-7645●	0.470	0.280	0.240	0.109
BF244A	FCH	101-7682●	0.290	0.183	0.131	0.079
BF244B	FCH	101-7683●	0.290	0.183	0.131	0.079
BF245A	FCH	101-7684●	0.340	0.320	0.230	0.115
BF245B	FCH	101-7685●	0.260	0.171	0.131	0.059
BF245C	FCH	101-7686●	0.300	0.196	0.143	0.070
Order Multiple=1			**1+**	**25+**	**100+**	**250+**
2N3819	FCH	101-7644●	0.169	0.107	0.077	0.042

TO-92

FAIRCHILD SEMICONDUCTOR



TO-92 (Straight)

V_{DS} V	N/P Channel	I_G mA	V_{DS} V	$V_{GS(off)}$ V	I_{DSS} mA min.	I_{DSS} mA max.	Package	Mftr.	P_{tot} mW	Mftrs. List No.
25	N	10	25	4	12	30	TO-92(m)	FCH	0.35	J309
25	N	10	25	6.5	24	60	TO-92(m)	FCH	0.35	J310
30	P	50	30	6	7	60	TO-92(k)	FCH	0.35	J175
35	N	50	35	10	20	—	TO-92(m)	FCH	0.35	J111..
35	N	50	35	5	5	—	TO-92(m)	FCH	0.35	J112
35	N	50	35	3	2	—	TO-92(m)	FCH	0.35	J113
40	N	50	40	1.5	0.2	1	TO-92(m)	FCH	0.625	J201

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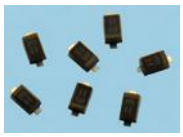
Order Multiple=5 Mftrs. List No.	Mftr.	Order Code	Price Each 5+	25+	100+	250+	1K+
J111..	FCH	740-883	0.096	0.061	0.045	0.041	0.037
J112	FCH	101-7712●	0.300	0.187	0.124	0.084	0.059
J113	FCH	101-7713●	0.290	0.183	0.143	0.070	0.059
J175	FCH	101-7714●	0.380	0.260	0.172	0.118	0.090
J201	FCH	101-7715●	0.270	0.169	0.112	0.075	0.054
J309	FCH	101-7716●	0.300	0.196	0.156	0.079	0.070
J310	FCH	101-7717●	0.300	0.186	0.124	0.083	0.059

Zener Diodes

Diode Zener
SOD-523

SMD

ROHM SEMICONDUCTOR



New

Features:
- 2-pin ultra mini-mold type for high-density mounting (EMD2).
- High reliability.
- Can be mounted automatically, using chip mounter.

Voltage, Vz min V	Current, Test mA	Power Dissipation mW	Mftrs. List No.
3.6	5	150	EDZTE613.6B
4.7	5	150	EDZTE614.7B
5.1	5	150	EDZTE615.1B
5.6	5	150	EDZTE615.6B
6.2	5	150	EDZTE616.2B
7.5	5	150	EDZTE617.5B
8.2	5	150	EDZTE618.2B
10	5	150	EDZTE6110B
18	5	150	EDZTE6118B
27	2	150	EDZTE6127B
30	2	150	EDZTE6130B

528000

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
EDZTE613.6B	SMD 167-9975●	0.330	0.220	0.151	0.082	0.069
EDZTE614.7B	SMD 167-9977●	0.330	0.220	0.151	0.082	0.069
EDZTE615.1B	SMD 167-9978●	0.330	0.220	0.151	0.082	0.069
EDZTE615.6B	SMD 167-9979●	0.330	0.220	0.151	0.082	0.069
EDZTE616.2B	SMD 167-9980●	0.330	0.220	0.151	0.082	0.069
EDZTE617.5B	SMD 167-9981●	0.330	0.220	0.151	0.082	0.069
EDZTE618.2B	SMD 167-9982●	0.330	0.220	0.151	0.082	0.069
EDZTE6110B	SMD 167-9972●	0.320	0.220	0.140	0.069	0.058
EDZTE6118B	SMD 167-9973●	0.330	0.220	0.151	0.082	0.069
EDZTE6127B	SMD 167-9974●	0.330	0.220	0.151	0.082	0.069
EDZTE6130B	SMD 167-9976●	0.330	0.220	0.151	0.082	0.069

RL Re-reeling available

Farnell

Zener Diodes - continued

Diode Zener



DO-34



LL-34

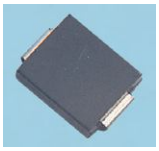
Voltage, Vz min V	Current, test mA	Case Style	Mftrs. List No.
6.2	5	VMN2	CDZT2R6.2B
6.8	5	SC-74A	FTZ6.8ET148
12	5	DO-34	MTZJT-7712B
5.6	5	DO-34	MTZJT-775.6B
6.2	5	DO-34	MTZJT-776.2B
6.8	5	DO-34	MTZJT-776.8B
8.2	5	DO-34	MTZJT-778.2B
10	20	LL-34	RLZTE-1110B
12	10	LL-34	RLZTE-1112B
15	10	LL-34	RLZTE-1115B
4.7	20	LL-34	RLZTE-114.7B
5.1	20	LL-34	RLZTE-115.1B
5.6	20	LL-34	RLZTE-115.6B
6.8	20	LL-34	RLZTE-116.8B
9.1	20	LL-34	RLZTE-119.1B
5.6	5	SOT-346	STZ5.6NT146
12	5	SOT-323	UMZ12NT106
6.8	5	SOT-353	UMZ6.8ENTR
6.8	5	SOT-323	UMZ6.8NT106

528148

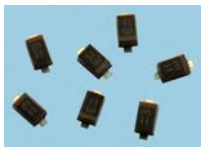
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
CDZT2R6.2B	SMD 167-9956	0.320	0.210	0.140	0.082	0.058
FTZ6.8ET148	SMD 167-9986	0.430	0.240	0.175	0.128	0.105
MTZJT-7712B	167-9990	0.300	0.151	0.105	0.047	0.035
MTZJT-775.6B	167-9991	0.300	0.151	0.105	0.047	0.035
MTZJT-776.2B	167-9992	0.300	0.151	0.105	0.047	0.035
MTZJT-776.8B	167-9993	0.300	0.151	0.105	0.047	0.035
MTZJT-778.2B	167-9994	0.300	0.151	0.105	0.047	0.035
RLZTE-1110B	SMD 168-0048	0.460	0.220	0.151	0.069	0.058
RLZTE-1112B	SMD 168-0049	0.460	0.220	0.151	0.069	0.058
RLZTE-1115B	SMD 168-0050	0.460	0.220	0.151	0.069	0.058
RLZTE-114.7B	SMD 168-0051	0.460	0.220	0.151	0.069	0.058
RLZTE-115.1B	SMD 168-0052	0.460	0.220	0.151	0.069	0.058
RLZTE-115.6B	SMD 168-0053	0.400	0.198	0.128	0.069	0.047
RLZTE-116.8B	SMD 168-0054	0.460	0.220	0.151	0.069	0.058
RLZTE-119.1B	SMD 168-0056	0.460	0.220	0.151	0.069	0.058
STZ5.6NT146	SMD 168-0072	0.570	0.380	0.270	0.186	0.151
UMZ12NT106	SMD 168-0112	0.580	0.380	0.270	0.186	0.151
UMZ6.8ENTR	SMD 168-0113	0.400	0.260	0.175	0.093	0.082
UMZ6.8NT106	SMD 168-0114	0.370	0.260	0.175	0.093	0.069

General Purpose Zener Diodes

ON Semiconductor



SMA H=3.56, W=5.44, D=2.13
SMB H=2.6, W=5.21, D=2.16



SOD-523



SOD-323



PowerMite

- General Purpose
- Surface Mount
- Compact Package
- 5% Voltage Tolerance

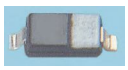
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Voltage, V_Z (V)	Power, P_D (W)	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
1PMT59xxBT1G Series, 3.2 W, PowerMite, 5%						
6.2	3.2	1PMT5920BT1G	SMD 143-1128	0.300	0.220	0.164
6.8	3.2	1PMT5921BT1G	SMD 143-1129	0.300	0.220	0.164
24	3.2	1PMT5934BT1G	SMD 143-1135	0.300	0.220	0.164
1SMA59xxBT3G Series, 1.5W, SMA, 5%						
3.3	1.5	1SMA5913BT3G	SMD 143-1138	0.320	0.190	0.132
3.9	1.5	1SMA5915BT3G	SMD 145-9010	0.128	0.105	0.100
4.7	1.5	1SMA5917BT3G	SMD 143-1139	0.320	0.190	0.132
5.1	1.5	1SMA5918BT3G	SMD 143-1140	0.320	0.190	0.132
5.6	1.5	1SMA5919BT3G	SMD 143-1141	0.320	0.190	0.132
6.2	1.5	1SMA5920BT3G	SMD 143-1142	0.320	0.190	0.132
6.8	1.5	1SMA5921BT3G	SMD 143-1143	0.220	0.158	0.119
7.5	1.5	1SMA5922BT3G	SMD 143-1144	0.320	0.190	0.132
8.2	1.5	1SMA5923BT3G	SMD 143-1145	0.320	0.190	0.132
10	1.5	1SMA5925BT3G	SMD 143-1147	0.320	0.190	0.132
12	1.5	1SMA5927BT3G	SMD 143-1148	0.320	0.190	0.132
15	1.5	1SMA5929BT3G	SMD 145-9011	0.300	0.190	0.132
16	1.5	1SMA5930BT3G	SMD 143-1149	0.220	0.158	0.119
18	1.5	1SMA5931BT3G	SMD 143-1150	0.320	0.190	0.132
24	1.5	1SMA5934BT3G	SMD 143-1151	0.320	0.190	0.132
27	1.5	1SMA5935BT3G	SMD 143-1152	0.320	0.190	0.132
30	1.5	1SMA5936BT3G	SMD 143-1153	0.220	0.158	0.119
33	1.5	1SMA5937BT3G	SMD 143-1154	0.220	0.158	0.119

Voltage, V_Z (V)	Power, P_D (W)	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
1SMB59xxBT3G Series, 3 W, SMB, 5%						
3.3	3	1SMB5913BT3G	SMD 143-1155	0.320	0.194	0.135
3.6	3	1SMB5914BT3G	SMD 143-1156	0.320	0.194	0.135
3.9	3	1SMB5915BT3G	SMD 143-1157	0.320	0.194	0.135
4.7	3	1SMB5917BT3G	SMD 143-1159	0.320	0.194	0.135
5.1	3	1SMB5918BT3G	SMD 143-1161	0.320	0.194	0.135
5.6	3	1SMB5919BT3G	SMD 143-1162	0.320	0.194	0.135
6.2	3	1SMB5920BT3G	SMD 143-1163	0.320	0.194	0.135
6.8	3	1SMB5921BT3G	SMD 143-1164	0.320	0.194	0.135
7.5	3	1SMB5922BT3G	SMD 143-1165	0.320	0.194	0.135
8.2	3	1SMB5923BT3G	SMD 143-1166	0.320	0.194	0.135
9.1	3	1SMB5924BT3G	SMD 143-1167	0.320	0.194	0.135
10	3	1SMB5925BT3G	SMD 143-1168	0.320	0.194	0.135
12	3	1SMB5927BT3G	SMD 143-1169	0.320	0.194	0.135
13	3	1SMB5928BT3G	SMD 143-1170	0.320	0.194	0.135
15	3	1SMB5929BT3G	SMD 145-9014	0.220	0.193	0.135
16	3	1SMB5930BT3G	SMD 143-1172	0.320	0.194	0.135
18	3	1SMB5931BT3G	SMD 143-1173	0.320	0.194	0.135
20	3	1SMB5932BT3G	SMD 143-1174	0.320	0.194	0.135
22	3	1SMB5933BT3G	SMD 143-1175	0.220	0.156	0.116
24	3	1SMB5934BT3G	SMD 143-1176	0.320	0.194	0.135
27	3	1SMB5935BT3G	SMD 143-1177	0.320	0.194	0.135
30	3	1SMB5936BT3G	SMD 143-1178	0.320	0.194	0.135
33	3	1SMB5937BT3G	SMD 143-1179	0.320	0.194	0.135
36	3	1SMB5938BT3G	SMD 143-1180	0.320	0.194	0.135
47	3	1SMB5941BT3G	SMD 143-1181	0.320	0.194	0.135
51	3	1SMB5942BT3G	SMD 143-1182	0.320	0.194	0.135
56	3	1SMB5943BT3G	SMD 143-1184	0.250	0.171	0.128
75	3	1SMB5946BT3G	SMD 143-1185	0.220	0.156	0.116
100	3	1SMB5949BT3G	SMD 143-1186	0.250	0.171	0.128
180	3	1SMB5955BT3G	SMD 143-1188	0.250	0.171	0.128
200	3	1SMB5956BT3G	SMD 143-1189	0.320	0.194	0.135
MM3ZxxVT1G Series, 0.2W, SOD-323						
2.4	0.2	MM3Z2V4T1G	SMD 145-9095	0.026	0.023	0.022
3.3	0.2	MM3Z3V3T1G	SMD 143-1198	0.043	0.030	0.023
3.6	0.2	MM3Z3V6T1G	SMD 143-1199	0.039	0.028	0.021
3.9	0.2	MM3Z3V9T1G	SMD 143-1200	0.039	0.028	0.021
4.7	0.2	MM3Z4V7T1G	SMD 143-1202	0.039	0.028	0.021
5.1	0.2	MM3Z5V1T1G	SMD 143-1203	0.045	0.032	0.025
5.6	0.2	MM3Z5V6T1G	SMD 143-1204	0.045	0.032	0.025
6.2	0.2	MM3Z6V2T1G	SMD 143-1205	0.043	0.030	0.023
6.8	0.2	MM3Z6V8T1G	SMD 143-1206	0.043	0.030	0.023
7.5	0.2	MM3Z7V5T1G	SMD 143-1207	0.043	0.030	0.023
8.2	0.2	MM3Z8V2T1G	SMD 143-1208	0.043	0.030	0.023
10	0.2	MM3Z10VT1G	SMD 143-1190	0.039	0.028	0.021
12	0.2	MM3Z12VT1G	SMD 143-1191	0.039	0.028	0.021
15	0.2	MM3Z15VT1G	SMD 143-1192	0.039	0.028	0.021
18	0.2	MM3Z18VT1G	SMD 143-1193	0.039	0.028	0.021
24	0.2	MM3Z24VT1G	SMD 143-1194	0.043	0.030	0.023
33	0.2	MM3Z33VT1G	SMD 143-1197	0.039	0.028	0.021
MM5ZxxVT1G Series, 0.2W, SOD-523						
2.4	0.2	MM5Z2V4T1G	SMD 143-1216	0.082	0.056	0.040
3.3	0.2	MM5Z3V3T1G	SMD 143-1218	0.082	0.056	0.040
4.7	0.2	MM5Z4V7T1G	SMD 143-1219	0.074	0.051	0.037
5.1	0.2	MM5Z5V1T1G	SMD 143-1220	0.082	0.056	0.040
5.6	0.2	MM5Z5V6T1G	SMD 143-1221	0.082	0.056	0.040
6.8	0.2	MM5Z6V8T1G	SMD 143-1222	0.082	0.056	0.040
7.5	0.2	MM5Z7V5T1G	SMD 143-1223	0.082	0.056	0.040
8.2	0.2	MM5Z8V2T1G	SMD 143-1224	0.082	0.056	0.040
10	0.2	MM5Z10VT1G	SMD 143-1209	0.082	0.056	0.040
12	0.2	MM5Z12VT1G	SMD 143-1210	0.074	0.051	0.037
15	0.2	MM5Z15VT1G	SMD 143-1211	0.082	0.056	0.040
18	0.2	MM5Z18VT1G	SMD 143-1212	0.082	0.056	0.040
33	0.2	MM5Z33VT1G	SMD 143-1217	0.082	0.056	0.040

BZT52C Series

multicomp



SOD-123
H=1.55, W=2.6, D=1.05

P_{D*} (W)	I_{FSM**} (A)	V_F (V)	Temp	Package	List No.
0.2	2	0.9	-55°C to 150°C	SOD-323	BZT52x**S** Series
0.41	2	0.9	-55°C to 150°C	SOD-123	BZT52Cx

* Mounted on 5mm² (0.12mm thick) land areas
**Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute max.
Band denotes Cathode

484576

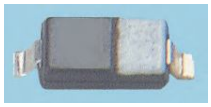
V_Z	Mftrs. List No.	Order Code	Price Each 5+	25+	100+	250+
SOD-323						
4.3	BZT52C4V3S	SMD 146-6017	0.280	0.200	0.141	0.103
4.7	BZT52C4V7S	SMD 146-6018	0.280	0.200	0.141	0.103
5.1	BZT52C5V1S	SMD 146-6019	0.280	0.200	0.141	0.103
7.5	BZT52C7V5S	SMD 146-6023	0.280	0.200	0.141	0.103
8.2	BZT52C8V2S	SMD 146-6024	0.280	0.200	0.141	0.103
10	BZT52C10S	SMD 146-6026	0.280	0.200	0.141	0.103
12	BZT52C12S	SMD 146-6027	0.280	0.200	0.141	0.103
18	BZT52C18S	SMD 146-6031	0.280	0.200	0.141	0.103
24	BZT52C24S	SMD 146-6035	0.280	0.200	0.141	0.103
27	BZT52C27S	SMD 146-6036	0.280	0.200	0.141	0.103
SOD-123						
10	BZT52C10	SMD 146-6557	0.110	0.103	0.088	0.082
11	BZT52C11	SMD 146-6558	0.110	0.103	0.088	0.082
12	BZT52C12	SMD 146-6559	0.110	0.103	0.088	0.082
13	BZT52C13	SMD 146-6560	0.110	0.103	0.088	0.082
15	BZT52C15	SMD 146-6561	0.110	0.103	0.088	0.082
16	BZT52C16	SMD 146-6563	0.110	0.103	0.088	0.082
18	BZT52C18	SMD 146-6564	0.110	0.103	0.088	0.082
20	BZT52C20	SMD 146-6565	0.110	0.103	0.088	0.082
22	BZT52C22	SMD 146-6566	0.110	0.103	0.088	0.082

RL Re-reeling available

			Price Each			
SOD-123						
27	BZT52C27	SMD 146-6568●	0.110	0.103	0.088	0.082
30	BZT52C30	SMD 146-6569●	0.110	0.103	0.088	0.082
33	BZT52C33	SMD 146-6570●	0.110	0.103	0.088	0.082
39	BZT52C39	SMD 146-6572●	0.110	0.103	0.088	0.082
4.7	BZT52C4V7	SMD 146-6573●	0.110	0.103	0.088	0.082
5.1	BZT52C5V1	SMD 146-6575●	0.110	0.103	0.088	0.082
5.6	BZT52C5V6	SMD 146-6576●	0.110	0.103	0.088	0.082
7.5	BZT52C7V5	SMD 146-6578●	0.110	0.103	0.088	0.082
8.2	BZT52C8V2	SMD 146-6579●	0.110	0.103	0.088	0.082
9.1	BZT52C9V1	SMD 146-6580●	0.110	0.103	0.088	0.082

Diode Zener
SOD-323

ROHM SEMICONDUCTOR



New

SMD

Features:
- Compact, 2-pin mini-mold type for high-density mounting. (UMD2)
- High reliability.
- Can be mounted automatically, using chip mounter.
- Power Dissipitation: 200 mW

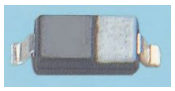
Voltage, Vz min V	Current, test mA	Mftrs. List No.	Voltage, Vz min V	Current, test mA	Mftrs. List No.
3.6	5	UDZSTE-173.6B	12	5	UDZSTE-1712B
3.9	5	UDZSTE-173.9B	13	5	UDZSTE-1713B
4.3	5	UDZSTE-174.3B	15	5	UDZSTE-1715B
4.7	5	UDZSTE-174.7B	16	5	UDZSTE-1716B
5.1	5	UDZSTE-175.1B	18	5	UDZSTE-1718B
5.6	5	UDZSTE-175.6B	20	5	UDZSTE-1720B
6.2	5	UDZSTE-176.2B	22	5	UDZSTE-1722B
6.8	5	UDZSTE-176.8B	24	5	UDZSTE-1724B
7.5	5	UDZSTE-177.5B	27	5	UDZSTE-1727B
8.2	5	UDZSTE-178.2B	30	5	UDZSTE-1730B
9.1	5	UDZSTE-179.1B	33	5	UDZSTE-1733B
10	5	UDZSTE-1710B	36	5	UDZSTE-1736B
11	5	UDZSTE-1711B			

528075

		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	500+
UDZSTE-173.6B	SMD 168-0093●	0.420	0.210	0.140	0.069	0.058
UDZSTE-173.9B	SMD 168-0094●	0.420	0.210	0.140	0.069	0.058
UDZSTE-174.3B	SMD 168-0098●	0.360	0.186	0.116	0.058	0.047
UDZSTE-174.7B	SMD 168-0099●	0.360	0.186	0.116	0.058	0.047
UDZSTE-175.1B	SMD 168-0100●	0.360	0.186	0.116	0.058	0.047
UDZSTE-175.6B	SMD 168-0101●	0.360	0.186	0.116	0.058	0.047
UDZSTE-176.2B	SMD 168-0102●	0.360	0.186	0.116	0.058	0.047
UDZSTE-176.8B	SMD 168-0103●	0.350	0.175	0.116	0.058	0.047
UDZSTE-177.5B	SMD 168-0104●	0.360	0.186	0.116	0.058	0.047
UDZSTE-178.2B	SMD 168-0105●	0.360	0.186	0.116	0.058	0.047
UDZSTE-179.1B	SMD 168-0106●	0.360	0.186	0.116	0.058	0.047
UDZSTE-1710B	SMD 168-0073●	0.360	0.186	0.116	0.058	0.047
UDZSTE-1711B	SMD 168-0074●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1712B	SMD 168-0075●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1713B	SMD 168-0076●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1715B	SMD 168-0077●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1716B	SMD 168-0081●	0.330	0.164	0.105	0.058	0.035
UDZSTE-1718B	SMD 168-0082●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1720B	SMD 168-0086●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1722B	SMD 168-0087●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1724B	SMD 168-0088●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1727B	SMD 168-0089●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1730B	SMD 168-0095●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1733B	SMD 168-0096●	0.420	0.210	0.140	0.069	0.058
UDZSTE-1736B	SMD 168-0097●	0.420	0.210	0.140	0.069	0.058

BZX384C Series, 5% Tolerance

NXP founded by Philips



SOD-323
H=1.1, W=1.8, D=1.36

SMD

- P_{tot}=300mW
- Plastic SOD-323 package
- Non-repetitive peak reverse power dissipation 40 W max

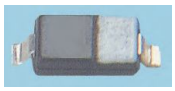
Zener Voltage, V	Mftrs. List No.	Order Code	Zener Voltage, V	Mftrs. List No.	Order Code
2.4	BZX384-C2V4	873-5573	15	BZX384-C15	873-5506
2.7	BZX384-C2V7	873-5581	16	BZX384-C16	873-5514
3	BZX384-C3V0	873-5638	18	BZX384-C18	873-5522
3.3	BZX384-C3V3	873-5646	20	BZX384-C20	873-5530
3.6	BZX384-C3V6	873-5654	22	BZX384-C22	873-5549
3.9	BZX384-C3V9	873-5662	24	BZX384-C24	873-5557
4.3	BZX384-C4V3	873-5697	27	BZX384-C27	873-5565
4.7	BZX384-C4V7	873-5700	30	BZX384-C30	873-5590
5.1	BZX384-C5V1	873-5735	33	BZX384-C33	873-5603
5.6	BZX384-C5V6	873-5743	36	BZX384-C36	873-5611
6.2	BZX384-C6V2	873-5778	39	BZX384-C39	873-5620
6.8	BZX384-C6V8	873-5786	43	BZX384-C43	873-5670
7.5	BZX384-C7V5	873-5808	47	BZX384-C47	873-5689
8.2	BZX384-C8V2	873-5816	51	BZX384-C51	873-5719
9.1	BZX384-C9V1	873-5824	56	BZX384-C56	873-5727
10	BZX384-C10	873-5468	62	BZX384-C62	873-5751
11	BZX384-C11	873-5476	68	BZX384-C68	873-5760
12	BZX384-C12	873-5484	75	BZX384-C75	873-5794
13	BZX384-C13	873-5492			

386991

Order Multiple=10		Price Each			
Series	Order Code	10+	100+	1K+	3K+
BZX384C...	All Values	0.072	0.044	0.032	0.023

MMSZxxxxBT1G Series, 500mW Zeners

ON Semiconductor



SOD-123
H=2.69, W=1.6, D=1.17

SMD

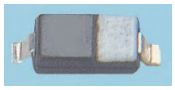
- General Purpose Zener Diodes
- Surface Mount
- Compact Package
- ESD Rating of Class 3(>16kV) per human body model
- Flammability rating: UL 94 V-0

496994

Voltage, V_Z (V)	Mftrs. List No.	Order Code	Price Each 10+	100+	250+	500+
2.4	MMSZ5221BT1G	SMD 143-1268●	0.072	0.051	0.038	0.029
3.3	MMSZ5226BT1G	SMD 143-1269●	0.068	0.049	0.036	0.028
3.6	MMSZ5227BT1G	SMD 143-1270●	0.062	0.045	0.033	0.026
3.9	MMSZ5228BT1G	SMD 143-1271●	0.068	0.049	0.036	0.028
4.3	MMSZ5229BT1G	SMD 145-9125●	0.041	0.035	0.032	– –
4.7	MMSZ5230BT1G	SMD 143-1272●	0.062	0.045	0.033	0.026
5.1	MMSZ5231BT1G	SMD 143-1273●	0.072	0.051	0.038	0.029
5.6	MMSZ5232BT1G	SMD 143-1275●	0.086	0.062	0.046	0.035
6.2	MMSZ5234BT1G	SMD 143-1276●	0.062	0.045	0.033	0.026
6.8	MMSZ5235BT1G	SMD 143-1277●	0.062	0.045	0.033	0.026
7.5	MMSZ5236BT1G	SMD 143-1278●	0.062	0.045	0.033	0.026
8.2	MMSZ5237BT1G	SMD 143-1279●	0.068	0.049	0.036	0.028
10	MMSZ5240BT1G	SMD 143-1280●	0.068	0.049	0.036	0.028
12	MMSZ5242BT1G	SMD 143-1281●	0.068	0.049	0.036	0.028
15	MMSZ5245BT1G	SMD 143-1282●	0.086	0.062	0.046	0.035
18	MMSZ5248BT1G	SMD 143-1283●	0.068	0.049	0.036	0.028
24	MMSZ5252BT1G	SMD 143-1284●	0.062	0.045	0.033	0.026
27	MMSZ5254BT1G	SMD 143-1285●	0.062	0.045	0.033	0.026
30	MMSZ5256BT1G	SMD 143-1287●	0.068	0.049	0.036	0.028
33	MMSZ5257BT1G	SMD 143-1288●	0.086	0.062	0.046	0.035
51	MMSZ5262BT1G	SMD 143-1289●	0.068	0.049	0.036	0.028
75	MMSZ5267BT1G	SMD 143-1290●	0.068	0.049	0.036	0.028

2.4V to 33V, 500mW Zeners

ON Semiconductor



SOD-123
H=2.69, W=1.6, D=1.17

- General Purpose Zener Diodes
- Surface Mount
- Compact Package
- ESD Rating of Class 3(>16kV) per human body model
- Flammability rating: UL 94 V-0

496986

Voltage, V_Z (V)	Mftrs. List No.	Order Code	Price Each 10+	100+	250+	500+
2.4	MMSZ2V4T1G	SMD 143-1263●	0.062	0.045	0.033	0.026
3.3	MMSZ3V3T1G	SMD 143-1266●	0.062	0.045	0.033	0.026
4.7	MMSZ4V7T1G	SMD 143-1267●	0.072	0.051	0.038	0.029
5.1	MMSZ5V1T1G	SMD 143-1291●	0.062	0.045	0.033	0.026
5.6	MMSZ5V6T1G	SMD 143-1292●	0.065	0.047	0.035	0.027
6.2	MMSZ6V2T1G	SMD 143-1293●	0.062	0.045	0.033	0.026
6.8	MMSZ6V8T1G	SMD 143-1294●	0.062	0.045	0.033	0.026
7.5	MMSZ7V5T1G	SMD 143-1295●	0.062	0.045	0.033	0.026
8.2	MMSZ8V2T1G	SMD 143-1296●	0.062	0.045	0.033	0.026
10	MMSZ10T1G	SMD 143-1256●	0.062	0.045	0.033	0.026
12	MMSZ12T1G	SMD 143-1257●	0.086	0.062	0.046	0.035
15	MMSZ15T1G	SMD 143-1258●	0.068	0.049	0.036	0.028
18	MMSZ18T1G	SMD 143-1259●	0.068	0.049	0.036	0.028
24	MMSZ24T1G	SMD 143-1260●	0.068	0.049	0.036	0.028
27	MMSZ27T1G	SMD 143-1261●	0.068	0.049	0.036	0.028
30	MMSZ30T1G	SMD 143-1264●	0.062	0.045	0.033	0.026
33	MMSZ33T1G	SMD 143-1265●	0.068	0.049	0.036	0.028

Diode Zener, 1W
SMA

TAIWAN SEMICONDUCTOR



New

SMD

Features:
- Complete voltage range 3.3 to 100 volts
- High peak reverse power dissipation
- High reliability
- Low leakage current
- Standard zener voltage tolerance is ± 5%
- Maximum Forward Voltage at IF = 200 mA: 1.2V

Voltage, Vz V	Current, test mA	Current, Zener mA	Current, Surge mA	Current, Leakage µA	Mftrs. List No.
6.8	37	133	660	50	1SMA4736
6.8	37	133	660	50	1SMA4736A
7.5	34	121	605	50	1SMA4737
7.5	34	121	605	50	1SMA4737A
8.2	31	110	550	50	1SMA4738
8.2	31	110	550	50	1SMA4738A
9.1	28	100	500	50	1SMA4739
9.1	28	100	500	50	1SMA4739A
10	25	91	454	50	1SMA4740
10	25	91	454	50	1SMA4740A
13	12	76	380	5	1SMA4742
13	12	76	380	5	1SMA4742A
13	19	69	344	5	1SMA4743
13	19	69	344	5	1SMA4743A
15	17	61	305	5	1SMA4744
15	17	61	305	5	1SMA4744A
16	15.5	57	285	5	1SMA4745

RL Re-reeling available

Farnell

Zener Diodes - continued

Diode Zener, 1W - continued

SMA - continued

Voltage, Vz V	Current, test mA	Current, Zener mA	Current, Surge mA	Current, Leakage µA	Mftrs. List No.
16	15.5	57	285	5	1SMA4745A
18	14	50	250	5	1SMA4746
18	14	50	250	5	1SMA4746A
20	12.5	45	225	5	1SMA4747
20	12.5	45	225	5	1SMA4747A
22	11.5	41	205	5	1SMA4748
22	11.5	41	205	5	1SMA4748A
24	10.5	38	190	5	1SMA4749
24	10.5	38	190	5	1SMA4749A
27	9.5	34	170	5	1SMA4750
27	9.5	34	170	5	1SMA4750A
30	8.5	30	150	5	1SMA4751
30	8.5	30	150	5	1SMA4751A
33	7.5	27	135	5	1SMA4752
33	7.5	27	135	5	1SMA4752A
36	7	25	125	5	1SMA4753
36	7	25	125	5	1SMA4753A
39	6.5	23	115	5	1SMA4754
39	6.5	23	115	5	1SMA4754A
43	6	22	110	5	1SMA4755
43	6	22	110	5	1SMA4755A
47	5.5	19	95	5	1SMA4756
47	5.5	19	95	5	1SMA4756A
51	5	18	90	5	1SMA4757
51	5	18	90	5	1SMA4757A
56	4.5	16	80	5	1SMA4758
56	4.5	16	80	5	1SMA4758A
68	3.7	13	65	5	1SMA4760
68	3.7	13	65	5	1SMA4760A
75	3.3	12	60	5	1SMA4761
75	3.3	12	60	5	1SMA4761A

528108

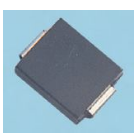
Order Multiple = 5

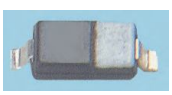
Mftrs. List No.	Order Code	Price Each 5+	25+	100+	500+	1K+
1SMA4736	SMD 168-7489●	0.20	0.17	0.15	0.13	0.11
1SMA4736A	SMD 168-7490●	0.20	0.17	0.15	0.13	0.11
1SMA4737	SMD 168-7491●	0.20	0.17	0.15	0.13	0.11
1SMA4737A	SMD 168-7492●	0.20	0.17	0.15	0.13	0.11
1SMA4738	SMD 168-7493●	0.20	0.17	0.15	0.13	0.11
1SMA4738A	SMD 168-7494●	0.20	0.17	0.15	0.13	0.11
1SMA4739	SMD 168-7495●	0.20	0.17	0.15	0.13	0.11
1SMA4739A	SMD 168-7496●	0.20	0.17	0.15	0.13	0.11
1SMA4740	SMD 168-7497●	0.20	0.17	0.15	0.13	0.11
1SMA4740A	SMD 168-7498●	0.20	0.17	0.15	0.13	0.11
1SMA4742	SMD 168-7500●	0.20	0.17	0.15	0.13	0.11
1SMA4742A	SMD 168-7501●	0.20	0.17	0.15	0.13	0.11
1SMA4743	SMD 168-7502●	0.20	0.17	0.15	0.13	0.11
1SMA4743A	SMD 168-7503●	0.20	0.17	0.15	0.13	0.11
1SMA4744	SMD 168-7504●	0.20	0.17	0.15	0.13	0.11
1SMA4744A	SMD 168-7506●	0.20	0.17	0.15	0.13	0.11
1SMA4745	SMD 168-7507●	0.20	0.17	0.15	0.13	0.11
1SMA4745A	SMD 168-7508●	0.20	0.17	0.15	0.13	0.11
1SMA4746	SMD 168-7509●	0.20	0.17	0.15	0.13	0.11
1SMA4746A	SMD 168-7511●	0.20	0.17	0.15	0.13	0.11
1SMA4747	SMD 168-7512●	0.20	0.17	0.15	0.13	0.11
1SMA4747A	SMD 168-7513●	0.20	0.17	0.15	0.13	0.11
1SMA4748	SMD 168-7514●	0.20	0.17	0.15	0.13	0.11
1SMA4748A	SMD 168-7515●	0.20	0.17	0.15	0.13	0.11
1SMA4749	SMD 168-7516●	0.20	0.17	0.15	0.13	0.11
1SMA4749A	SMD 168-7518●	0.20	0.17	0.15	0.13	0.11
1SMA4750	SMD 168-7519●	0.20	0.17	0.15	0.13	0.11
1SMA4750A	SMD 168-7520●	0.20	0.17	0.15	0.13	0.11
1SMA4751	SMD 168-7521●	0.20	0.17	0.15	0.13	0.11
1SMA4751A	SMD 168-7522●	0.20	0.17	0.15	0.13	0.11
1SMA4752	SMD 168-7523●	0.20	0.17	0.15	0.13	0.11
1SMA4752A	SMD 168-7524●	0.20	0.17	0.15	0.13	0.11
1SMA4753	SMD 168-7525●	0.20	0.17	0.15	0.13	0.11
1SMA4753A	SMD 168-7526●	0.20	0.17	0.15	0.13	0.11
1SMA4754	SMD 168-7527●	0.20	0.17	0.15	0.13	0.11
1SMA4754A	SMD 168-7528●	0.20	0.17	0.15	0.13	0.11
1SMA4755	SMD 168-7531●	0.20	0.17	0.15	0.13	0.11
1SMA4755A	SMD 168-7532●	0.20	0.17	0.15	0.13	0.11
1SMA4756	SMD 168-7533●	0.20	0.17	0.15	0.13	0.11
1SMA4756A	SMD 168-7534●	0.20	0.17	0.15	0.13	0.11
1SMA4757	SMD 168-7535●	0.20	0.17	0.15	0.13	0.11
1SMA4757A	SMD 168-7536●	0.20	0.17	0.15	0.13	0.11
1SMA4758	SMD 168-7537●	0.20	0.17	0.15	0.13	0.11
1SMA4758A	SMD 168-7538●	0.20	0.17	0.15	0.13	0.11
1SMA4760	SMD 168-7539●	0.20	0.17	0.15	0.13	0.11
1SMA4760A	SMD 168-7540●	0.20	0.17	0.15	0.13	0.11
1SMA4761	SMD 168-7541●	0.20	0.17	0.15	0.13	0.11
1SMA4761A	SMD 168-7543●	0.20	0.17	0.15	0.13	0.11

MMSZxxxxT1G Series

0.5 W

ON Semiconductor





SOD-123, H=2.84, W=1.8, D=1.35

- General Purpose 0.5 W Zener Diodes
- Surface Mount
- Compact Package
- 5% Voltage Tolerance

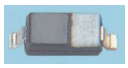
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Voltage, V_Z (V)	Power, P_D (W)	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
1.8	0.5	MMSZ4678T1G	SMD 145-9115●	0.049	0.043	0.040
3	0.5	MMSZ4683T1G	SMD 145-9116●	0.059	0.051	0.049
4.3	0.5	MMSZ4687T1G	SMD 145-9117●	0.044	0.039	0.035
4.7	0.5	MMSZ4688T1G	SMD 145-9118●	0.058	0.050	0.046
5.1	0.5	MMSZ4689T1G	SMD 145-9121●	0.049	0.043	0.040
5.6	0.5	MMSZ4690T1G	SMD 145-9122●	0.043	0.036	0.034
10	0.5	MMSZ4697T1G	SMD 145-9124●	0.049	0.043	0.040
4.3	0.5	MMSZ5229BT1G	SMD 145-9125●	0.041	0.035	0.032

BZV55C Series

Hermetically Sealed, Glass Silicon

multicomp



SOD-123
H=1.55, W=2.6, D=1.05

P_{D^*} (W)	I_{FRM} (mA)	V_F (V)	Temp	Package	List No.
0.5	250	0.9	-65°C to 200°C	SOD-80C	BZV55C Series

484751

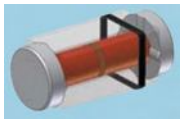
V_Z	Mftrs. List No.	Order Code	Price Each 10+	25+	100+	250+
10	BZV55C10	SMD 146-6526●	0.050	0.034	0.025	0.022
11	BZV55C11	SMD 146-6527●	0.050	0.034	0.025	0.022
12	BZV55C12	SMD 146-6528●	0.050	0.034	0.025	0.022
13	BZV55C13	SMD 146-6529●	0.050	0.034	0.025	0.022
15	BZV55C15	SMD 146-6530●	0.050	0.034	0.025	0.022
16	BZV55C16	SMD 146-6531●	0.050	0.034	0.025	0.022
18	BZV55C18	SMD 146-6532●	0.050	0.034	0.025	0.022
20	BZV55C20	SMD 146-6533●	0.050	0.034	0.025	0.022
22	BZV55C22	SMD 146-6534●	0.050	0.034	0.025	0.022
24	BZV55C24	SMD 146-6535●	0.050	0.034	0.025	0.022
27	BZV55C27	SMD 146-6536●	0.050	0.034	0.025	0.022
30	BZV55C30	SMD 146-6538●	0.050	0.034	0.025	0.022
33	BZV55C33	SMD 146-6539●	0.050	0.034	0.025	0.022
36	BZV55C36	SMD 146-6540●	0.050	0.034	0.025	0.022
3.3	BZV55C3V6	SMD 146-6541●	0.050	0.034	0.025	0.022
3.9	BZV55C3V9	SMD 146-6542●	0.050	0.034	0.025	0.022
43	BZV55C43	SMD 146-6543●	0.050	0.034	0.025	0.022
4.3	BZV55C4V3	SMD 146-6545●	0.050	0.034	0.025	0.022
4.7	BZV55C4V7	SMD 146-6546●	0.050	0.034	0.025	0.022
51	BZV55C51	SMD 146-6547●	0.050	0.034	0.025	0.022
5.1	BZV55C5V1	SMD 146-6548●	0.050	0.034	0.025	0.022
5.6	BZV55C5V6	SMD 146-6551●	0.050	0.034	0.025	0.022
6.2	BZV55C6V2	SMD 146-6552●	0.050	0.034	0.025	0.022
7.5	BZV55C7V5	SMD 146-6554●	0.050	0.034	0.025	0.022
8.2	BZV55C8V2	SMD 146-6555●	0.050	0.034	0.025	0.022
9.1	BZV55C9V1	SMD 146-6556●	0.050	0.034	0.025	0.022

BZT55C Series Diodes

Quadro MiniMelf - 500mW

multicomp

New



Quadro Mini-Melf

Features:

- Zener voltage range 2.0 to 75 volts
- Mini-MELF package
- Surface device type mounting
- Hermetically sealed glass
- Compression Bonded Construction
- All external surfaces are corrosion resistant and terminals are readily solderable
- RoHS compliant
- Matte Tin(Sn) lead finish
- Blue color band indicates negative polarity

Voltage, Vz max. V	Current, Test mA	Mftrs. List No.	Voltage, Vz max. V	Current, Test mA	Mftrs. List No.
2.11	5	BZT55C2V0	14.1	5	BZT55C13
2.33	5	BZT55C2V2	15.6	5	BZT55C15
2.56	5	BZT55C2V4	17.1	5	BZT55C16
2.89	5	BZT55C2V7	19.1	5	BZT55C18
3.2	5	BZT55C3V0	21.1	5	BZT55C20
3.5	5	BZT55C3V3	23.3	5	BZT55C22
3.8	5	BZT55C3V6	25.6	5	BZT55C24
4.1	5	BZT55C3V9	28.9	2	BZT55C27
4.6	5	BZT55C4V3	32	2	BZT55C30
5	5	BZT55C4V7	35	2	BZT55C33
5.4	5	BZT55C5V1	38	2	BZT55C36
6	5	BZT55C5V6	41	2	BZT55C39
6.6	5	BZT55C6V2	46	2	BZT55C43
7.2	5	BZT55C6V8	50	2	BZT55C47
7.9	5	BZT55C7V5	54	2	BZT55C51
8.7	5	BZT55C8V2	60	2	BZT55C56
9.6	5	BZT55C9V1	66	2	BZT55C62
10.6	5	BZT55C10	72	2	BZT55C68
11.6	5	BZT55C11	80	2	BZT55C75
12.7	5	BZT55C12			

516979

Order Multiple = 10

Mftrs. List No.	Order Code	Price Each 10+	100+	250+	1K+
BZT55C2V0	SMD 162-1851●	0.041	0.030	0.024	0.021
BZT55C2V2	SMD 162-1852●	0.041	0.030	0.024	0.021
BZT55C2V4	SMD 162-1854●	0.041	0.030	0.024	0.021
BZT55C2V7	SMD 162-1855●	0.041	0.030	0.024	0.021
BZT55C3V0	SMD 162-1860●	0.041	0.030	0.024	0.021
BZT55C3V3	SMD 162-1861●	0.041	0.030	0.024	0.021
BZT55C3V6	SMD 162-1862●	0.041	0.030	0.024	0.021
BZT55C3V9	SMD 162-1863●	0.041	0.030	0.024	0.021
BZT55C4V3	SMD 162-1867●	0.041	0.030	0.024	0.021
BZT55C4V7	SMD 162-1868●	0.041	0.030	0.024	0.021
BZT55C5V1	SMD 162-1871●	0.041	0.030	0.024	0.021
BZT55C5V6	SMD 162-1872●	0.041	0.030	0.024	0.021

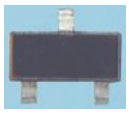
RL Re-reeling available

Farnell

Order Multiple = 10			Price Each		
Mftrs. List No.	Order Code	10+	100+	250+	1K+
BZT55C6V2	SMD 162-1875●	0.041	0.030	0.024	0.021
BZT55C6V8	SMD 162-1876●	0.041	0.030	0.024	0.021
BZT55C7V5	SMD 162-1879●	0.041	0.030	0.024	0.021
BZT55C8V2	SMD 162-1880●	0.041	0.030	0.024	0.021
BZT55C9V1	SMD 162-1881●	0.041	0.030	0.024	0.021
BZT55C10	SMD 162-1839●	0.041	0.030	0.024	0.021
BZT55C11	SMD 162-1840●	0.041	0.030	0.024	0.021
BZT55C12	SMD 162-1842●	0.041	0.030	0.024	0.021
BZT55C13	SMD 162-1843●	0.041	0.030	0.024	0.021
BZT55C15	SMD 162-1844●	0.041	0.030	0.024	0.021
BZT55C16	SMD 162-1845●	0.041	0.030	0.024	0.021
BZT55C18	SMD 162-1846●	0.041	0.030	0.024	0.021
BZT55C20	SMD 162-1847●	0.041	0.030	0.024	0.021
BZT55C22	SMD 162-1848●	0.041	0.030	0.024	0.021
BZT55C24	SMD 162-1849●	0.041	0.030	0.024	0.021
BZT55C27	SMD 162-1850●	0.041	0.030	0.024	0.021
BZT55C30	SMD 162-1856●	0.041	0.030	0.024	0.021
BZT55C33	SMD 162-1857●	0.041	0.030	0.024	0.021
BZT55C36	SMD 162-1858●	0.041	0.030	0.024	0.021
BZT55C39	SMD 162-1859●	0.041	0.030	0.024	0.021
BZT55C43	SMD 162-1864●	0.041	0.030	0.024	0.021
BZT55C47	SMD 162-1866●	0.041	0.030	0.024	0.021
BZT55C51	SMD 162-1869●	0.041	0.030	0.024	0.021
BZT55C56	SMD 162-1870●	0.041	0.030	0.024	0.021
BZT55C62	SMD 162-1873●	0.041	0.030	0.024	0.021
BZT55C68	SMD 162-1874●	0.041	0.030	0.024	0.021
BZT55C75	SMD 162-1878●	0.041	0.030	0.024	0.021

BZX84C Series

multicomp



SMD

SOT-23
H=1.3, W=2.9, D=0.95

Low voltage, General Purpose

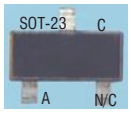
P_{D^*} (W)	I_{FRM} (mA)	V_F (V)	Temp	Package	Mftrs. List No.
0.3	250	1.5	-65°C to 150°C	SOT-23	BZX84C

484812

			Price Each			
V_Z	Mftrs. List No.	Order Code	5+	25+	100+	250+
10	BZX84C10	SMD 146-6581●	0.067	0.053	0.038	0.024
11	BZX84C11	SMD 146-6582●	0.067	0.053	0.038	0.024
12	BZX84C12	SMD 146-6583●	0.067	0.053	0.038	0.024
13	BZX84C13	SMD 146-6584●	0.067	0.053	0.038	0.024
15	BZX84C15	SMD 146-6585●	0.067	0.053	0.038	0.024
16	BZX84C16	SMD 146-6587●	0.067	0.053	0.038	0.024
18	BZX84C18	SMD 146-6588●	0.067	0.053	0.038	0.024
20	BZX84C20	SMD 146-6590●	0.067	0.053	0.038	0.024
22	BZX84C22	SMD 146-6591●	0.067	0.053	0.038	0.024
24	BZX84C24	SMD 146-6593●	0.067	0.053	0.038	0.024
27	BZX84C27	SMD 146-6594●	0.067	0.053	0.038	0.024
30	BZX84C30	SMD 146-6595●	0.067	0.053	0.038	0.024
33	BZX84C33	SMD 146-6596●	0.067	0.053	0.038	0.024
36	BZX84C36	SMD 146-6597●	0.067	0.053	0.038	0.024
39	BZX84C39	SMD 146-6599●	0.067	0.053	0.038	0.024
47	BZX84C47	SMD 146-6601●	0.067	0.053	0.038	0.024
4.7	BZX84C4V7	SMD 146-6602●	0.067	0.053	0.038	0.024
51	BZX84C51	SMD 146-6603●	0.067	0.053	0.038	0.024
5.1	BZX84C5V1	SMD 146-6605●	0.067	0.053	0.038	0.024
5.6	BZX84C5V6	SMD 146-6606●	0.067	0.053	0.038	0.024
6.2	BZX84C6V2	SMD 146-6607●	0.067	0.053	0.038	0.024
7.5	BZX84C7V5	SMD 146-6608●	0.067	0.053	0.038	0.024
8.2	BZX84C8V2	SMD 146-6609●	0.067	0.053	0.038	0.024
9.1	BZX84C9V1	SMD 146-6610●	0.067	0.053	0.038	0.024

BZX84C Series Zener Voltage Regulators

ON Semiconductor



SMD

This series of Zener diodes is offered in the convenient, surface mount plastic SOT-23 package. These devices are designed to providevoltage regulation with minimum space requirement. They are well suited for applications such as cellular phones, hand held portables,and high density PC boards.

- 225 mW Rating on FR-4 or FR-5 Board
- Zener Breakdown Voltage Range - 2.4 V to 75 V
- Package Designed for Optimal Automated Board Assembly
- Small Package Size for High Density Applications
- ESD Rating of Class 3 (>16 KV) per Human Body Model

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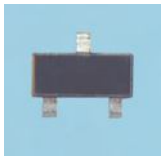
Voltage, V_Z (V)	Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+
3.9	BZX84C3V9LT1G	SMD 145-9050●	0.032	0.030	0.028	– –
4.7	BZX84C4V7LT1G	SMD 145-9051●	0.035	0.032	0.031	– –
5.1	BZX84C5V1LT1G	SMD 145-9052●	0.035	0.032	0.031	– –
12	BZX84C12LT1G	SMD 145-9049●	0.035	0.032	0.031	– –

£ € 40,000 PRICES REDUCED

MMBZ Series

40W Peak

ON Semiconductor



SMD

- 40 W Peak @ 1ms
- PD on FR-5 Board(1x0.75x0.62")=225mW
- Common Anode and Common Cathode Configurations
- Low Leakage (<5µA)
- Flammability Rating UL 94V-0

These dual monolithic silicon zener diodes are designed for applications requiring transient overvoltage protection capability. They are intended for use in voltage and ESD sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. Their dual junction common cathode design protects two separate lines using only one package. These devices are ideal for situations where board space is at a premium.

496964

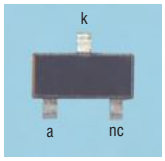
Voltage, V_Z (V)	Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
Dual Diode, Common Anode						
5.6	MMBZ5V6ALT1G	SMD 143-1253●	0.120	0.085	0.070	0.056
6.2	MMBZ6V2ALT1G	SMD 143-1254●	0.079	0.056	0.040	0.031
15	MMBZ15VALT1G	SMD 143-1226●	0.120	0.085	0.070	0.056
18	MMBZ18VALT1G	SMD 143-1228●	0.101	0.072	0.050	0.040
27	MMBZ27VALT1G	SMD 143-1229●	0.079	0.056	0.040	0.031
Dual Diode, Common Cathode						
15	MMBZ15VDLT1G	SMD 143-1227●	0.120	0.085	0.070	0.056
27	MMBZ27VCLT1G	SMD 143-1230●	0.120	0.085	0.070	0.056
33	MMBZ33VALT1G	SMD 143-1231●	0.079	0.056	0.040	0.031

BZX84C Series, 5% Tolerance

SMD

FAIRCHILD SEMICONDUCTOR

NXP founded by Philips



SOT-23
H=1.12, W=3.05, D=2.3

Equivalents to the popular BZX55/BZX79 series, and the BZX85/BZV85 series. Supplied on 8mm tape (SOT-23) and 12mm tape (SOT-223). ±5% working tolerance.

		FCH	NXP			FCH	NXP
4.7	BZX84-C4V7	**984-4384**	**108-1428**	10	BZX84-C10	**984-4317**	**108-1405**
5.1	BZX84-C5V1	**984-4392**	**108-1430**	12	BZX84-C12	**984-4325**	**108-1407**
5.6	BZX84-C5V6	**984-4406**	**108-1431**	15	BZX84-C15	**984-4333**	**108-1409**
6.2	BZX84-C6V2	**984-4414**	**108-1435**	16	BZX84-C16	**984-4341**	—
6.8	BZX84-C6V8	**984-4430**	**108-1436**	18	BZX84-C18	**984-4350**	**108-1411**
8.2	BZX84-C8V2	**984-4449**	**108-1439**	20	BZX84-C20	**984-4368**	**108-1412**
9.1	BZX84-C9V1	**984-4457**	**108-1440**				

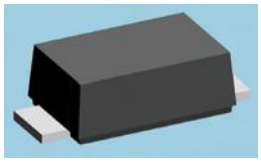
211304

Series	Mftr.		Price Each MIXED QUANTITY PRICING				
Order Multiple=5		**Order Code**	5+	100+	1K+	3K+	10K+
BZX84C...	FCH	**All Values**	0.073	0.059	0.040	0.017	0.013
BZX84C...	NXP	**All Values**	0.086	0.044	0.020	0.018	0.016

Diode, SMF Zener

TAIWAN SEMICONDUCTOR

New



Features:
- Silicon planar zener diodes
- Low leakage current
- Excellent stability
- High temp soldering

Vz V	W	Mftr.	Mftrs. List No.
12	0.8	TSC	BZD27C12P
13	0.8	TSC	BZD27C13P
15	0.8	TSC	BZD27C15P
24	0.8	TSC	BZD27C24P
27	0.8	TSC	BZD27C27P
33	0.8	TSC	BZD27C33P
36	0.8	TSC	BZD27C36P
39	0.8	TSC	BZD27C39P
43	0.8	TSC	BZD27C43P
47	0.8	TSC	BZD27C47P
62	0.8	TSC	BZD27C62P
100	0.8	TSC	BZD27C100P
120	0.8	TSC	BZD27C120P
200	0.8	TSC	BZD27C200P
240	0.8	TSC	BZD27C240P

503791

Order Multiple=5				Price Each		
Mftrs. List No.	Description	Order Code	5+	50+	100+	500+
BZD27C12P	Diode, Zener 0.8W 12V	SMD 155-9108●	0.144	0.103	0.080	0.072
BZD27C13P	Diode, Zener 0.8W 13V	SMD 155-9109●	0.144	0.103	0.080	0.072
BZD27C15P	Diode, Zener 0.8W 15V	SMD 155-9110●	0.144	0.103	0.080	0.072
BZD27C24P	Diode, Zener 0.8W 24V	SMD 155-9113●	0.144	0.103	0.080	0.072
BZD27C27P	Diode, Zener 0.8W 27V	SMD 155-9115●	0.144	0.103	0.080	0.072
BZD27C33P	Diode, Zener 0.8W 33V	SMD 155-9116●	0.144	0.103	0.080	0.072
BZD27C36P	Diode, Zener 0.8W 36V	SMD 155-9117●	0.144	0.103	0.080	0.072
BZD27C39P	Diode, Zener 0.8W 39V	SMD 155-9118●	0.144	0.103	0.080	0.072
BZD27C43P	Diode, Zener 0.8W 43V	SMD 155-9119●	0.144	0.103	0.080	0.072
BZD27C47P	Diode, Zener 0.8W 47V	SMD 155-9120●	0.144	0.103	0.080	0.072

RL Re-reeling available

Farnell

Zener Diodes - continued

Diode, SMF Zener - continued

Order Multiple=5

Mftrs. List No.	Description	Order Code	Price Each 5+	50+	100+	500+
BZD27C62P	Diode, Zener 0.8W 62V	SMD 155-9121●	0.144	0.103	0.080	0.072
BZD27C100P	Diode, Zener 0.8W 100V	SMD 155-9106●	0.144	0.103	0.080	0.072
BZD27C120P	Diode, Zener 0.8W 120V	SMD 155-9107●	0.144	0.103	0.080	0.072
BZD27C200P	Diode, Zener 0.8W 200V	SMD 155-9111●	0.144	0.103	0.080	0.072
BZD27C240P	Diode, Zener 0.8W 240V	SMD 155-9112●	0.141	0.101	0.078	0.071

BZX284C Series, 5% Tolerance



SOD-110

I_{FRM} (max) mA	P_{tot} (max) mW	T_a °C
250	0.4	25

Supplied on 8mm tape.

Zener Voltage, V	Mftrs. List No.	Order Code	Zener Voltage, V	Mftrs. List No.	Order Code
2.4	BZX284-C2V4	108-1386	9.1	BZX284-C9V1	108-1402
3	BZX284-C3V0	108-1389	10	BZX284-C10	108-1374
3.3	BZX284-C3V3	108-1390	11	BZX284-C11	108-1375
3.6	BZX284-C3V6	108-1392	12	BZX284-C12	108-1376
3.9	BZX284-C3V9	108-1393	13	BZX284-C13	108-1377
4.3	BZX284-C4V3	108-1394	15	BZX284-C15	108-1379
4.7	BZX284-C4V7	108-1395	16	BZX284-C16	108-1381
5.1	BZX284-C5V1	108-1396	18	BZX284-C18	108-1382
5.6	BZX284-C5V6	108-1397	20	BZX284-C20	108-1383
6.2	BZX284-C6V2	108-1398	24	BZX284-C24	108-1384
6.8	BZX284-C6V8	108-1399	27	BZX284-C27	108-1385
7.5	BZX284-C7V5	108-1400	30	BZX284-C30	108-1387
8.2	BZX284-C8V2	108-1401	33	BZX284-C33	108-1388

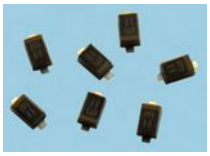
211300

Order Multiple=5

Mftrs. List No.	Order Code	Price Each MIXED QUANTITY PRICING 5+	100+	250+	1K+
BZX284C Series	All Values	0.089	0.048	0.036	0.032

Diode Zener, 1W

SOD-106



Features:
- Small power mold type. (PMDS)
- High ESD tolerance
- Power Dissipitation: 1W

Voltage, Vz min V	Current, Test mA	Mftrs. List No.
3.9	40	PTZTE253.9B
4.7	40	PTZTE254.7B
5.1	40	PTZTE255.1A
5.6	40	PTZTE255.6B
6.2	40	PTZTE256.2A
9.1	40	PTZTE259.1B
10	40	PTZTE2510A
15	20	PTZTE2515B
27	10	PTZTE2527A
27	10	PTZTE2527B
30	10	PTZTE2530A
30	10	PTZTE2530B
33	10	PTZTE2533A

528017

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
PTZTE253.9B	SMD 168-0001●	0.430	0.240	0.175	0.128	0.105
PTZTE254.7B	SMD 168-0005●	0.430	0.240	0.175	0.128	0.105
PTZTE255.1A	SMD 168-0008●	0.430	0.240	0.175	0.128	0.105
PTZTE255.6B	SMD 168-0009●	0.430	0.240	0.175	0.128	0.105
PTZTE256.2A	SMD 168-0010●	0.430	0.240	0.175	0.128	0.105
PTZTE259.1B	SMD 168-0011●	0.430	0.240	0.175	0.128	0.105
PTZTE2510A	SMD 167-9996●	0.430	0.240	0.175	0.128	0.105
PTZTE2515B	SMD 167-9997●	0.430	0.240	0.175	0.128	0.105
PTZTE2527A	SMD 167-9999●	0.430	0.240	0.175	0.128	0.105
PTZTE2527B	SMD 168-0000●	0.430	0.240	0.175	0.128	0.105
PTZTE2530A	SMD 168-0002●	0.430	0.240	0.175	0.128	0.105
PTZTE2530B	SMD 168-0003●	0.430	0.240	0.175	0.128	0.105
PTZTE2533A	SMD 168-0004●	0.430	0.240	0.175	0.128	0.105

BZG03C Series, 5% Tolerance



SOD106A
H=2.65, W=5.5, D=2.5

P_{tot} = 3W
Equivalents to the BZT03 series, supplied on 12mm tape.

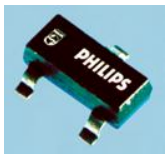
Zener Voltage, V	Mftrs. List No.	Order Code
10	BZG03-C10	939-8082
12	BZG03-C12	939-8090
15	BZG03-C15	939-8104
24	BZG03-C24	939-8139
30	BZG03-C30	939-8155
33	BZG03-C33	939-8163
180	BZG03-C180	939-8210

211172

Order Multiple=5

Order Code	Price Each MIXED QUANTITY PRICING 5+	100+	1K5+	3K+
BZG03 Series All Values	0.830	0.430	0.330	0.169

Low Power, 2% and 5% Tolerance



SOT-23



DO-35

	I_f, mA	P_{tot}	Package
BZX79...Series	250 mA	0.4W	DO-35
BZX84...Series	200 mA	250mW	SOT-23

211347

Order Multiple=10

Zener Voltage, V	Mftrs. List No.	Order Code	Price Each 10+	50+	100+	1K+	5K+
2% Tolerance, DO-35							
4.7	BZX79-B4V7	109-7274●	0.138	0.057	0.041	0.028	0.024
5.1	BZX79-B5V1	109-7275●	0.138	0.057	0.041	0.028	0.024
5.6	BZX79-B5V6	109-7276●	0.148	0.061	0.044	0.030	0.027
6.2	BZX79-B6V2	109-7277●	0.148	0.061	0.044	0.030	0.027
12	BZX79-B12	109-7273●	0.148	0.061	0.044	0.030	0.027
5% Tolerance, DO-35							
43	BZX79-C43	109-7244●	0.121	0.050	0.038	0.023	0.021
51	BZX79-C51	109-7245●	0.121	0.050	0.038	0.023	0.021
62	BZX79-C62	109-7247●	0.097	0.040	0.031	0.018	0.017
68	BZX79-C68	109-7248●	0.119	0.049	0.036	0.024	0.022
Order Multiple=5			**5+**	**100+**	**1K+**	**3K+**	**10K+**
2% Tolerance, SOT-23							
5.1	BZX84-B5V1	SMD 108-1403● RL	0.055	0.038	0.030	0.027	0.026
5.6	BZX84-B5V6	SMD 108-1404● RL	0.055	0.038	0.030	0.027	0.026

CLL5 Series SOD-80C

500mW Hermetically Sealed, Glass Silicon Zener Diodes



Power Ptot	V_F	Temp	Package	List No.
0.5W	1.1V	-65°C to 200°C	SOD-80C	CLL52xxB

504628

Order Multiple=10

V_z	Mftrs. List No.	Order Code	Price Each 10+	50+	100+	500+	1K+
4.7	CLL5230B	SMD 146-6631●	0.051	0.034	0.025	0.023	0.020
5.1	CLL5231B	SMD 146-6632●	0.051	0.034	0.025	0.023	0.020
5.6	CLL5232B	SMD 146-6633●	0.051	0.034	0.025	0.023	0.020
6.2	CLL5234B	SMD 146-6634●	0.051	0.034	0.025	0.023	0.020
8.2	CLL5237B	SMD 146-6635●	0.051	0.034	0.025	0.023	0.020
9.1	CLL5239B	SMD 146-6636●	0.051	0.034	0.025	0.023	0.020
10	CLL5240B	SMD 146-6637●	0.051	0.034	0.025	0.023	0.020
12	CLL5242B	SMD 146-6638●	0.051	0.034	0.025	0.023	0.020
15	CLL5245B	SMD 146-6639●	0.051	0.034	0.025	0.023	0.020
18	CLL5248B	SMD 146-6640●	0.051	0.034	0.025	0.023	0.020
20	CLL5250B	SMD 146-6642●	0.051	0.034	0.025	0.023	0.020
24	CLL5252B	SMD 146-6643●	0.051	0.034	0.025	0.023	0.020
27	CLL5254B	SMD 146-6644●	0.051	0.034	0.025	0.023	0.020
33	CLL5257B	SMD 146-6645●	0.051	0.034	0.025	0.023	0.020

BZV55 Series, 5% Tolerance - RoHs Compliant

SOD-80, 500mw



Zener Voltage V	Mftrs. List No.	Order Code	Zener Voltage V	Mftrs. List No.	Order Code	Zener Voltage V	Mftrs. List No.	Order Code
2.4	BZV55-C2V4	109-7193	6.8	BZV55-C6V8	109-7205	18	BZV55-C18	109-7211
2.7	BZV55-C2V7	109-7194	7.5	BZV55-C7V5	109-7206	20	BZV55-C20	109-7212
3.3	BZV55-C3V3	109-7197	8.2	BZV55-C8V2	109-7207	22	BZV55-C22	109-7189
3.9	BZV55-C3V9	109-7198	9.1	BZV55-C9V1	109-7208	24	BZV55-C24	109-7190
4.3	BZV55-C4V3	109-7199	10	BZV55-C10	108-1361	27	BZV55-C27.	109-7191
4.7	BZV55-C4V7	109-7200	12	BZV55-C12	109-7185	30	BZV55-C30	108-1362
5.1	BZV55-C5V1	109-7202	13	BZV55-C13	109-7186	33	BZV55-C33	109-7195
5.1	BZV55-B5V1	873-5441	15	BZV55-C15	109-7187	39	BZV55-C39	109-7196
5.6	BZV55-C5V6	109-7203	16	BZV55-C16	109-7188	56	BZV55-C56	109-7201
6.2	BZV55-C6V2	109-7204						

422866/211296

Order Multiple=5

Order Code	Price Each 5+	25+	100+	1K+	3K+
BZV55C Series All Values	0.048	0.033	0.026	0.022	0.020

£ € 40,000 PRICES REDUCED

RL Re-reeling available

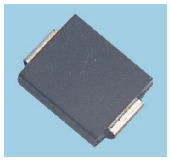
Farnell

SML47x Series Diodes Zeners

1W

multicomp

New



DO-214AC

Features:

- Plastic package has Underwriters Laboratory
- Flammability Classification 94 V-0
- For surface mounted applications
- Low Zener impedance
- Low regulation factor
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Standard voltage tolerance is 10 %, Suffix A ± 5 %.

Voltage Vz V	Current Test mA	Marking SMD	Mftrs. List No.	Mftrs. List No.	Voltage Vz V	Current Test mA	Marking SMD	Mftrs. List No.	Mftrs. List No.
6.8	37	6P8	SML4736	SML4736A	24	10.5	24	SML4749	SML4749A
7.5	34	7P5	SML4737	SML4737A	27	9.5	27	SML4750	SML4750A
8.2	31	8P2	SML4738	SML4738A	30	8.5	30	SML4751	SML4751A
9.1	28	9P1	SML4739	SML4739A	33	7.5	33	SML4752	SML4752A
10	25	10	SML4740	SML4740A	36	7	36	SML4753	SML4753A
12	21	12	SML4742	SML4742A	39	6.5	39	SML4754	SML4754A
13	19	13	SML4743	SML4743A	43	6	43	SML4755	SML4755A
15	17	15	SML4744	SML4744A	47	5.5	47	SML4756	SML4756A
16	15.5	16	SML4745	SML4745A	51	5	51	SML4757	SML4757A
18	14	18	SML4746	SML4746A	56	4.5	56	SML4758	SML4758A
20	12.5	20	SML4747	SML4747A	68	3.7	68	SML4760	SML4760A
22	11.5	22	SML4748	SML4748A	75	3.3	75	SML4761	SML4761A

517777

Order Multiple=5

Mftrs. List No.	Order Code	Price Each 5+	100+	250+	500+	1K+
SML4736	SMD 162-5285	0.330	0.220	0.165	0.133	0.110
SML4736A	SMD 162-5286	0.330	0.220	0.165	0.133	0.110
SML4737	SMD 162-5288	0.330	0.220	0.165	0.133	0.110
SML4737A	SMD 162-5289	0.330	0.220	0.165	0.133	0.110
SML4738	SMD 162-5290	0.330	0.220	0.165	0.133	0.110
SML4738A	SMD 162-5291	0.330	0.220	0.165	0.133	0.110
SML4739	SMD 162-5292	0.330	0.220	0.165	0.133	0.110
SML4739A	SMD 162-5293	0.330	0.220	0.165	0.133	0.110
SML4740	SMD 162-5294	0.330	0.220	0.165	0.133	0.110
SML4740A	SMD 162-5295	0.330	0.220	0.165	0.133	0.110
SML4742	SMD 162-5296	0.330	0.220	0.165	0.133	0.110
SML4742A	SMD 162-5297	0.330	0.220	0.165	0.133	0.110
SML4743	SMD 162-5298	0.330	0.220	0.165	0.133	0.110
SML4743A	SMD 162-5300	0.330	0.220	0.165	0.133	0.110
SML4744	SMD 162-5301	0.330	0.220	0.165	0.133	0.110
SML4744A	SMD 162-5302	0.330	0.220	0.165	0.133	0.110
SML4745	SMD 162-5303	0.330	0.220	0.165	0.133	0.110
SML4745A	SMD 162-5304	0.330	0.220	0.165	0.133	0.110
SML4746	SMD 162-5306	0.330	0.220	0.165	0.133	0.110
SML4746A	SMD 162-5307	0.330	0.220	0.165	0.133	0.110
SML4747	SMD 162-5308	0.330	0.220	0.165	0.133	0.110
SML4747A	SMD 162-5309	0.330	0.220	0.165	0.133	0.110
SML4748	SMD 162-5310	0.330	0.220	0.165	0.133	0.110
SML4748A	SMD 162-5311	0.330	0.220	0.165	0.133	0.110
SML4749	SMD 162-5312	0.330	0.220	0.165	0.133	0.110
SML4749A	SMD 162-5313	0.330	0.220	0.165	0.133	0.110
SML4750	SMD 162-5314	0.330	0.220	0.165	0.133	0.110
SML4750A	SMD 162-5315	0.330	0.220	0.165	0.133	0.110
SML4751	SMD 162-5316	0.330	0.220	0.165	0.133	0.110
SML4751A	SMD 162-5318	0.330	0.220	0.165	0.133	0.110
SML4752	SMD 162-5319	0.330	0.220	0.165	0.133	0.110
SML4752A	SMD 162-5320	0.330	0.220	0.165	0.133	0.110
SML4753	SMD 162-5321	0.330	0.220	0.165	0.133	0.110
SML4753A	SMD 162-5322	0.330	0.220	0.165	0.133	0.110
SML4754	SMD 162-5323	0.330	0.220	0.165	0.133	0.110
SML4754A	SMD 162-5324	0.330	0.220	0.165	0.133	0.110
SML4755	SMD 162-5325	0.330	0.220	0.165	0.133	0.110
SML4755A	SMD 162-5326	0.330	0.220	0.165	0.133	0.110
SML4756	SMD 162-5327	0.330	0.220	0.165	0.133	0.110
SML4756A	SMD 162-5328	0.330	0.220	0.165	0.133	0.110
SML4757	SMD 162-5331	0.330	0.220	0.165	0.133	0.110
SML4757A	SMD 162-5332	0.330	0.220	0.165	0.133	0.110
SML4758	SMD 162-5333	0.330	0.220	0.165	0.133	0.110
SML4758A	SMD 162-5334	0.330	0.220	0.165	0.133	0.110
SML4760	SMD 162-5335	0.330	0.220	0.165	0.133	0.110
SML4760A	SMD 162-5336	0.330	0.220	0.165	0.133	0.110
SML4761	SMD 162-5337	0.330	0.220	0.165	0.133	0.110
SML4761A	SMD 162-5338	0.330	0.220	0.165	0.133	0.110

BZG05C and BZG03C Series, 5% Tolerance

SMD

VISHAY



- P_{tot} = 3W
- Non-repetitive peak power dissipation; 60W (BZG05C series), 600W (BZG03C series)
- DO-214AC (SMA) package

H = 2.9, W = 2.9, D = 5.6

Zener Voltage (V)	Mftrs. List No.	Order Code	Zener Voltage (V)	Mftrs. List No.	Order Code
10	BZG03-C10	939-8082	3.3	BZG05-C3V3	939-7965
12	BZG03-C12	939-8090	3.6	BZG05-C3V6	939-7973
15	BZG03-C15	939-8104	3.9	BZG05-C3V9	939-7981
18	BZG03-C18	939-8112	4.3	BZG05-C4V3	939-7990
20	BZG03-C20	939-8120	4.7	BZG05-C4V7	939-8007
24	BZG03-C24	939-8139	5.1	BZG05-C5V1	939-8015
27	BZG03-C27	939-8147	5.6	BZG05-C5V6	939-8023
30	BZG03-C30	939-8155	6.2	BZG05-C6V2	939-8031
33	BZG03-C33	939-8163	6.8	BZG05-C6V8	939-8040
56	BZG03-C56	939-8171	7.5	BZG05-C7V5	939-8058
100	BZG03-C100	939-8180	8.2	BZG05-C8V2	939-8066
120	BZG03-C120	939-8198	9.1	BZG05-C9V1	939-8074
150	BZG03-C150	939-8201			
180	BZG03-C180	939-8210			
200	BZG03-C200	939-8228			
240	BZG03-C240	939-8236			
270	BZG03-C270	939-8244			

Mftrs. List No.	Order Code	Price Each 5+	100+	1K5+	3K+
BZG05C Series	All Values	0.680	0.360	0.280	0.137
BZG03C Series	All Values	0.830	0.430	0.330	0.169

406002

Reels of 1500

Mftrs. List No.	Order Code	Price Per Reel 1+	+
BZG05C5V1TR LEAD-FREE	NEW SMD 156-2361	165.65	149.08
BZG05C5V6TR LEAD-FREE	NEW SMD 156-2362	165.65	149.08
BZG03C18TR LEAD-FREE	NEW SMD 156-2366	201.66	181.50
BZG03C27TR LEAD-FREE	NEW SMD 156-2369	201.66	181.50
BZG03C10TR LEAD-FREE	NEW SMD 156-2363	201.66	181.50
BZG03C12TR LEAD-FREE	NEW SMD 156-2364	201.66	181.50
BZG03C15TR LEAD-FREE	NEW SMD 156-2365	201.66	181.50
BZG03C24TR LEAD-FREE	NEW SMD 156-2367	201.66	181.50
BZG03C30TR LEAD-FREE	NEW SMD 156-2371	201.66	181.50
BZG03C33TR LEAD-FREE	NEW SMD 156-2372	201.66	181.50
BZG03C180TR LEAD-FREE	NEW SMD 156-2373	201.66	181.50

BZX79C Series, 5% Tolerance

FAIRCHILD SEMICONDUCTOR

NXP founded by Philips



P_{tot} = 500mW
DO-35 L = 4.5, Dia. = 2.0
V_f=1.5 (FCH)
0.9 (PS)

Zener Voltage, V	Mftrs. List No.	Order Code FCH	Order Code NXP	Zener Voltage, V	Mftrs. List No.	Order Code FCH	Order Code NXP
2.4	BZX79-C2V4	—	109-7223	10	BZX79-C10	—	109-7213
2.7	BZX79-C2V7	—	109-7224	11	BZX79-C11	—	109-7214
3	BZX79-C3V0	—	109-7228	12	BZX79-C12	—	109-7215
3.3	BZX79-C3V3	—	109-7229	13	BZX79-C13	—	109-7216
3.6	BZX79-C3V6	—	109-7230	15	BZX79-C15	984-4511	109-7217
3.9	BZX79-C3V9	—	109-7231	16	BZX79-C16	—	109-7218
4.3	BZX79-C4V3	—	109-7233	18	BZX79-C18	—	109-7219
4.7	BZX79-C4V7	—	109-7235	22	BZX79-C22	—	109-7220
5.1	BZX79-C5V1	—	109-7236	24	BZX79-C24	984-4554	—
5.6	BZX79-C5V6	—	109-7237	27	BZX79-C27	—	109-7221
6.2	BZX79-C6V2	—	109-7238	30	BZX79-C30	—	109-7225
6.8	BZX79-C6V8	—	109-7239	36	BZX79-C36	—	109-7226
7.5	BZX79-C7V5	—	109-7241	39	BZX79-C39	—	109-7227
8.2	BZX79-C8V2	984-4694	109-7242	47	BZX79-C47	—	109-7232
9.1	BZX79-C9V1	—	109-7243	75	BZX79-C75	—	109-7240

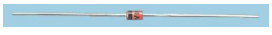
211314

Order Multiple=10

Series	Mftr.	Order Code	Price Each MIXED QUANTITY PRICING 10+	100+	1K+	3K+	
BZX79C...	FCH	All Values	0.052	0.040	0.035	0.017	
			10+	50+	100+	1K+	5K+
BZX79C...	NXP	All Values	0.116	0.047	0.036	0.022	0.020

Leaded Zeners, DO-35, DO-41

FAIRCHILD SEMICONDUCTOR



DO-35

	Voltage, V_Z V	Current (mA)	Power P_T W	Mftrs List No.
DO-35				
	4.7	5	0.5	BZX79-C4V7
	5.1	5	0.5	BZX79-C5V1
	5.6	5	0.5	BZX79-C5V6
	6.2	5	0.5	BZX79-C6V2
	8.2	5	0.5	BZX79-C8V2
	9.1	5	0.5	BZX79-C9V1
	10	5	0.5	BZX79-C10
	12	5	0.5	BZX79-C12
	15	5	0.5	BZX79-C15
	20	5	0.5	BZX79-C20
	24	5	0.5	BZX79-C24

419708

Mftrs. List No.	Order Code	Price Each 10+	100+	1K+	3K+	+
BZX79-C4V7	984-4597	0.052	0.040	0.035	0.017	– –
BZX79-C5V1	984-4619	0.052	0.040	0.035	0.017	– –
BZX79-C5V6	984-4635	0.052	0.040	0.035	0.017	– –
BZX79-C6V2	984-4651	0.052	0.040	0.035	0.017	– –
BZX79-C8V2	984-4694	0.052	0.040	0.035	0.017	– –
BZX79-C9V1	984-4716	0.051	0.040	0.035	0.017	– –

RL Re-reeling available

Farnell

Zener Diodes - continued

Leaded Zeners, DO-35, DO-41 - continued

Mftrs. List No.	Order Code	Price Each 10+	100+	1K+	3K+	+
BZX79-C10	984-4465	0.052	0.040	0.035	0.017	– –
BZX79-C12	984-4481	0.052	0.040	0.035	0.017	– –
BZX79-C15	984-4511	0.052	0.040	0.035	0.017	– –
BZX79-C20	984-4546	0.026	0.021	0.018	0.008	– –
BZX79-C24	984-4554	0.040	0.032	0.028	0.013	– –

1N47x Series Diode Zeners

1W, DO-41

multicomp

New



DO-41

Features:

- Low profile package
- Built-in strain relief
- Glass passivated junction
- Low inductance
- High temperature soldering guaranteed 260°C / 10 seconds at terminals

Voltage, Vz max. V	Current, Test mA	Current, Surge mA	Mftrs. List No.	Voltage, Vz max. V	Current, Test mA	Current, Surge mA	Mftrs. List No.
12.6	21	380	1N4742A	31.5	8.5	150	1N4751A
13.65	19	344	1N4743A	34.65	7.5	135	1N4752A
15.75	17	304	1N4744A	37.8	7	125	1N4753A
16.8	15.5	285	1N4745A	49.35	5.5	95	1N4756A
18.9	14	250	1N4746A	53.55	5	90	1N4757A
21	12.5	225	1N4747A	58.8	4.5	80	1N4758A
23.1	11.5	205	1N4748A	71.4	3.7	65	1N4760A
25.2	10.5	190	1N4749A	78.75	3.3	60	1N4761A
28.35	9.5	170	1N4750A	95	2.5	45	1N4764A

517197

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	1K+
1N4742A	162-1618	0.140	0.100	0.084	0.046
1N4743A	162-1619	0.140	0.100	0.084	0.046
1N4744A	162-1620	0.140	0.100	0.084	0.046
1N4745A	162-1621	0.140	0.100	0.084	0.046
1N4746A	162-1623	0.140	0.100	0.084	0.046
1N4747A	162-1624	0.140	0.100	0.084	0.046
1N4748A	162-1625	0.140	0.100	0.084	0.046
1N4749A	162-1626	0.140	0.100	0.084	0.046
1N4750A	162-1627	0.140	0.100	0.084	0.046
1N4751A	162-1628	0.140	0.100	0.084	0.046
1N4752A	162-1629	0.140	0.100	0.084	0.046
1N4753A	162-1630	0.140	0.100	0.084	0.046
1N4756A	162-1631	0.140	0.100	0.084	0.046
1N4757A	162-1632	0.140	0.100	0.084	0.046
1N4758A	162-1633	0.140	0.100	0.084	0.046
1N4760A	162-1635	0.140	0.100	0.084	0.046
1N4761A	162-1636	0.140	0.100	0.084	0.046
1N4764A	162-1637	0.140	0.100	0.084	0.046

BZV85C, BZX55C and BZX85C Series, 5% Tolerance

FAIRCHILD SEMICONDUCTOR

NXP founded by Philips



Family	Mftr.	Package	L		P_{tot} (W)	V_f
BZX55C	FCH	DO-35	4.8	2	0.5	1.2
BZV85C	NXP	DO-41	4.8	2.6	1	1.0
BZX85C	FCH	DO-41	4.8	2.6	1	1.2

Zener Voltage, V	Mftrs. List No.	Order Code FCH	Mftrs. List No.	Order Code FCH	Mftrs. List No.	Order Code NXP
3.3	BZX55-C3V3	984-4562	BZX85-C3V3	984-4163	—	—
3.6	—	—	BZX85-C3V6	984-4171	—	—
3.9	BZX55-C3V9	984-4570	BZX85-C3V9	984-4198	—	—
4.3	—	—	BZX85-C4V3	984-4228	—	—
4.7	BZX55-C4V7	984-4589	BZX85-C4V7	984-4236	—	—
5.1	BZX55-C5V1	984-4600	BZX85-C5V1	984-4244	BZV85-C5V1	109-7263
5.6	BZX55-C5V6	984-4627	BZX85-C5V6	984-4252	BZV85-C5V6	109-7264
6.2	BZX55-C6V2	984-4643	BZX85-C6V2	984-4260	—	—
6.8	BZX55-C6V8	984-4660	BZX85-C6V8	984-4279	BZV85-C6V8	109-7267
7.5	BZX55-C7V5	984-4678	BZX85-C7V5	984-4287	BZV85-C7V5	109-7269
8.2	BZX55-C8V2	984-4686	BZX85-C8V2	984-4295	BZV85-C8V2	109-7270
9.1	BZX55-C9V1	984-4708	BZX85-C9V1	984-4309	BZV85-C9V1	109-7272
11	—	—	BZX85-C11	984-4066	—	—
12	BZX55-C12	984-4473	BZX85-C12	984-4074	BZV85-C12	109-7250
13	BZX55-C13	984-4490	BZX85-C13	984-4082	—	—
15	BZX55-C15	984-4503	BZX85-C15	984-4090	BZV85-C15	109-7251
16	BZX55-C16	984-4520	BZX85-C16	984-4104	—	—
18	BZX55-C18	984-4538	BZX85-C18	984-4120	BZV85-C18	109-7252
22	—	—	BZX85-C22	984-4139	—	—
24	—	—	BZX85-C24	984-4147	—	—
27	—	—	BZX85-C27	984-4155	BZV85-C27	109-7253
30	—	—	BZX85-C30	984-4201	BZV85-C30	109-7254
33	—	—	BZX85-C33	984-4210	BZV85-C33	109-7255
36	—	—	—	—	BZV85-C36	109-7256
39	—	—	—	—	BZV85-C39	109-7257
43	—	—	—	—	BZV85-C43	109-7259
47	—	—	—	—	BZV85-C47	109-7261
51	—	—	—	—	BZV85-C51	108-1363
56	—	—	—	—	BZV85-C56	109-7262
62	—	—	—	—	BZV85-C62	109-7265
75	—	—	—	—	BZV85-C75	109-7268

211342

Order Multiple=5 Series	Mftr.	Order Code	Price Each 5+	25+	100+	1K+	3K+
BZX55C...	FCH	All Values	0.065	0.048	0.038	0.018	0.017
BZX85C...	FCH	All Values	0.077	0.075	0.053	0.034	0.033
			5+	100+	1K+	3K+	10K+
BZV85C...	NXP	All Values	0.062	0.045	0.036	0.033	0.032

BZT03C Series, 5% Tolerance

VISHAY



SOD-57

- P_{tot} = 3.25W
- Clamping time in picoseconds
- SOD57 Package

Zener Voltage, V	Mftrs. List No.	Order Code	Price Each 5+	25+	100+	1K+	5K+
7.5	BZT03-C7V5	939-8252	0.360	0.260	0.250	0.155	0.147
8.2	BZT03-C8V2	939-8260	0.450	0.330	0.300	0.194	0.184
9.1	BZT03-C9V1	939-8279	0.390	0.290	0.280	0.171	0.163
10	BZT03-C10	939-8287	0.360	0.260	0.250	0.155	0.147
12	BZT03-C12	939-8295	0.440	0.330	0.300	0.191	0.178
13	BZT03-C13	939-8309	0.450	0.330	0.300	0.194	0.184
15	BZT03-C15	939-8317	0.450	0.330	0.300	0.194	0.184
16	BZT03-C16	939-8325	0.450	0.330	0.300	0.194	0.184
18	BZT03-C18	939-8333	0.360	0.260	0.250	0.155	0.147
20	BZT03-C20	939-8341	0.450	0.330	0.300	0.194	0.184
22	BZT03-C22	939-8350	0.450	0.330	0.300	0.194	0.184
24	BZT03-C24	939-8368	0.360	0.260	0.250	0.155	0.147
27	BZT03-C27	939-8376	0.360	0.260	0.250	0.155	0.147
30	BZT03-C30	939-8384	0.450	0.330	0.300	0.194	0.184
33	BZT03-C33	939-8392	0.360	0.260	0.250	0.155	0.147
36	BZT03-C36	939-8406	0.450	0.330	0.300	0.194	0.184
39	BZT03-C39	939-8414	0.490	0.420	0.350	0.280	0.210
43	BZT03-C43	939-8422	0.340	0.250	0.220	0.146	0.138
47	BZT03-C47	939-8430	0.450	0.330	0.300	0.194	0.184
51	BZT03-C51	939-8449	0.450	0.330	0.300	0.194	0.184
56	BZT03-C56	939-8457	0.450	0.330	0.300	0.194	0.184
62	BZT03-C62	939-8465	0.450	0.330	0.300	0.194	0.184
68	BZT03-C68	939-8473	0.450	0.330	0.300	0.194	0.184
75	BZT03-C75	939-8481	0.450	0.330	0.300	0.194	0.184
82	BZT03-C82	939-8490	0.450	0.330	0.300	0.194	0.184
91	BZT03-C91	939-8503	0.360	0.260	0.250	0.155	0.147
100	BZT03-C100	939-8511	0.340	0.250	0.220	0.146	0.138
120	BZT03-C120	939-8520	0.440	0.330	0.300	0.191	0.178
130	BZT03-C130	939-8538	0.360	0.260	0.250	0.155	0.147
150	BZT03-C150	939-8546	0.360	0.260	0.250	0.155	0.147
160	BZT03-C160	939-8554	0.360	0.260	0.250	0.155	0.147
180	BZT03-C180	939-8562	0.340	0.250	0.220	0.146	0.138
200	BZT03-C200	939-8570	0.450	0.330	0.300	0.194	0.184
220	BZT03-C220	939-8589	0.450	0.330	0.300	0.194	0.184
270	BZT03-C270	939-8597	0.450	0.330	0.300	0.194	0.184

406449

Reels of 5000 Mftrs. List No.	Order Code	Price Per Reel 1+
BZT03C10-TR LEAD-FREE	NEW 156-2374	826.13
BZT03C12-TR LEAD-FREE	NEW 156-2375	800.14
BZT03C13-TR LEAD-FREE	NEW 156-2376	826.13
BZT03C15-TR LEAD-FREE	NEW 156-2377	826.13
BZT03C22-TR LEAD-FREE	NEW 156-2378	826.13
BZT03C24-TR LEAD-FREE	NEW 156-2379	826.13
BZT03C27-TR LEAD-FREE	NEW 156-2380	826.13
BZT03C30-TR LEAD-FREE	NEW 156-2382	826.13
BZT03C33-TR LEAD-FREE	NEW 156-2383	826.13
BZT03C39-TR LEAD-FREE	NEW 156-2384	800.14
BZT03C47-TR LEAD-FREE	NEW 156-2385	826.13
BZT03C51-TR LEAD-FREE	NEW 156-2386	826.13
BZT03C62-TR LEAD-FREE	NEW 156-2387	826.13
BZT03C100-TR LEAD-FREE	NEW 156-2388	826.13
BZT03C150-TR LEAD-FREE	NEW 156-2389	826.13
BZT03C200-TR LEAD-FREE	NEW 156-2390	826.13
BZT03C220-TR LEAD-FREE	NEW 156-2391	826.13
BZT03C270-TR LEAD-FREE	NEW 156-2392	826.13

1N5300B Series

ON Semiconductor

ON



Package	L	Dia.	P_{tot} (W)
17-02	8.9	3.7	5

Zener Voltage, V	Mftrs. List No.	Order Code	Zener Voltage, V	Mftrs. List No.	Order Code	Zener Voltage, V	Mftrs. List No.	Order Code
3.3	1N5333BG	955-7903	14	1N5351BG	955-8098	47	1N5368BG	955-8250
3.9	1N5335BG	955-7920	15	1N5352BG	955-8101	51	1N5369BG	955-8268
4.3	1N5336BG	955-7938	16	1N5353BG	955-8110	56	1N5370BG	955-8276
4.7	1N5337BG	955-7946	17	1N5354BG	955-8128	62	1N5372BG	955-8292
5.1	1N5338BG	955-7954	18	1N5355BG	955-8136	68	1N5373BG	955-8306
5.6	1N5339BG	955-7962	20	1N5357BG	955-8152	75	1N5374BG	955-8314
6	1N5340BG	955-7970	22	1N5358BG	955-8160	82	1N5375BG	955-8322
6.2	1N5341BG	955-7989	24	1N5359BG	955-8179	91	1N5377BG	955-8330
6.8	1N5342BG	955-7997	25	1N5360BG	955-8187	100	1N5378BG	955-8349
7.5	1N5343BG	955-8012	27	1N5361BG	955-8195	120	1N5380BG	955-8357
8.2	1N5344BG	955-8020	30	1N5363BG	955-8209	150	1N5383BG	955-8373
9.1	1N5346BG	955-8047	33	1N5364BG	955-8217	160	1N5384BG	955-8381
10	1N5347BG	955-8055	36	1N5365BG	955-8225	180	1N5386BG	955-8390
11	1N5348BG	955-8063	39	1N5366BG	955-8233	200	1N5388BG	955-8403
12	1N5349BG	955-8071	43	1N5367BG	955-8241			
13	1N5350BG	955-8080						

211326

	Order Code	Price Each MIXED QUANTITY PRICING 1+	25+	100+	500+	1K+
1N5300B Series	All Values	0.310	0.194	0.168	0.125	0.115

RL Re-reeling available

Farnell

BZY91C and BZY93C Series, 5% Tolerance



Series	Polarity	Package	P_{tot} (W)
BZY93...	Stud Cathode	DO-4 10/32 UNF 2A	20
BZY93...R	Stud Anode	DO-4 10/32 UNF 2A	20
BZY91...	Stud Cathode	DO-5 28 UNF 2A	75

Suitable for transient suppression in addition to voltage regulation.

Suppressors are normally chosen with a stand-off voltage equal to that of the steady state voltage of the line on which they will be used. The stand-off voltage is the maximum reverse voltage that can be applied without causing significant reverse dissipation.

In practice, the stand-off voltage of a device is 'three steps down' in the series from the zener voltage given by the suffix. For example, a BZY93C15 would be used as a voltage regulator on a 15V line and as a transient suppressor on a 11V line.

Zener Voltage, V	Mftrs. List No.	Order Code	Mftrs. List No.	Order Code	Mftrs. List No.	Order Code
7.5	BZY93-C7V5	370-277	BZY93-C7V5R	427-550	—	—
8.2	BZY93-C8V2	370-289	—	—	—	—
—	—	—	—	—	BZY91-C10	119-2116●
—	—	—	—	—	BZY91-C12	119-2117●
15	BZY93-C15	119-2124				
—	—	—	—	—	BZY91-C24	119-2119●
47	—	—	—	—	BZY91-C47	119-2121●
75	—	—	—	—	BZY91-C75	119-2123●

211376

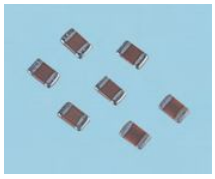
Series	Order Code	Price Each MIXED QUANTITY PRICING 1+	5+	25+
BZY91...	All Values	24.38	16.18	14.56
BZY93...	All Values	8.14	6.36	5.61

Protection Diodes

PolySURG™ TR Series ESD Suppressor

Bi-directional

Bussmann



SMD

- Ideal ESD protection for high frequency, low voltage applications.
- Exceeds testing requirements outlined in IEC 61000-4-2
- Ultra low capacitance (0.15pF maximum)
- Very low leakage current
- Fast response time
- Bi-directional

0603/1608 footprint
L=1.6, W=0.8, D=0.5

Continuous operating Voltage (V)	V_{CLAMP} Typ (V)	V_{CLAMP} Max (V)	Trigger Typ (V)	ESD Threat Voltage capability	List No.	Order Code
24	35	60	125	8-15kV	0603ESDA-TR1	147-0613

497093

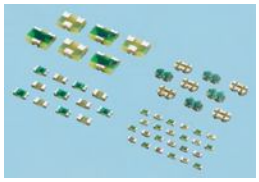
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
0603ESDA-TR1	SMD 147-0613●	0.118	0.113	0.109	– –	– –

Diodes, Bidirectional TVS

Littelfuse

New

SMD



Typical Applications

- HDTV Hardware
- Laptop/Desktop Computers
- Network Hardware
- Computer Peripherals
- Digital Cameras
- External Storage
- Set-Top Boxes

Features

- Ultra-low capacitance
- Low leakage current
- Fast response time
- Bi-directional
- Withstands multiple ESD strikes
- Compatible with pick-and-place processes

ESD Capability

IEC 61000-4-2 Direct Discharge	8kV
IEC 61000-4-2 Air Discharge	15kV
Trigger Voltage*	500 V, typical
Clamping Voltage*	150V, typical
Rated Voltage	24VDC, max
Capacitance**	0.055 pF
Response Time*	< 1ns
Leakage Current***	< 1nA

* Trigger and clamping voltage measured per IEC 61000-4-2, 8kV directdischarge method.
** Capacitance measured at 1MHZ.
*** Leakage current measured at 6VDC.

511810

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
PGB1010603MR	SMD 160-5718●	0.36	0.35	0.34	0.33	0.32
PGB1040805MR	SMD 160-5721●	0.98	0.96	0.92	0.90	0.88

CeraDiodes

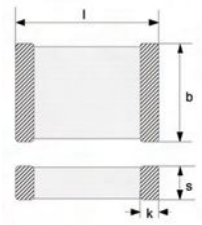
EPCOS

SMD



H=0.9mm, W=1.75mm, D=0.9mm

- Multilayer ceramic oxide construction
- 0603 package, one third of the size of conventional TVS diodes
- Very stable capacitance, largely unaffected by temperature fluctuations and DC bias voltages
- No derating up to maximum operating temperature (85°C)
- ESD Protection to **IEC 61000-4-2**
- Bidirectional operation



Symb.	MIN	MAX	Unit
l	1.45	1.75	mm
b	0.7	0.9	mm
s	0.7	0.9	mm
k	0.1	0.4	mm

	V_{dc} Max DC Working Voltage V	V_{br} Breakdown Voltage Min. V	Clamping Voltage V_{clamp} max. V	Max. Reverse Leakage Current µA	Capacitance pF	Mftrs. List No.
Std CeraDiode						
	9	10	30	10	220	CDS3C09GTA.
High Speed CeraDiode						
	16	150	290	10	3	CDS3C16GTH.
	30	50	120	10	10	CDS3C30GTH.

* Typical V_{br}

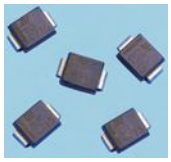
342647

Mftrs. List No.	Order Code	Price Each 1+	5+	10+	25+	50+
CDS3C09GTA.	SMD 530-2382● RL	0.300	0.250	0.177	0.142	0.131
CDS3C16GTH.	SMD 530-2412● RL	0.300	0.250	0.177	0.142	0.131
CDS3C30GTH.	SMD 530-2420● RL	0.290	0.240	0.172	0.138	0.126

Transil™ - 3.3V Equipment Protection

ST

SMD



- Unidirectional Transil Diode
- Peak Pulse Power: 600 W (10/1000 µs)
- Low clampling factor
- Fast response time
- UL recognised

Reverse stand-off voltage	3.3V
Peak pulse power	600W @ 1ms

Undirectional transil diode designed specifically for protecting 3.3V supplied sensitive equipment against transient overvoltages.Transil diodes provide high overvoltage protection by clamping action. Their instantaneous response to transient overvoltages makes them particulary suited to protect voltage sensistive devices such as MOS technology and low voltage supply IC's

204160

Order Multiple=5

Mftrs. List No.	Order Code	Price Each 5+	10+	50+	100+	500+
SMLVT3V3..	SMD 980-2886● RL	0.64	0.48	0.44	0.43	0.42

Reel of 2500

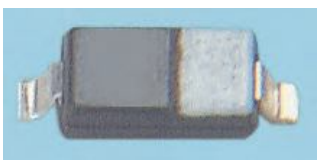
Mftrs. List No.	Order Code	Price Per Reel 1+	3+
SMLVT3V3	NEW SMD 156-2404●	815.75	734.18

PESD Protection Diodes

NXP



SOT-665



SOD323

Lines of Protection Unidirectional	Bidirectional	Standoff Voltage V	V_{br} min. V	Diode Capacitance @ Vr max. pF	P_{pp} W	V_{clamp} max. V	Package	Device Marking	Mftrs. List No.
1	—	3.3	5.2	300	330	5.6	SOD-523	N1	PESD3V3S1UB
1	—	5	6.4	200	260	6.8	SOD-523	N2	PESD5V0S1UB
1	—	5	7	65	500	7.6	SOD-323	AC	PESD5V0L1BA
—	1	3.3	5.8	95	500	6.4	SOD-323	AB	PESD3V3L1BA
—	1	5	5.5	45	130	14	SOD-323	E6	PESD5V0S1BA
—	1	5	6.4	45	130	14	SOD-523	L7	PESD5V0S1BB
—	1	5.2	6.4	—	100	6.8	SOT-339	D5V2S18	PESD5V2S18U
—	1	12	14.2	13	200	15.9	SOD-323	AD	PESD12VL1BA
—	1	12	14.7	75	180	15	SOD-523	N3	PESD12VS1UB
—	1	15	17.1	11	200	18.9	SOD-323	AE	PESD15VL1BA
—	1	15	17.6	70	160	18	SOD-523	N4	PESD15VS1UB
—	1	24	25.4	9	200	27.8	SOD-323	AF	PESD24VL1BA
—	1	24	26.5	50	160	27	SOD-523	N5	PESD24VS1UB
1	1	3.3	5.8	1.5	80	20	SOT-23	AP	PESD3V3U1UT
1	1	5	5.5	3.5	—	—	SOD-323	AA	PESD5V0U1BA
1	1	5	7	1.5	80	21	SOT-23	AQ	PESD5V0U1UT

RL Re-reeling available

Protection Diodes - continued

PESD Protection Diodes - continued

Lines of Protection Unidirectional	Lines of Protection Bidirectional	Standoff Voltage	V_{br} min.	Diode Capacitance @ Vr max.	P_{pp}	V_{clamp} max.	Package	Device Marking	Mftrs. List No.
1	1	12	14.2	1.5	200	39	SOT-23	AR	PESD12VU1UT
2	—	3.3	5.2	300	330	5.6	SOT-23	*U9	PESD3V3S2UT
4	—	3.3	5.32	28	30	5.6	SOT-353	L1*	PESD3V3L4UG
4	3	3.3	5.32	28	30	5.6	SOT-665	A2	PESD3V3L4UW
4	3	3.3	5.3	300	200	12	SSOT-6	K4	PESD3V3S4UD
4	3	5	6.46	19	30	6.8	SOT-665	A1	PESD5V0L4UW
4	3	5	6.4	220	200	13	SSOT-6	K5	PESD5V0S4UD
4	3	5	6.4	15	16	13	SOT-353	V2	PESD5V0V4UG
4	3	24	25.5	70	200	52	SSOT-6	K8	PESD24VS4UD
—	4	5	6.46	19	30	6.8	SOT-353	L2*	PESD5V0L4UG
5	4	3.3	5.3	28	25	5.6	SOT-363	K3*	PESD3V3L5UY
5	4	5	6.4	19	25	6.8	SOT-363	K4*	PESD5V0L5UY
—	7	5	7.2	10	35	7.6	SOT-505	5V07B	PESD5V0L7BAS
5	4	3.3	5.3	28	25	5.6	SOT-666	E1	PESD3V3L5UV
5	4	3.3	5.3	300	200	12	SSOT-6	E1	PESD3V3S5UD
6	—	5	6.4	19	35	6.8	SOT-96	5V0L6US	PESD5V0L6US
—	7	5	7.2	10	35	7.6	SOT-96	5V0L7BS	PESD5V0L7BS
2 CAN	—	24	25.4	17	200	70	SOT-23	AN	PESD1CAN
2 CAN	—	24	26.2	30	230	41	SOT-23	6R	PESD2CAN
2 FLEXRAY	—	24	25.4	17	200	70	SOT-23	ZJ	PESD1FLEX
1 LIN	—	24	25.4	17	160	70	SOD-323	AM	PESD1LIN

Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	3K+	+
PESD12VL1BA	SMD 873-7363● RL	0.290	0.174	0.124	0.093	– –
PESD12VS1UB	SMD 873-7371● RL	0.270	0.159	0.114	0.084	– –
PESD15VL1BA	SMD 873-7410● RL	0.280	0.169	0.120	0.090	– –
PESD15VS1UB	SMD 873-7428● RL	0.260	0.155	0.112	0.082	– –
PESD24VL1BA	SMD 873-7460● RL	0.290	0.174	0.124	0.093	– –
PESD24VS1UB	SMD 873-7479● RL	0.260	0.154	0.111	0.082	– –
PESD3V3L1BA	SMD 873-7517● RL	0.290	0.174	0.124	0.093	– –
PESD3V3L4UG	SMD 873-7525● RL	0.400	0.250	0.173	0.130	– –
PESD3V3L4UW	SMD 873-7533● RL	0.400	0.250	0.173	0.130	– –
PESD3V3L5UV	SMD 873-7541● RL	0.430	0.270	0.184	0.138	– –
PESD3V3L5UY	SMD 873-7550● RL	0.350	0.210	0.147	0.110	– –
PESD3V3S1UB	SMD 873-7568● RL	0.270	0.159	0.114	0.084	– –
PESD3V3S2UT	SMD 873-7592● RL	0.330	0.200	0.145	0.107	– –
PESD5V0L1BA	SMD 873-7606● RL	0.290	0.174	0.124	0.093	– –
PESD5V0L4UG	SMD 873-7614● RL	0.400	0.250	0.173	0.130	– –
PESD5V0L4UW	SMD 873-7622● RL	0.400	0.250	0.173	0.130	– –
PESD5V0L5UY	SMD 873-7649● RL	0.430	0.270	0.184	0.138	– –
PESD5V0L6US	SMD 873-7665● RL	0.630	0.390	0.280	0.200	– –
PESD5V0L7BAS	SMD 873-7673● RL	0.630	0.390	0.280	0.200	– –
PESD5V0L7BS	SMD 873-7681● RL	0.510	0.310	0.220	0.161	– –
PESD5V0S1BA	SMD 873-7690● RL	0.370	0.240	0.162	0.118	– –
PESD5V0S1BB	SMD 873-7703● RL	0.370	0.240	0.162	0.118	– –
PESD5V0S1UB	SMD 873-7711● RL	0.260	0.149	0.107	0.080	– –
PESD5V2S18U	SMD 873-7754● RL	0.630	0.450	0.310	0.270	– –
PESD12VU1UT	SMD 151-0698●	0.200	0.161	0.139	0.118	– –
PESD1CAN	SMD 151-0703●	0.200	0.161	0.139	0.098	– –
PESD1FLEX	SMD 151-0704●	0.151	0.121	0.105	0.093	– –
PESD1LIN	SMD 151-0705●	0.159	0.130	0.111	0.097	– –
PESD24VS4UD	SMD 151-0707●	0.200	0.161	0.139	0.123	– –
PESD2CAN	SMD 151-0712●	0.200	0.161	0.139	0.098	– –
PESD3V3S4UD	SMD 151-0714●	0.200	0.161	0.139	0.123	– –
PESD3V3S5UD	SMD 151-0715●	0.240	0.194	0.166	0.147	– –
PESD3V3U1UT	SMD 151-0716●	0.200	0.161	0.139	0.118	– –
PESD5V0S4UD	SMD 151-0720●	0.200	0.161	0.139	0.123	– –
PESD5V0U1BA	SMD 151-0723●	0.151	0.121	0.105	0.093	– –
PESD5V0U1UT	SMD 151-0724●	0.200	0.161	0.139	0.118	– –
PESD5V0V4UG	SMD 151-0726●	0.240	0.194	0.166	0.147	– –

386596

Reel of 3000 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
PESD12VL1BA,115	NEW SMD 156-2425●	203.70	183.34
PESD5V0S1BA,115	NEW SMD 156-2426●	236.39	212.75

Double ESD Protection Diodes



SOT-663
H=0.6, W=1.7, D=1.3



SOT-23
H=1.12, W=3.05, D=2.3

- Unidirectional double ESD protection diodes in SOT-23 and SOT-663 packages
- Designed to protect up to two transmission or data lines against damage from ESD and other transients

Stand-Off Voltage V_{rm}, V	V_{br} V	V_{clamp} V	Peak Pulse Power W	Device Marking Code	Device Marking Code	Mftrs. List No.	Order Code
Common Cathode							
3.3	5.2 - 6	5.6	330	SOT-23	*7A	PESD3V3S2UAT	873-7576
5	6.4 - 7.2	6.8	260	SOT-23	*7B	PESD5V0S2UAT	873-7738
12	14.7 - 15.3	15	180	SOT-23	*7C	PESD12VS2UAT	873-7380
15	17.6 - 18.4	18	160	SOT-23	*7D	PESD15VS2UAT	873-7436
24	26.5 - 27.5	27	160	SOT-23	*7E	PESD24VS2UAT	873-7487
Common Anode							
3.3	5.2 - 6	5.6	150	SOT-663	E1	PESD3V3S2UQ	873-7584
5	6.4 - 7.2	6.8	150	SOT-663	E2	PESD5V0S2UQ	873-7746
5.2	6.4 - 7.2	9	330	SOT-23	*U1	PESD5V2S2UT	873-7762
12	14.7 - 15.3	15	150	SOT-663	E3	PESD12VS2UQ	873-7398
12	14.7 - 15.3	15	180	SOT-23	*U2	PESD12VS2UT	873-7401
15	17.6 - 18.4	18	160	SOT-23	*U3	PESD15VS2UT	873-7452
24	26.5 - 27.5	27	150	SOT-663	E5	PESD24VS2UQ	873-7495
Common Anode							
24	26.5 - 27.5	27	160	SOT-23	*U4	PESD24VS2UT	873-7509
Bidirectional Double Protection							
3.3	5.8 - 6.9	26	350	SOT-23	V3	PESD3V3L2BT	151-0713
5	7 - 8.2	28	350	SOT-23	V4	PESD5V0L2BT	151-0719
5	5.5 - 9.5	14	130	SOT-23	*G5	PESD5V0S2BT	873-7720
5	5.5 - 9.5	—	—	SOT-23	1U*	PESD5V0U2BT	151-0725
12	14.2 - 16.7	37	200	SOT-23	V5	PESD12VL2BT	151-0695
15	17.1 - 20.3	44	200	SOT-23	V6	PESD15VL2BT	151-0699

386507

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	3K+	+
Common Cathode						
PESD3V3S2UAT	SMD 873-7576● RL	0.340	0.200	0.149	0.110	– –
PESD5V0S2UAT	SMD 873-7738● RL	0.340	0.200	0.149	0.110	– –
PESD12VS2UAT	SMD 873-7380● RL	0.260	0.156	0.112	0.083	– –
PESD15VS2UAT	SMD 873-7436● RL	0.270	0.163	0.119	0.088	– –
PESD24VS2UAT	SMD 873-7487● RL	0.260	0.156	0.112	0.083	– –
Common Anode						
PESD3V3S2UQ	SMD 873-7584● RL	0.340	0.200	0.149	0.110	– –
PESD5V0S2UQ	SMD 873-7746● RL	0.340	0.200	0.149	0.110	– –
PESD5V2S2UT	SMD 873-7762● RL	0.340	0.200	0.149	0.110	– –
PESD12VS2UQ	SMD 873-7398● RL	0.340	0.200	0.149	0.110	– –
PESD12VS2UT	SMD 873-7401● RL	0.340	0.200	0.149	0.110	– –
PESD15VS2UT	SMD 873-7452● RL	0.340	0.200	0.149	0.110	– –
PESD24VS2UQ	SMD 873-7495● RL	0.340	0.200	0.149	0.110	– –
PESD24VS2UT	SMD 873-7509● RL	0.340	0.200	0.149	0.110	– –
Bidirectional						
PESD3V3L2BT	SMD 151-0713●	0.159	0.130	0.111	0.097	– –
PESD5V0L2BT	SMD 151-0719●	0.159	0.130	0.111	0.097	– –
PESD5V0S2BT	SMD 873-7720● RL	0.480	0.300	0.210	0.158	– –
PESD5V0U2BT	SMD 151-0725●	0.151	0.121	0.105	0.093	– –
PESD12VL2BT	SMD 151-0695●	0.159	0.130	0.111	0.097	– –
PESD15VL2BT	SMD 151-0699●	0.159	0.130	0.111	0.097	– –

Double Rail-to-Rail ESD Protection Diodes



SOT-143B

- ESD protection of two high-speed data lines or high frequency signal lines
- Ultra low input/output to ground capacitance, C(I/O-GND)
- IEC 61000-4-2, level 4 (ESD)
- Very low clamping voltage due to an integrated additional ESD protection diode
- Very low leakage current

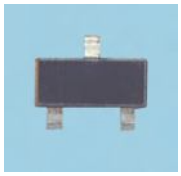
Standoff Voltage V	V_{br} min. V	C(I/O-GND) pF	V_{clamp} max. V	ESD protection max. kV	Package	Device Marking	Mftrs. List No.
5.5	6	1.8	7.5	12	SOT-143B	*AE	PRTR5V0U2AX
5.5	6	1	7.5	8	SOT-143B	*R1	PRTR5V0U2X

496627

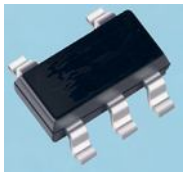
Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	3K+
PRTR5V0U2AX	SMD 152-4156●	0.320	0.240	0.178	0.168
PRTR5V0U2X	SMD 152-4157●	0.320	0.240	0.178	0.168

TVS Arrays for ESD Protection

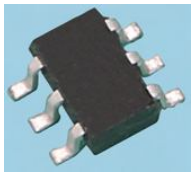
Transil™ Suppression Diodes



SOT-23



SOT-23-5L (SC-59)



SO-8

Dual monolithic voltage suppressors, designed to protect components which are connected to data and transmission lines against ESD.They clamp the voltage just above the logic level supply for positive transients, and to a diode drop below ground for negative transients.It can also work as a bidirectional suppressor by connecting only pin1 and pin 2.

- 2/4/6 x Unidirectional Transil Diodes
- Low leakage current: I_R max less than 20µA (less than 2µA for ESSDA6V1U1)
- High ESD level

$V_{BR\ min}$ V	$V_{BR\ min}$ V	@	I_r mA	P_{PP} W	Package Marking	Package	Mffts. List No.
2 devices							
14.2	15.8		1	300	EL15	SOT-23	ESDA14V2L
6.1	7.2		1	300	EL61	SOT-23	ESDA6V1L
4 devices							
6.1	7.2		1	500	EC61	SOT-23	ESDA6V1SC5
6.1	7.2		1	500	ES61	SOT-23	ESDA6V1SC6
6 devices							
6.1	7.2		1	200	E6VU1	SOIC	ESDA6V1U1

RL Re-reeling available

Farnell

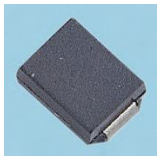
Order Multiple=1			Price Each				
Mftrs. List No.	Order Code		1+	25+	100+	250+	1K+
ESDA14V2L	SMD 980-2240●		0.590	0.420	0.310	0.200	0.197
ESDA6V1L	SMD 980-2258●		0.510	0.360	0.260	0.230	0.220
ESDA6V1SC5	SMD 980-2266●	RL	0.680	0.510	0.360	0.250	0.240
ESDA6V1SC6	SMD 980-2274●	RL	0.660	0.490	0.310	0.240	0.220
ESDA6V1U1	SMD 980-2282●		1.270	0.850	0.700	0.620	0.550

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Reels of 3000		Price Per Reel
Mftrs. List No.	Order Code	1+
ESDA6V1SC5	NEW SMD 156-2427●	763.81
ESDA6V1L	NEW SMD 156-2430●	600.60

400W TVS Diodes

SMAJ Series



- Built-in strain relief
- Low profile package
- Excellent clamping capability
- Glass passivated junction

SMB/DO-214AA

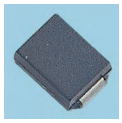
V_{br} Voltage Stand-off V	V_{clamp} max. V	Current Peak Pulse A	Mftrs. List No. Unidirectional	Bidirectional
123	162	1.9	SMAJ100A	SMAJ100CA
12.3	17	23.5	SMAJ10A	SMAJ10CA
135	177	1.7	SMAJ110A	SMAJ110CA
13.5	18.2	22	SMAJ11A	SMAJ11CA
147	193	1.6	SMAJ120A	SMAJ120CA
14.7	19.9	20.1	SMAJ12A	SMAJ12CA
159	209	1.5	SMAJ130A	SMAJ130CA
15.9	21.5	18.6	SMAJ13A	SMAJ13CA
185	243	1.3	SMAJ150A	SMAJ150CA
18.5	24.4	16.4	SMAJ15A	SMAJ15CA
197	259	1.2	SMAJ160A	SMAJ160CA
19.7	26	15.4	SMAJ16A	SMAJ16CA
209	275	1.1	SMAJ170A	SMAJ170CA
22.1	29.2	13.7	SMAJ18A	SMAJ18CA
24.5	32.4	12.3	SMAJ20A	SMAJ20CA
26.9	35.5	11.3	SMAJ22A	SMAJ22CA
29.5	38.9	10.3	SMAJ24A	SMAJ24CA
31.9	42.1	9.5	SMAJ26A	SMAJ26CA
34.4	45.4	8.8	SMAJ28A	SMAJ28CA
36.8	48.4	8.3	SMAJ30A	SMAJ30CA
40.6	53.3	7.5	SMAJ33A	SMAJ33CA
44.2	58.1	6.9	SMAJ36A	SMAJ36CA
49.1	64.5	6.2	SMAJ40A	SMAJ40CA
52.8	69.4	5.8	SMAJ43A	SMAJ43CA
55.3	72.7	5.5	SMAJ45A	SMAJ45CA
58.9	77.4	5.2	SMAJ48A	SMAJ48CA
7	9.2	43.5	SMAJ5.0A	SMAJ5.0CA
62.7	82.4	4.9	SMAJ51A	SMAJ51CA
530 477	760		SMAJ530	
66.3	87.1	4.6	SMAJ54A	SMAJ54CA
550 495	760		SMAJ550	
71.2	93.6	4.3	SMAJ58A	SMAJ58CA
7.37	10.3	38.8	SMAJ6.0A	SMAJ6.0CA
7.98	11.2	35.7	SMAJ6.5A	SMAJ6.5CA
73.7	96.8	4.1	SMAJ60A	SMAJ60CA
78.6	103	3.9	SMAJ64A	SMAJ64CA
8.6	12	33.3	SMAJ7.0A	SMAJ7.0CA
9.21	12.9	31	SMAJ7.5A	SMAJ7.5CA
92.1	121	3.3	SMAJ75A	SMAJ75CA
95.8	126	3.2	SMAJ78A	SMAJ78CA
10.4	14.4	27.8	SMAJ8.5A	SMAJ8.5CA
104	137	2.2	SMAJ85A	SMAJ85CA
11.1	15.4	26	SMAJ9.0A	SMAJ9.0CA

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Order Multiple=5			Price Each				
Mftrs. List No.	Order Code		5+	25+	100+	250+	1K+
400W Unidirectional							
SMAJ100A	SMD 157-8939●		0.134	0.098	0.085	0.073	0.065
SMAJ10A	SMD 157-8941●		0.145	0.106	0.091	0.080	0.070
SMAJ110A	SMD 157-8943●		0.134	0.098	0.085	0.073	0.065
SMAJ11A	SMD 157-8945●		0.134	0.098	0.085	0.073	0.065
SMAJ120A	SMD 157-8948●		0.134	0.098	0.085	0.073	0.065
SMAJ12A	SMD 157-8950●		0.134	0.098	0.085	0.073	0.065
SMAJ130A	SMD 157-8952●		0.134	0.098	0.085	0.073	0.065
SMAJ13A	SMD 157-8954●		0.134	0.098	0.085	0.073	0.065
SMAJ150A	SMD 157-8956●		0.134	0.098	0.085	0.073	0.065
SMAJ15A	SMD 157-8958●		0.134	0.098	0.085	0.073	0.065
SMAJ160A	SMD 157-8962●		0.134	0.098	0.085	0.073	0.065
SMAJ16A	SMD 157-8964●		0.134	0.098	0.085	0.073	0.065
SMAJ170A	SMD 157-8966●		0.134	0.098	0.085	0.073	0.065
SMAJ18A	SMD 157-8968●		0.134	0.098	0.085	0.073	0.065
SMAJ20A	SMD 157-8970●		0.134	0.098	0.085	0.073	0.065
SMAJ22A	SMD 157-8973●		0.134	0.098	0.085	0.073	0.065
SMAJ24A	SMD 157-8975●		0.134	0.098	0.085	0.073	0.065
SMAJ26A	SMD 157-8977●		0.134	0.098	0.085	0.073	0.065
SMAJ28A	SMD 157-8979●		0.134	0.098	0.085	0.073	0.065
SMAJ30A	SMD 157-8981●		0.134	0.098	0.085	0.073	0.065
SMAJ33A	SMD 157-8983●		0.134	0.098	0.085	0.073	0.065
SMAJ36A	SMD 157-8986●		0.134	0.098	0.085	0.073	0.065
SMAJ40A	SMD 157-8988●		0.134	0.098	0.085	0.073	0.065
SMAJ43A	SMD 157-8990●		0.134	0.098	0.085	0.073	0.065
SMAJ45A	SMD 157-8992●		0.134	0.098	0.085	0.073	0.065

Order Multiple=5			Price Each				
Mftrs. List No.	Order Code		5+	25+	100+	250+	1K+
400W Unidirectional							
SMAJ48A	SMD 157-8994●		0.134	0.098	0.085	0.073	0.065
SMAJ5.0A	SMD 157-8997●		0.148	0.108	0.093	0.082	0.071
SMAJ51A	SMD 157-8999●		0.134	0.098	0.085	0.073	0.065
SMAJ530	SMD 157-9001●		0.198	0.145	0.124	0.109	0.097
SMAJ54A	SMD 157-9002●		0.134	0.098	0.085	0.073	0.065
SMAJ550	SMD 157-9004●		0.198	0.145	0.124	0.109	0.097
SMAJ58A	SMD 157-9005●		0.134	0.098	0.085	0.073	0.065
SMAJ6.0A	SMD 157-9007●		0.148	0.108	0.093	0.082	0.071
SMAJ6.5A	SMD 157-9011●		0.148	0.108	0.093	0.082	0.071
SMAJ60A	SMD 157-9013●		0.134	0.098	0.085	0.073	0.065
SMAJ64A	SMD 157-9015●		0.134	0.098	0.085	0.073	0.065
SMAJ7.0A	SMD 157-9017●		0.148	0.108	0.093	0.082	0.071
SMAJ7.5A	SMD 157-9019●		0.148	0.108	0.093	0.082	0.071
SMAJ75A	SMD 157-9021●		0.134	0.098	0.085	0.073	0.065
SMAJ78A	SMD 157-9024●		0.134	0.098	0.085	0.073	0.065
SMAJ8.5A	SMD 157-9026●		0.148	0.108	0.093	0.082	0.071
SMAJ85A	SMD 157-9028●		0.134	0.098	0.085	0.073	0.065
SMAJ9.0A	SMD 157-9030●		0.148	0.108	0.093	0.082	0.071
400W Bidirectional							
SMAJ100CA	SMD 157-8940●		0.153	0.112	0.096	0.085	0.074
SMAJ10CA	SMD 157-8942●		0.250	0.180	0.154	0.135	0.119
SMAJ110CA	SMD 157-8944●		0.153	0.112	0.096	0.085	0.074
SMAJ11CA	SMD 157-8946●		0.153	0.112	0.096	0.085	0.074
SMAJ120CA	SMD 157-8949●		0.153	0.112	0.096	0.085	0.074
SMAJ12CA	SMD 157-8951●		0.153	0.112	0.096	0.085	0.074
SMAJ130CA	SMD 157-8953●		0.153	0.112	0.096	0.085	0.074
SMAJ13CA	SMD 157-8955●		0.153	0.112	0.096	0.085	0.074
SMAJ150CA	SMD 157-8957●		0.153	0.112	0.096	0.085	0.074
SMAJ15CA	SMD 157-8961●		0.153	0.112	0.096	0.085	0.074
SMAJ160CA	SMD 157-8963●		0.153	0.112	0.096	0.085	0.074
SMAJ16CA	SMD 157-8965●		0.153	0.112	0.096	0.085	0.074
SMAJ170CA	SMD 157-8967●		0.153	0.112	0.096	0.085	0.074
SMAJ18CA	SMD 157-8969●		0.153	0.112	0.096	0.085	0.074
SMAJ20CA	SMD 157-8971●		0.153	0.112	0.096	0.085	0.074
SMAJ22CA	SMD 157-8974●		0.153	0.112	0.096	0.085	0.074
SMAJ24CA	SMD 157-8976●		0.153	0.112	0.096	0.085	0.074
SMAJ26CA	SMD 157-8978●		0.153	0.112	0.096	0.085	0.074
SMAJ28CA	SMD 157-8980●		0.153	0.112	0.096	0.085	0.074
SMAJ30CA	SMD 157-8982●		0.153	0.112	0.096	0.085	0.074
SMAJ33CA	SMD 157-8985●		0.153	0.112	0.096	0.085	0.074
SMAJ36CA	SMD 157-8987●		0.153	0.112	0.096	0.085	0.074
SMAJ40CA	SMD 157-8989●		0.153	0.112	0.096	0.085	0.074
SMAJ43CA	SMD 157-8991●		0.153	0.112	0.096	0.085	0.074
SMAJ45CA	SMD 157-8993●		0.153	0.112	0.096	0.085	0.074
SMAJ48CA	SMD 157-8995●		0.153	0.112	0.096	0.085	0.074
SMAJ5.0CA	SMD 157-8998●		0.250	0.180	0.154	0.135	0.119
SMAJ51CA	SMD 157-9000●		0.153	0.112	0.096	0.085	0.074
SMAJ54CA	SMD 157-9003●		0.153	0.112	0.096	0.085	0.074
SMAJ58CA	SMD 157-9006●		0.153	0.112	0.096	0.085	0.074
SMAJ6.0CA	SMD 157-9008●		0.250	0.180	0.154	0.135	0.119
SMAJ6.5CA	SMD 157-9012●		0.250	0.180	0.154	0.135	0.119
SMAJ60CA	SMD 157-9014●		0.153	0.112	0.096	0.085	0.074
SMAJ64CA	SMD 157-9016●		0.153	0.112	0.096	0.085	0.074
SMAJ7.0CA	SMD 157-9018●		0.250	0.180	0.154	0.135	0.119
SMAJ7.5CA	SMD 157-9020●		0.250	0.180	0.154	0.135	0.119
SMAJ75CA	SMD 157-9023●		0.153	0.112	0.096	0.085	0.074
SMAJ78CA	SMD 157-9025●		0.153	0.112	0.096	0.085	0.074
SMAJ8.5CA	SMD 157-9027●		0.250	0.180	0.154	0.135	0.119
SMAJ85CA	SMD 157-9029●		0.153	0.112	0.096	0.085	0.074
SMAJ9.0CA	SMD 157-9031●		0.250	0.180	0.154	0.135	0.119

400W Transil™ Suppression Diodes



- 400W - 1500W Peak Pulse Power capability
- Low clamping factor
- Low incremental surge resistance
- Fast response time

SMA H = 2.9, W = 2.9, D = 5.6
SMB H = 2.45, W = 5.6, D = 3.95
SMC H = 2.45, W = 8.15, D = 6.25

Max Reverse Leakage Current µA	V_{br} min. @ V_{rm}	V	I_r @ mA	P_{pp} W	V_{clamp} max. V	I_{fsm} A	Package Marking	Mftrs. List No. Unidirectional (d.c.)	Bidirectional (a.c.)
SMA Package, 400W									
800	5	6.4	10	400	13.4	40	AE/AA	SMAJ5.0A	SMAJ5.0CA
5	12	13.3	1	400	19.9	40	DUK/DBK	SMAJ12A	SMAJ12CA
1	15	16.7	1	400	24.4	40	BM/AJ	SMAJ15A	SMAJ15CA
1	28	31.1	1	400	45.4	40	CG/CH	SMAJ28A	SMAJ28CA
1	30	33.3	1	400	48.4	40	CK/CL	SMAJ30A	SMAJ30CA
1	33	36.7	1	400	53.3	40	CM/CN	SMAJ33A	SMAJ33CA
1	58	64.4	1	400	93.6	40	EUF	SMAJ58A-TR	—

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Order Multiple=5			Price Each				
Mftrs. List No.	Order Code		5+	25+	100+	250+	1K+
400W Unidirectional							
SMAJ5.0A	SMD 980-2851●	RL	0.540	0.340	0.220	0.191	0.132
SMAJ12A	SMD 980-2754●	RL	0.500	0.260	0.165	0.139	0.138
SMAJ15A	SMD 980-2770●	RL	0.700	0.350	0.230	0.195	0.194
SMAJ28A	SMD 980-2797●	RL	0.790	0.380	0.290	0.158	0.155
SMAJ30A	SMD 980-2819●	RL	0.370	0.220	0.184	0.137	0.128
SMAJ33A	SMD 980-2835●	RL	0.370	0.230	0.183	0.145	0.128
SMAJ58A-TR	SMD 137-3661●		0.230	0.180	0.151	0.127	0.116

RL Re-reeling available

Protection Diodes - continued

400W Transil™ Suppression Diodes - continued

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	250+	1K+
400W Bidirectional						
SMAJ5.0CA	SMD 980-2860● RL	0.430	0.260	0.200	0.158	0.137
SMAJ12CA	SMD 980-2762● RL	0.620	0.430	0.310	0.270	0.196
SMAJ15CA	SMD 980-2789● RL	0.390	0.280	0.200	0.151	0.119
SMAJ28CA	SMD 980-2800● RL	0.530	0.380	0.290	0.220	0.168
SMAJ30CA	SMD 980-2827● RL	0.490	0.310	0.240	0.177	0.158
SMAJ33CA	SMD 980-2843● RL	0.500	0.310	0.240	0.210	0.181

Reels of 5000 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
SMAJ12CA-TR	NEW SMD 156-2413●	645.81	581.23
SMAJ15CA-TR	NEW SMD 156-2414●	633.16	569.84
SMAJ5.0A-TR	NEW SMD 156-2415●	506.53	– –
SMAJ5.0CA-TR	NEW SMD 156-2416●	621.10	558.99

600W Transil™ Suppression Diodes



- 600W Peak Pulse Power capability
- Low clamping factor
- Low incremental surge resistance
- Fast response time

SMB H = 2.45, W = 5.6, D = 3.95

Max Reverse Leakage Current µA @ V_{rm}	V_{br} min. V	@ I_r mA	P_{pp} W	V_{clamp} max. V	I_{fsm} A	Package Marking	Mftrs. List No. Unidirectional (d.c.)	Bidirectional (a.c.)
SMB Package, 600W								
1000 5.8	6.45	10	600	13.4	100	DE/LE	SM6T6V8A	SM6T6V8CA
500 6.4	7.13	10	600	14.5	100	-/LG	—	SM6T7V5CA
1 12.8	14.3	1	600	27.2	100	-/LX	—	SM6T15CA
1 15.3	17.1	1	600	32.5	100	EE/ME	SM6T18A	SM6T18CA
1 23.1	25.7	1	600	48.3	100	EP/-	SM6T27A	—
1 25.6	28.5	1	600	53.5	100	ER/-	SM6T30A	—
1 28.2	31.4	1	600	59	100	ET/MT	SM6T33A	SM6T33CA
1 30.8	34.2	1	600	64.3	100	-/MV	—	SM6T36CA
1 33.3	37.1	1	600	69.7	100	EX/MX	SM6T39A	SM6T39CA

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	250+	1K+
600W Unidirectional						
SM6T6V8A	SMD 980-2720● RL	0.460	0.350	0.260	0.179	0.167
SM6T18A	SMD 980-2630● RL	0.460	0.350	0.260	0.179	0.167
SM6T27A	SMD 980-2657● RL	0.460	0.350	0.260	0.179	0.167
SM6T30A	SMD 980-2665● RL	0.380	0.290	0.200	0.147	0.140
SM6T33A	SMD 980-2673● RL	0.460	0.350	0.260	0.179	0.167
SM6T39A	SMD 980-2703● RL	0.460	0.350	0.260	0.179	0.167
600W Bidirectional						
SM6T6V8CA	SMD 980-2738● RL	0.440	0.280	0.189	0.175	0.133
SM6T7V5CA	SMD 980-2746● RL	0.280	0.200	0.157	0.120	0.103
SM6T15CA	SMD 980-2622● RL	0.440	0.310	0.210	0.175	0.133
SM6T18CA	SMD 980-2649● RL	0.440	0.310	0.210	0.175	0.133
SM6T33CA	SMD 980-2681● RL	0.430	0.320	0.250	0.163	0.156
SM6T36CA	SMD 980-2690● RL	0.440	0.330	0.260	0.167	0.160
SM6T39CA	SMD 980-2711● RL	0.510	0.380	0.300	0.195	0.188

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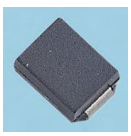
Reels of 2500 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
SM6T18CA	NEW SMD 156-2417●	336.49	302.85
SM6T33A	NEW SMD 156-2418●	303.19	272.87
SM6T6V8A	NEW SMD 156-2419●	303.19	272.87
SM6T6V8CA	NEW SMD 156-2420●	336.49	302.85

Unidirectional Zener TVS

ON Semiconductor



41A: L=9.5, Dia=5.3



SMB

- Working Peak Reverse Voltage Range: -5V to -100V
- Peak Power -1500W @ 1ms (Mosorb)
- Low leakage <5µA above 10V
- Response time is typically <1ns

V(BR) Typ, (V) Mosorb	P_{PK} Max, (W)	V_{RWM} Max (V)	I_{RMax} (uA)	Voltage Max. (V)	Package	List No.	Order Code
6.2	1500	5	300	8.5	41A	1N5908G	1458994
6.3	1500	5	300	9.4	41A	1N6373G	1459008
6.8	1500	5.8	1000	10.5	41A	1N6267AG	1458996
15	1500	12.8	5	21.2	41A	1N6275AG	1458997
16	1500	13.6	5	22.5	41A	1N6276AG	1458998
18	1500	15.3	5	25.2	41A	1N6277AG	1458999
30	1500	25.6	5	41.4	41A	1N6282AG	1459000
33	1500	28.2	5	45.7	41A	1N6283AG	1459002
36	1500	30.8	5	49.9	41A	1N6284AG	1459003
42.4 (min)	1500	36	2	65.2	41A	1N6380G	1459009
100	1500	85.5	5	137	41A	1N6295AG	1459005
Mini-Mosorb (SA5.0AG Series)							
6.7	500	5	600	9.2	59A	SA5.0AG	1459172
1SMBxxxAT3 Series							
6.7	600	5	800	9.2	SMB	1SMB5.0AT3G	1459013
14	600	12	5	19.9	SMB	1SMB12AT3G	1459012
P6SMB15AT3G Series							
6.8	600	5.8	1000	10.5	SMB	P6SMB6.8AT3G	1459166
15	600	12.8	5	21.2	SMB	P6SMB15AT3G	1459162
36	600	30.8	5	49.9	SMB	P6SMB36AT3G	1459164
39	600	33.3	5	53.9	SMB	P6SMB39AT3G	1459165

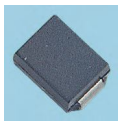
Designed to protect voltage sensitive components from high voltage, high-energy transients. They have excellent clamping capability, high surge capability, low zener impedance and fast response time. **Mosorb** devices are ON Semiconductor's exclusive, cost-effective, highly reliable Surmetic axial leaded package and are ideally-suited for use in communication systems, numerical controls, process controls, medical equipment, business machines, power supplies and many other industrial/consumer applications, to protect CMOS, MOS and Bipolar integrated circuits.

497066

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
1N5908G	145-8994●	0.340	0.300	0.290	– –	– –
1N6267AG	145-8996●	0.350	0.300	0.290	– –	– –
1N6275AG	145-8997●	0.510	0.450	0.320	– –	– –
1N6276AG	145-8998●	0.550	0.450	0.320	– –	– –
1N6277AG	145-8999●	0.510	0.450	0.320	– –	– –
1N6282AG	145-9000●	0.340	0.300	0.290	– –	– –
1N6283AG	145-9002●	0.510	0.450	0.320	– –	– –
1N6284AG	145-9003●	0.510	0.450	0.320	– –	– –
1N6295AG	145-9005●	1.070	0.860	0.640	– –	– –
1N6373G	145-9008●	0.340	0.300	0.290	– –	– –
1N6380G	145-9009●	0.410	0.370	0.320	– –	– –
1SMB12AT3G	SMD 145-9012●	0.220	0.190	0.138	– –	– –
1SMB5.0AT3G	SMD 145-9013●	0.220	0.182	0.138	– –	– –
P6SMB15AT3G	SMD 145-9162●	0.156	0.130	0.122	– –	– –
P6SMB18CAT3G	SMD 145-9163●	0.156	0.139	0.130	– –	– –
P6SMB36AT3G	SMD 145-9164●	0.152	0.133	0.126	– –	– –
P6SMB39AT3G	SMD 145-9165●	0.162	0.144	0.132	– –	– –
P6SMB6.8AT3G	SMD 145-9166●	0.149	0.131	0.123	– –	– –
SA5.0AG	145-9172●	0.169	0.149	0.140	– –	– –

1500W Transil™ Suppression Diodes

SMC (DO-214AB)



- 400W - 1500W Peak Pulse Power capability
- Low clamping factor
- Low incremental surge resistance
- Fast response time

SMC H = 2.45, W = 8.15, D = 6.25

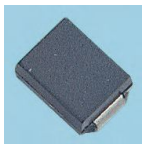
Max Reverse Leakage Current µA @ V_{rm}	V_{br} min. V	@ I_r mA	P_{pp} W	V_{clamp} max. V	I_{fsm} A	Package Marking	Mftrs. List No. Unidirectional (d.c.)	Bidirectional (a.c.)
SMC Package, 1500W								
1000 5.8	6.45	10	1500	13.4	200	MDE/BDE	SM15T6V8A	SM15T6V8CA
10 8.55	9.5	1	1500	18.6	200	MDP/-	SM15T10A	—
5 20.5	22.8	1	1500	42.8	200	MEM/-	SM15T24A	—
5 28.2	31.4	1	1500	59	200	MET/-	SM15T33A	—
5 30.8	34.2	1	1500	64.3	200	-/BEV	—	SM15T36CA
5 33.3	37.1	1	1500	69.7	200	MEX/-	SM15T39A	—
5 85.5	95	1	1500	178	200	-/BFX	—	SM15T100CA

429894

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
1500W Unidirectional						
SM15T24A	SMD 980-2576● RL	0.68	0.49	0.37	0.32	0.26
SM15T33A	SMD 980-2584● RL	0.59	0.44	0.33	0.28	0.24
SM15T39A	SMD 980-2606● RL	0.86	0.60	0.43	0.37	0.29
SM15T10A	SMD 988-5609● RL	0.70	0.52	0.38	0.30	0.29
SM15T6V8A	SMD 988-5820● RL	0.70	0.52	0.38	0.30	0.29
1500W Bidirectional						
SM15T6V8CA	SMD 980-2614● RL	0.78	0.58	0.43	0.34	0.31
SM15T36CA	SMD 980-2592● RL	0.73	0.54	0.41	0.34	0.29
SM15T100CA	SMD 980-2568● RL	0.82	0.60	0.46	0.38	0.31

T1/E1 Telecommunication Ethernet Protection

Transil™ Suppression Diodes



SMB H = 2.45, W = 5.6, D = 3.95

A very low voltage transient surge arrestor especially designed to protect sensitive telecommunication equipment against lightning strikes and other transients. Its low voltage especially makes it suitable to protect low voltage transformer in T1/E1, ethernet links without satuaration of the transformer.Transil diodes are not subject to ageing and provide a fail safe mode in short circuit for a better protection.

- Bidirectional crowbar protection
- Voltage: 8V
- Low leakage current I_R = 2 µA max
- Repetative peak pulse current: I_{PP} = 75A (10/1000 µs)

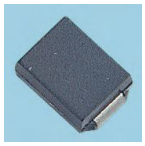
RL Re-reeling available

V_{rm}	@	I_r mA	I_{TSM} @ 50 Hz, (A)	Package Marking	Mffts. List No.
6		2	35	L08	SMP75-8

429897

Order Multiple=1			Price Each			
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
SMP75-8	SMD 980-2894● RL	1.10	0.84	0.61	0.52	0.44

Trisil™ Voltage Suppression Diodes



- Bi-directional crowbar protection
- No ageing, and no noise
- Holding current = 150mA min. (SMP/SMPTA series)
- Small footprint

SMB H=2.45, W=5.6, D=3.95

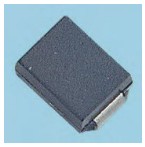
Max. Reverse Leakage Current µA	@	V_{rm} V	V_{br} max. V	@	I_r mA	I_H mA	I_{TSM} @50Hz A	Package Marking	Mftrs. List No.
SMB Package, I_{pp}=100A (8/20µs), P_{pp}=5W.									
2		56	82		800	150	30	U01	SMTPA62
2		90	133		800	150	30	U13	SMTPA100
2		108	160		800	150	30	U17	SMTPA120
2		117	173		800	150	30	U19	SMTPA130
2		198	293		800	150	30	U31	SMTPA220
2		243	360		800	150	30	U39	SMTPA270

413130

		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
SMB Package, I_{pp}=100A (8/20µs), P_{pp}=5W.						
SMTPA62	SMD 980-2959● RL	0.87	0.67	0.58	0.50	0.41
SMTPA100	SMD 980-2908● RL	0.87	0.67	0.59	0.53	0.49
SMTPA120	SMD 980-2916● RL	0.62	0.48	0.41	0.37	0.36
SMTPA130	SMD 980-2924● RL	0.75	0.57	0.51	0.46	0.42
SMTPA220	SMD 980-2932● RL	0.87	0.67	0.59	0.53	0.49
SMTPA270	SMD 980-2940● RL	0.85	0.63	0.43	0.42	0.41

Telecommunication Equipment Protection

Transil™ Suppression Diodes



SMB H = 2.45, W = 5.6, D = 3.95

General purpose TVS, offering superior equipment protection against lightning strikes and power cross-ings.Typical application equipment includes analogue and digital line cards (xDSL, T1/E1, ISDN), terminals (phone, fax modem) and central office equipment.Transil diodes are not subject to ageing and provide a fail safe mode in short circuit for a better protection.

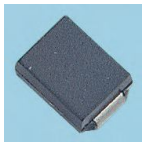
- Bidirectional crowbar protection
- Low capacitance (30pf to 45pf typ @ 50V)
- Low leakage current I_H = 150 mA min
- Repetative peak pulse current: I_{PP} = 100A (10/1000 µs)

Max Reverse Leakage Current µA	@	V_{rm}	@	I_r mA	I_{fsm} kA	Package Marking	Mffts. List No.
SMA Package, 400W							
2		8		2	100	PL8	SMP100LC-8
2		25		2	100	L25	SMP100LC-25
2		35		50	100	L35	SMP100LC-35
2		140		2	100	L14	SMP100LC-140
2		160		2	100	L16	SMP100LC-160
2		200		2	100	L20	SMP100LC-200
2		230		2	100	L23	SMP100LC-230
2		270		2	100	L27	SMP100LC-270

429895

Order Multiple=5			Price Each			
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
SMP100LC-8	SMD 990-7238● RL	1.18	0.92	0.67	0.56	0.43
SMP100LC-25	SMD 990-7203● RL	0.84	0.54	0.43	0.37	0.32
SMP100LC-35	SMD 990-7211● RL	0.76	0.58	0.43	0.36	0.31
SMP100LC-140	SMD 988-6494● RL	0.97	0.70	0.50	0.43	0.36
SMP100LC-160	SMD 988-6508● RL	0.91	0.72	0.58	0.48	0.41
SMP100LC-200	SMD 990-7181● RL	0.97	0.70	0.50	0.43	0.36
SMP100LC-230	SMD 990-7190● RL	0.96	0.64	0.52	0.49	0.42
SMP100LC-270	SMD 117-5641●	0.96	0.64	0.53	0.51	0.50

Trisil™ Voltage Suppression Diodes



- Bi-directional crowbar protection
- No ageing, and no noise
- Holding current = 150mA min. (SMP/SMPTA series)
- Small footprint
- Low capacitance; SMP100**LC**-*** series

SMB H=2.45, W=5.6, D=3.95
SMC H=2.45, W=8.15, D=6.25

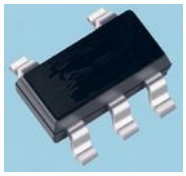
Max. Reverse Leakage Current µA	@	V_{rm} V	V_{br} max. V	@	I_r mA	I_H mA	I_{TSM} @50Hz A	Package Marking	Mftrs. List No.
SMB Package, I_{pp}=100A (8/20µs), P_{pp}=5W.									
2		56	82		800	150	30	U01	SMTPA62
2		90	133		800	150	30	U13	SMTPA100
2		108	160		800	150	30	U17	SMTPA120
2		117	173		800	150	30	U19	SMTPA130
2		198	293		800	150	30	U31	SMTPA220
2		243	360		800	150	30	U39	SMTPA270
SMB Package, I_{pp}=250A (8/20µs)									
2		6	15		800	50	35	L08	SMP75-8
2		8	25		800	50	24	PL8	SMP100LC-8
2		25	40		800	150	24	L25	SMP100LC-25
2		120	155		800	150	24	L12	SMP100LC-120
2		140	185		800	150	24	L14	SMP100LC-140
2		160	205		800	150	24	L16	SMP100LC-160
2		200	255		800	150	24	L20	SMP100LC-200
2		230	295		800	150	24	L23	SMP100LC-230
2		270	345		800	150	24	L27	SMP100LC-270
2		320	400		800	150	24	L32	SMP100MC-320
2		400	540		800	150	24	L40	SMP100MC-400
50		35	55		800	150	24	L35	SMP100LC-35

234879

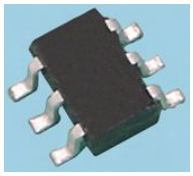
		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
SMB Package, I_{pp}=100A (8/20µs), P_{pp}=5W.						
SMTPA62	SMD 980-2959● RL	0.87	0.67	0.58	0.50	0.41
SMTPA100	SMD 980-2908● RL	0.87	0.67	0.59	0.53	0.49
SMTPA120	SMD 980-2916● RL	0.62	0.48	0.41	0.37	0.36
SMTPA130	SMD 980-2924● RL	0.75	0.57	0.51	0.46	0.42
SMTPA220	SMD 980-2932● RL	0.87	0.67	0.59	0.53	0.49
SMTPA270	SMD 980-2940● RL	0.85	0.63	0.43	0.42	0.41
SMB Package, I_{pp}=250A (8/20µs)						
SMP75-8	SMD 980-2894● RL	1.10	0.84	0.61	0.52	0.44
SMP100LC-8	SMD 990-7238● RL	1.18	0.92	0.67	0.56	0.43
SMP100LC-25	SMD 990-7203● RL	0.84	0.54	0.43	0.37	0.32
SMP100LC-35	SMD 990-7211● RL	0.76	0.58	0.43	0.36	0.31
SMP100LC-120	SMD 988-6486● RL	0.66	0.46	0.34	0.29	0.26
SMP100LC-140	SMD 988-6494● RL	0.97	0.70	0.50	0.43	0.36
SMP100LC-160	SMD 988-6508● RL	0.91	0.72	0.58	0.48	0.41
SMP100LC-200	SMD 990-7181● RL	0.97	0.70	0.50	0.43	0.36
SMP100LC-230	SMD 990-7190● RL	0.96	0.64	0.52	0.49	0.42
SMP100LC-270	SMD 117-5641●	0.96	0.64	0.53	0.51	0.50
SMP100MC-320	SMD 129-5222● RL	0.86	0.65	0.53	– –	– –
SMP100MC-400	SMD 129-5224● RL	0.80	0.53	0.44	– –	– –

TVS Array

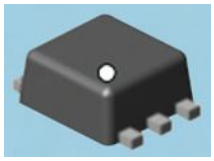
New



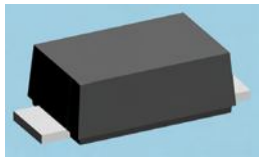
RSA6.1ENTR



RSA6.1U5T108



RSB12JS2T2R



RSB6.8GT2R
RSB6.8STE61

RSA6.1ENTR Features:
- Small mold type. (UMD5)
- High reliability.

RSA6.1U5T108 Features:
- Small mold type. (SMD6)
- High reliability.

RSB12JS2T2R Features:
- Ultra small mold type. (EMD6)
- Low capacitance
- Bi direction

RSB6.8GT2R Features:
- Ultra small mold type. (VMD2)
- High reliability.
- Bi chip-mounter, automatic mounting is possible.

RSB6.8STE61 Features:
- Ultra small mold type. (EMD2)
- Bi direction high reliability.
- Bi chip-mounter, automatic mounting is possible.

Voltage, Vbr V	Voltage, Stand-off V	Capacitance, Cd Typ @ Vr pF	Power, Peak Pulse	Case Style	Mftrs. List No.
6.1	6.1	90	200 W	SOT-353	RSA6.1ENTR
6.1	6.1	200	200 mW	SOT-457	RSA6.1U5T108
12	12	1	150 mW	SC-75A	RSB12JS2T2R
6.8	6.8	15	10 W	VMD2	RSB6.8GT2R
6.8	6.8	30	10 W	SOD-523	RSB6.8STE61

RL Re-reeling available

Protection Diodes - continued

TVS Array - continued

528115

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
RSA6.1ENTR	SMD 168-0059●	0.400	0.220	0.151	0.116	0.093
RSA6.1U5T108	SMD 168-0060●	0.370	0.210	0.151	0.116	0.093
RSB12JS2T2R	SMD 168-0061●	0.380	0.260	0.186	0.128	0.105
RSB6.8GT2R	SMD 168-0062●	0.370	0.210	0.151	0.116	0.093
RSB6.8STE61	SMD 168-0063●	0.400	0.220	0.151	0.116	0.093

Quad ESD Transient Voltage Suppressors



SOT-457



SOT-665

- Monolithic transient voltage suppressors for 4-bit wide ESD transient suppression
- Four unidirectional lines, three bidirectional

Leakage Current I_{rm}	Stand-Off Voltage V_{rm}, V	Peak Pulse Current A	Device Marking Code	Package	Mftrs. List No.	Order Code
SOT-457						
2	3	3	Z6	SOT-457	BZA456A	873-5069
0.7	4	2.66	Z2	SOT-457	BZA462A	873-5077
0.1	15	0.7	Z0	SOT-457	BZA420A	873-5050
SOT-353						
2	3	3.75	Z1%	SOT-353	BZA856A	873-5093
0.7	4	2.9	Z2%	SOT-353	BZA862A	873-5123
0.2	4.3	2.6	Z3%	SOT-353	BZA868A	873-5158
0.1	15	3.75	Z4%	SOT-353	BZA820A	873-5085
0.2	3	3.75	R3%	SOT-353	BZA856AVL	873-5115
SOT-665						
1	3	2.2	Z1	SOT-665	BZA956A	873-5182
0.1	4	2.1	V2	SOT-665	BZA962AVL	873-5212
SOT-457 - Bidirectional						
0.1	5	2	Z8	SOT-457	BZA408B	873-5042

387032

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	3K+
BZA408B	SMD 873-5042● RL	0.550	0.340	0.250	0.174
BZA420A	SMD 873-5050● RL	0.280	0.173	0.121	0.090
BZA456A	SMD 873-5069● RL	0.370	0.240	0.162	0.118
BZA462A	SMD 873-5077● RL	0.360	0.220	0.157	0.115
BZA820A	SMD 873-5085● RL	0.370	0.240	0.162	0.118
BZA856A	SMD 873-5093● RL	0.370	0.240	0.162	0.118
BZA856AVL	SMD 873-5115● RL	0.300	0.188	0.130	0.095
BZA862A	SMD 873-5123● RL	0.360	0.220	0.157	0.115
BZA868A	SMD 873-5158● RL	0.360	0.220	0.157	0.115
BZA956A	SMD 873-5182● RL	0.370	0.240	0.162	0.118
BZA962AVL	SMD 873-5212● RL	0.370	0.240	0.162	0.118

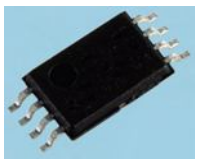
Diode Array, Unidirectional TVS



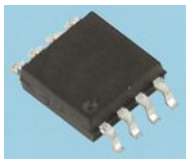
SOT-23



SC70



TSSOP



MSOP

New

Mftrs. List No.	Case Style	Order Code	No. Channels
SP0502BAHTG	SOT-23	160-5734	2
SP0502BAJTG	SC70	160-5735	4
SP0504BAATG	TSSOP	160-5736	4
SP0504BAHTG	SOT-23	160-5737	4
SP0504BAJTG	SC70	160-5738	5
SP0505BAHTG	SOT-23	160-5739	5
SP0505BAJTG	SC70	160-5740	6
SP0506BAATG	MSOP	160-5741	6

511765

Order Code	Price Each 1+	25+	100+	250+	500+
SMD 160-5734●	0.28	0.27	0.26	0.25	0.24
SMD 160-5735●	0.30	0.29	0.28	0.27	0.26
SMD 160-5736●	0.71	0.69	0.66	0.65	0.63
SMD 160-5737●	0.47	0.46	0.45	0.44	0.43
SMD 160-5738●	0.41	0.39	0.38	0.37	0.36
SMD 160-5739●	0.51	0.50	0.49	0.47	0.46
SMD 160-5740●	0.45	0.44	0.43	0.42	0.41
SMD 160-5741●	0.61	0.59	0.58	0.56	0.55

ISDN Line and Microcontroller Protection



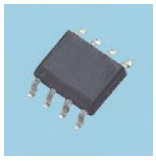
- Array of 8 or 12 diodes configured by cells of 2 diodes, each cell being used to protect signal line form transient overvoltages by clamping action.
- Low input capacitance
- Suitable for digital line protection
- Complies with **IEC-1000-4-2 level 4**

Vpp kV	V_{RRM} Max. V	Ipp 8/12µs A	Ppk mW	Vf V	Irm max. µA	Mftrs. List No.
9	18	12	730	1.2	2	DA108S1
12	18	12	730	1.2	2	DA112S1

228772

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
DA108S1	SMD 980-2215●	1.18	0.99	0.73	0.60	0.58
DA112S1	SMD 980-2223●	1.03	0.87	0.75	0.64	0.62

Tripolar Protection for ISDN Interfaces



SO-8

- Bidirectional triple crowbar protection
- Complies with: **CCIT K17-K20, VDE 0433 & VDE 0870 CNET**

I_{rm} @ µA	V_{rm} V	V_{br} Min. V	@	I_r max. mA	I_{tsm} @ f=50Hz A	V_{bo} max. V	I_{bo} max. mA	I_{pp} 2/10µs A	Mftrs. List No.
10	70	80		1	8	120	800	90	TPI8011NRL

229539

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
TPI8011NRL	SMD 117-5678●	2.23	1.68	1.24	1.14	1.07

USB Port Protection



- Full diode bridge with in-built suppression
- V_{br}=6V min.
- Peak pulse power dissipation=500W
- Low capacitance
- Complies with USB 1.0 and USB 2.0 requirements (USB 2.0 version backwards compatable with USB 1.0 spec)

V_{br} min. V	Protection	I_R µA	I_{pp} A	V_{pp} kV	P_{pk} W	Package	Mftrs. List No.
USB 1.0 Compatable							
6	2 lines	—	25	15	500	SOIC	USB6B1
USB 2.0 Compatable							
6	2 lines	1	—	15	—	SOT-666	USBLC6-2P6
6	4 lines	1	—	15	—	SOT-23	USBLC6-4SC6

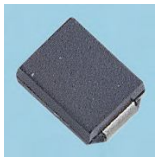
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
USB6B1	SMD 980-4358●	1.16	0.92	0.74	0.62	0.53
USBLC6-2P6	SMD 129-5310●	0.72	0.57	0.47	– –	– –
USBLC6-4SC6	SMD 129-5311●	0.80	0.63	0.51	0.45	0.43

211085

Tube of 100 Mftrs. List No.	Order Code	Price Per Tube 1+	3+	8+
USB6B1	NEW SMD 156-3990●	70.03	59.80	52.54

600W TVS Diodes

P6SMB Series



SMB/DO-214AA

- Built-in strain relief
- Low profile package
- Excellent clamping capability
- Glass passivated junction

V_{br} V	Voltage Stand-off V	V_{clamp} max. V	Current Peak Pulse A	Mftrs. List No. Unidirectional	Bidirectional
105	85.5	137	4.5	P6SMB100A	P6SMB100CA
10.5	8.55	14.5	43	P6SMB10A	P6SMB10CA
158	128	207	3	P6SMB150A	P6SMB150CA
18.9	15.3	25.2	25	P6SMB18A	P6SMB18CA
20	171	274	2.2	P6SMB200A	P6SMB200CA
23.1	18.8	30.6	20	P6SMB22A	P6SMB22CA
28.4	23.1	37.5	16.8	P6SMB27A	P6SMB27CA
34.7	28.2	45.7	13.8	P6SMB33A	P6SMB33CA
37.8	30.8	49.9	12.6	P6SMB36A	P6SMB36CA

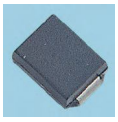
RL Re-reeling available

V_{br} Voltage Stand-off	V_{clamp} max.	Current Peak Pulse	Mftrs. List No. Unidirectional	Bidirectional
41	33.3	53.9	11.6	P6SMB39A	P6SMB39CA
49.4	40.2	64.8	9.7	P6SMB47A	P6SMB47CA
65.1	53	85	7.4	P6SMB62A	P6SMB62CA
71.4	58.1	92	6.8	P6SMB68A	P6SMB68CA
7.14	5.8	10.5	60	P6SMB6V8A	P6SMB6V8CA

509389

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	250+	1K+
600W Unidirectional						
P6SMB100A	SMD 157-8862●	0.187	0.137	0.117	0.103	0.092
P6SMB10A	SMD 157-8864●	0.280	0.200	0.171	0.151	0.135
P6SMB150A	SMD 157-8866●	0.187	0.137	0.117	0.103	0.092
P6SMB18A	SMD 157-8869●	0.187	0.137	0.117	0.103	0.092
P6SMB200A	SMD 157-8872●	0.187	0.137	0.117	0.103	0.092
P6SMB22A	SMD 157-8874●	0.187	0.137	0.117	0.103	0.092
P6SMB27A	SMD 157-8876●	0.187	0.137	0.117	0.103	0.092
P6SMB33A	SMD 157-8879●	0.187	0.137	0.117	0.103	0.092
P6SMB36A	SMD 157-8882●	0.187	0.137	0.117	0.103	0.092
P6SMB39A	SMD 157-8884●	0.187	0.137	0.117	0.103	0.092
P6SMB47A	SMD 157-8886●	0.187	0.137	0.117	0.103	0.092
P6SMB62A	SMD 157-8888●	0.187	0.137	0.117	0.103	0.092
P6SMB68A	SMD 157-8890●	0.187	0.137	0.117	0.103	0.092
P6SMB6V8A	SMD 157-8892●	0.280	0.200	0.171	0.151	0.135
600W Bidirectional						
P6SMB100CA	SMD 157-8863●	0.200	0.147	0.125	0.110	0.098
P6SMB10CA	SMD 157-8865●	0.380	0.280	0.240	0.200	0.183
P6SMB150CA	SMD 157-8867●	0.200	0.147	0.125	0.110	0.098
P6SMB18CA	SMD 157-8871●	0.200	0.147	0.125	0.110	0.098
P6SMB200CA	SMD 157-8873●	0.200	0.147	0.125	0.110	0.098
P6SMB22CA	SMD 157-8875●	0.200	0.147	0.125	0.110	0.098
P6SMB27CA	SMD 157-8878●	0.200	0.147	0.125	0.110	0.098
P6SMB33CA	SMD 157-8880●	0.200	0.147	0.125	0.110	0.098
P6SMB36CA	SMD 157-8883●	0.200	0.147	0.125	0.110	0.098
P6SMB39CA	SMD 157-8885●	0.200	0.147	0.125	0.110	0.098
P6SMB47CA	SMD 157-8887●	0.200	0.147	0.125	0.110	0.098
P6SMB62CA	SMD 157-8889●	0.200	0.147	0.125	0.110	0.098
P6SMB68CA	SMD 157-8891●	0.200	0.147	0.125	0.110	0.098
P6SMB6V8CA	SMD 157-8894●	0.380	0.280	0.240	0.200	0.183

600W Transil™ Suppression Diodes



SMB
H = 2.45, W=5.6, D = 3.95

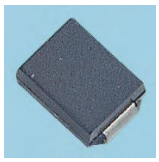
Max Reverse Leakage Current μA	V_{br} min. V	@	V_{clamp} max. V	Package Marking	Mftrs. List No. Unidirectional (d.c.)	Bidirectional (a.c.)
SMB Package, 600W						
800	6.4		9.2	BBZ/BBZ	SMBJ5.0A	SMBJ5.0CA
800	6.7		10.3	BBA/BBA	SMBJ6.0A	SMBJ6.0CA
500	7.2		11.2	BBB	SMBJ6.5A	—
1	9.4		14.4	BBC/BBC	SMBJ8.5A	SMBJ8.5CA
1	11.1		162	BBD/BBD	—	SMBJ10CA
1	13.3		19.9	LE/BE	SMBJ12A	SMBJ12CA
1	14.4		209	BBF/BBF	SMBJ13A	SMBJ13CA
1	16.7		24.4	BBG/BBG	SMBJ15A	SMBJ15CA
1	20		29.2	BBH/BBH	SMBJ18A	SMBJ18CA
1	22.2		32.4	BBI/BBI	—	SMBJ20CA
1	24.4		35.5	CBH	SMBJ22A	—
1	26.7		38.9	BBJ/BBJ	SMBJ24A	SMBJ24CA
1	31.1		45.4	BBL/BBL	SMBJ28A	SMBJ28CA
1	33.3		48.4	BBM/BBM	SMBJ30A	SMBJ30CA
1	36.7		53.3	BBN/BBN	SMBJ33A	SMBJ33CA
1	44.4		64.5	CBJ /CBJ	SMBJ40A	SMBJ40CA
1	47.8		69.4	CT	—	SMBJ43CA-TR
1	53.3		77.4	BBW/BBW	SMBJ48A	SMBJ48CA
1	64.4		93.6	BBO/BBO	SMBJ58A	SMBJ58CA
1	7.2		113	CBM	SMBJ70A	—
1	111		162	CBQ/CBQ	—	SMBJ100CA
1	144		209	BBS	SMBJ130A	—
1	189		275	CBM/BBU	SMBJ170A	SMBJ170CA

419547

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
Unidirectional						
SMBJ5.0A	SMD 988-6311● RL	0.410	0.310	0.230	0.177	0.128
SMBJ6.0A	SMD 988-6354● RL	0.530	0.410	0.290	0.210	0.155
SMBJ6.5A	SMD 988-6370● RL	0.460	0.340	0.250	0.175	0.133
SMBJ8.5A	SMD 988-6397● RL	0.310	0.220	0.169	0.139	0.123
SMBJ12A	SMD 988-6060● RL	0.410	0.310	0.260	0.198	0.155
SMBJ13A	SMD 988-6095● RL	0.280	0.210	0.165	0.140	0.126
SMBJ15A	SMD 988-6117● RL	0.410	0.310	0.260	0.198	0.155
SMBJ18A	SMD 988-6150● RL	0.250	0.173	0.138	0.109	0.086
SMBJ22A	SMD 988-6184● RL	0.290	0.210	0.165	0.140	0.126
SMBJ24A	SMD 988-6192● RL	0.410	0.300	0.210	0.177	0.140
SMBJ28A	SMD 988-6214● RL	0.340	0.260	0.193	0.164	0.147
SMBJ30A	SMD 988-6230● RL	0.220	0.152	0.125	0.111	0.101
SMBJ33A	SMD 988-6257● RL	0.280	0.210	0.160	0.092	0.088
SMBJ40A	SMD 988-6273● RL	0.330	0.260	0.193	0.164	0.147
SMBJ48A	SMD 988-6290● RL	0.310	0.220	0.169	0.139	0.124
SMBJ58A	SMD 988-6338● RL	0.280	0.210	0.165	0.140	0.126

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
Unidirectional						
SMBJ70A	SMD 988-6389● RL	0.430	0.330	0.230	0.177	0.140
SMBJ130A	SMD 988-6087● RL	0.196	0.153	0.117	0.100	0.090
SMBJ170A	SMD 988-6133● RL	0.240	0.170	0.128	0.109	0.088
Bidirectional						
SMBJ5.0CA	SMD 988-6320● RL	0.430	0.330	0.270	0.210	0.168
SMBJ6.0CA	SMD 988-6362● RL	0.350	0.280	0.210	0.172	0.155
SMBJ8.5CA	SMD 988-6400● RL	0.300	0.240	0.182	0.146	0.133
SMBJ10CA	SMD 988-6052● RL	0.490	0.390	0.300	0.250	0.220
SMBJ12CA	SMD 988-6079● RL	0.430	0.330	0.230	0.177	0.114
SMBJ13CA	SMD 988-6109●	0.310	0.220	0.169	0.139	0.128
SMBJ15CA	SMD 988-6125● RL	0.430	0.330	0.230	0.177	0.114
SMBJ18CA	SMD 988-6168● RL	0.670	0.500	0.380	0.330	0.300
SMBJ20CA	SMD 988-6176● RL	0.450	0.340	0.280	0.220	0.200
SMBJ24CA	SMD 988-6206● RL	0.340	0.260	0.193	0.164	0.147
SMBJ28CA	SMD 988-6222● RL	0.350	0.280	0.210	0.172	0.155
SMBJ30CA	SMD 988-6249● RL	0.430	0.290	0.191	0.177	0.128
SMBJ33CA	SMD 988-6265● RL	0.350	0.280	0.210	0.172	0.155
SMBJ40CA	SMD 988-6281● RL	0.300	0.240	0.182	0.146	0.133
SMBJ43CA-TR	SMD 129-5221● RL	0.340	0.270	0.200	0.167	0.151
SMBJ48CA	SMD 988-6303● RL	0.310	0.220	0.166	0.139	0.116
SMBJ58CA	SMD 988-6346● RL	0.320	0.220	0.172	0.142	0.096
SMBJ100CA	SMD 988-6044● RL	0.350	0.280	0.210	0.172	0.155
SMBJ170CA	SMD 988-6141● RL	0.350	0.280	0.210	0.172	0.155

600W Transient Voltage Suppression Diodes



- Glass passivated junction
- 600W Peak Pulse Power capability
- Excellent clamping capability
- Low incremental surge resistance
- Fast response time

SMB H = 2.44, W = 5.59, D = 3.56

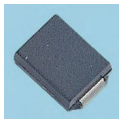
V_{rm} Stand-off Voltage V	V_{br} Breakdown Voltage Min. V	Max. V	I_{test} mA	Clamping Voltage V_{clamp} max. V	Max. Peak Pulse Current A	Max. Reverse Leakage Current μA	Mftrs. List No. Unidirectional (d.c.)	Bidirectional (a.c.)
600W Peak Pulse Power								
5	6.4	7	10	9.2	65.2	800	SMBJ5V0A	SMBJ5V0CA
9	10	11.1	1	15.4	39	10	SMBJ9V0A	SMBJ9V0CA
12	13.3	14.7	1	19.9	30.2	5	SMBJ12A	SMBJ12CA
15	16.7	18.5	1	24.4	24.6	5	SMBJ15A	SMBJ15CA
16	17.8	19.7	1	26	23.1	5	SMBJ16A	SMBJ16CA
18	20	22.1	1	29.2	20.5	5	SMBJ18A	SMBJ18CA
22	24.4	26.9	1	35.5	16.9	5	SMBJ22A	SMBJ22CA
24	26.7	29.5	1	38.9	15.4	5	SMBJ24A	SMBJ24CA
30	33.3	36.8	1	48.4	12.4	5	SMBJ30A	SMBJ30CA
33	36.7	40.6	1	53.3	11.3	5	SMBJ33A	SMBJ33CA
36	40	44.2	1	58.1	10.3	5	SMBJ36A	SMBJ36CA

211323

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	500+	1K+
600W Unidirectional						
SMBJ5V0A	SMD 101-7841● RL	0.400	0.220	0.145	0.109	0.081
SMBJ9V0A	SMD 101-7843● RL	0.930	0.480	0.340	0.169	0.166
SMBJ12A	SMD 101-7826● RL	0.470	0.260	0.210	0.160	0.129
SMBJ15A	SMD 101-7828● RL	0.710	0.370	0.250	0.138	0.135
SMBJ16A	SMD 101-7830● RL	0.490	0.260	0.210	0.160	0.129
SMBJ18A	SMD 984-3990●	0.530	0.270	0.210	0.160	0.129
SMBJ22A	SMD 101-7833● RL	0.530	0.280	0.210	0.160	0.129
SMBJ24A	SMD 101-7836● RL	0.470	0.260	0.210	0.160	0.129
SMBJ30A	SMD 984-4007●	0.820	0.400	0.280	0.145	0.143
SMBJ33A	SMD 984-4015●	0.590	0.300	0.200	0.106	0.104
SMBJ36A	SMD 984-4023●	0.470	0.260	0.210	0.160	0.129
600W Bidirectional						
SMBJ5V0CA	SMD 101-7842● RL	0.820	0.510	0.380	0.230	0.191
SMBJ9V0CA	SMD 101-7844● RL	0.830	0.510	0.390	0.230	0.191
SMBJ12CA	SMD 101-7827● RL	0.680	0.440	0.310	0.191	0.160
SMBJ15CA	SMD 101-7829● RL	0.920	0.480	0.350	0.210	0.200
SMBJ16CA	SMD 101-7831● RL	0.440	0.280	0.230	0.176	0.142
SMBJ18CA	SMD 101-7832● RL	0.420	0.280	0.230	0.176	0.142
SMBJ22CA	SMD 101-7835● RL	0.470	0.310	0.230	0.176	0.142
SMBJ24CA	SMD 101-7837● RL	0.550	0.350	0.240	0.152	0.127
SMBJ30CA	SMD 101-7838● RL	0.760	0.500	0.340	0.210	0.178
SMBJ33CA	SMD 101-7839● RL	0.380	0.260	0.172	0.086	0.071
SMBJ36CA	SMD 101-7840● RL	0.680	0.440	0.310	0.191	0.160

Reels of 3000 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
SMBJ15A	NEW SMD 156-2401●	203.75	183.38
SMBJ5V0A	NEW SMD 156-2402●	221.74	199.57

600W Transient Voltage Suppression Diodes



SMB H = 2.61, W = 4.75, D = 3.73

- Glass passivated junction
- 600W peak pulse power capability
- Excellent clamping capability
- Fast response time
- Typical I_R less than 1μA above 10V
- Plastic case to **UL 94V-0**

RL Re-reeling available

Protection Diodes - continued

600W Transient Voltage Suppression Diodes - continued

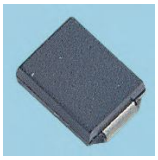
V_{rm} Stand-off Voltage V	V_{br} Breakdown Voltage Min. V	V_{br} Breakdown Voltage Max. V	I_{test} mA	V_{clamp} max. V	Max. Peak Pulse Current A	Max. Reverse Leakage Current µA	Package Marking*	Mftrs. List No. Unidirectional (d.c.)	Mftrs. List No. Bidirectional (a.c.)
1500W Peak Pulse Power									
5	6.4	7	1	9.2	68	800	KE	SMBJ5.0A	SMBJ5.0CA
7.5	8.33	9.21	10	12.9	48	100	KP	SMBJ7.5A	SMBJ7.5CA
12	13.3	14.7	1	19.9	31	5	LE	SMBJ12A	SMBJ12CA
15	16.7	18.5	1	24.4	25.1	5	LM	SMBJ15A	SMBJ15CA
24	26.7	32.6	1	38.9	14.6	5	LY	SMBJ24A	SMBJ24CA
30	33.3	36.8	1	48.4	13	5	MK	SMBJ30A	SMBJ30CA

* Coloured band denotes cathode on unidirectional devices only.

344036

Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
600W Unidirectional		Price Each				
SMBJ5.0A	SMD 727-7792● RL	0.300	0.240	0.181	0.159	0.138
SMBJ7.5A	SMD 727-7814● RL	0.300	0.240	0.181	0.159	0.138
SMBJ12A	SMD 727-7717● RL	0.300	0.240	0.181	0.159	0.138
SMBJ15A	SMD 727-7733● RL	0.300	0.240	0.181	0.159	0.138
SMBJ24A	SMD 727-7750● RL	0.300	0.240	0.181	0.159	0.138
SMBJ30A	SMD 727-7776● RL	0.300	0.240	0.181	0.159	0.138
600W Bidirectional						
SMBJ5.0CA	SMD 727-7806● RL	0.360	0.290	0.220	0.192	0.170
SMBJ7.5CA	SMD 727-7822● RL	0.360	0.290	0.220	0.192	0.170
SMBJ12CA	SMD 727-7725● RL	0.360	0.290	0.220	0.193	0.170
SMBJ15CA	SMD 727-7741● RL	0.360	0.290	0.220	0.193	0.170
SMBJ24CA	SMD 727-7768● RL	0.360	0.290	0.220	0.193	0.170
SMBJ30CA	SMD 727-7784● RL	0.360	0.290	0.220	0.193	0.170

1500W Transient Voltage Suppression Diodes



- Glass passivated junction
- 1500W peak pulse power capability
- Excellent clamping capability
- Low incremental surge resistance
- Fast response time

SMC H = 2.62, W = 8.23, D = 6.22

V_{rm} Stand-off Voltage V	V_{br} Breakdown Voltage Min. V	V_{br} Breakdown Voltage Max. V	I_{test} mA	V_{clamp} max. V	Max. Peak Pulse Current A	Max. Reverse Leakage Current µA	Package Marking*	Mftrs. List No. Unidirectional (d.c.)	Mftrs. List No. Bidirectional (a.c.)
1500W Peak Pulse Power									
5	6.4	7	10	9.2	163	1000	GDE	SMCJ5V0A	SMCJ5V0CA
6	6.67	7.37	10	10.3	145.6	1000	GDG	SMCJ6V0A	SMCJ6V0CA
12	13.3	14.7	1	19.9	75.3	5	GEE	SMCJ12A	SMCJ12CA
15	16.7	18.5	1	24.4	61.5	5	GEM	SMCJ15A	SMCJ15CA
18	20	22.1	1	29.2	51.4	5	GET	SMCJ18A	SMCJ18CA
22	24.4	26.9	1	35.5	42.3	5	GEX	SMCJ22A	SMCJ22CA
24	26.7	29.5	1	38.9	38.6	5	GEZ	SMCJ24A	SMCJ24CA
30	33.3	36.8	1	48.4	31	5	GFK	SMCJ30A	SMCJ30CA
33	36.7	40.6	1	53.3	28.1	5	GFM	SMCJ33A	SMCJ33CA
36	40	44.2	1	58.1	25.8	5	GFP	SMCJ36A	SMCJ36CA

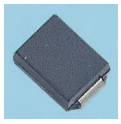
Mftrs. List No.	Order Code	1+	25+	100+	500+	1K+
1500W Unidirectional		Price Each				
SMCJ5V0A	SMD 101-7863● RL	1.240	0.880	0.740	0.420	0.400
SMCJ6V0A	SMD 101-7865● RL	0.950	0.680	0.570	0.330	0.320
SMCJ12A	SMD 101-7845● RL	0.770	0.550	0.460	0.280	0.250
SMCJ15A	SMD 101-7848● RL	0.770	0.550	0.460	0.280	0.250
SMCJ18A	SMD 101-7850● RL	0.860	0.610	0.510	0.290	0.280
SMCJ22A	SMD 101-7852● RL	0.750	0.540	0.460	0.280	0.250
SMCJ24A	SMD 984-4031●	0.850	0.590	0.490	0.280	0.270
SMCJ30A	SMD 101-7855● RL	0.750	0.540	0.460	0.280	0.250
SMCJ33A	SMD 101-7857● RL	0.790	0.570	0.470	0.280	0.270
SMCJ36A	SMD 101-7861● RL	0.750	0.540	0.460	0.280	0.250
1500W Bidirectional						
SMCJ5V0CA	SMD 101-7864● RL	1.340	0.920	0.820	0.470	0.430
SMCJ6V0CA	SMD 101-7866● RL	1.340	0.920	0.830	0.470	0.430
SMCJ7V5CA	SMD 101-7868● RL	1.340	0.920	0.820	0.470	0.430
SMCJ12CA	SMD 101-7847● RL	0.920	0.640	0.560	0.320	0.300
SMCJ15CA	SMD 101-7849● RL	0.920	0.640	0.570	0.320	0.300
SMCJ18CA	SMD 101-7851● RL	0.920	0.630	0.560	0.310	0.300
SMCJ24CA	SMD 101-7854● RL	1.150	0.790	0.700	0.400	0.370
SMCJ30CA	SMD 101-7856● RL	0.870	0.610	0.530	0.310	0.290
SMCJ33CA	SMD 101-7859● RL	0.920	0.640	0.560	0.320	0.300
SMCJ36CA	SMD 101-7862● RL	0.620	0.420	0.380	0.220	0.195

211322

Reels of 3000 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
SMCJ30A	NEW SMD 156-2405●	521.38	469.26
SMCJ30CA	NEW SMD 156-2421●	437.48	393.72
SMCJ33CA	NEW SMD 156-2422●	437.48	393.72
SMCJ36CA	NEW SMD 156-2424●	437.48	393.72

RL Re-reeling available

400W Unidirectional TransZorb™ Suppression Diodes



- 400W Peak Pulse Power, I_{FSM} = 40A
- Opimised for LAN applications
- Glass passivated
- Low incremental surge resistance, excellent clampingcapability
- Very fast response time

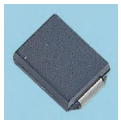
SMA: H = 2.9, W = 2.9, D = 5.6

V_{br} min. V	V_{br} max. V	@ I_{test} mA	V_{clamp} max. V	Max. Reverse Leakage Current µA	@ V_{wm} V	Mftrs. List No.
6.4	7.82	10	9.6	800	5	SMAJ5.0
6.4	7.07	10	9.2	800	5	SMAJ5.0A
13.3	16.3	1.0	22	1	12	SMAJ12
13.3	14.7	1.0	19.9	1	12	SMAJ12A
16.7	20.4	1.0	26.9	1	15	SMAJ15
16.7	18.5	1.0	24.4	1	15	SMAJ15A
20.0	24.4	1.0	32.2	1	18	SMAJ18
20.0	22.1	1.0	29.2	1	18	SMAJ18A
26.7	32.6	1.0	43	1	24	SMAJ24
26.7	29.5	1.0	38.9	1	24	SMAJ24A
33.3	40.7	1.0	53.5	1	30	SMAJ30
33.3	36.8	1.0	48.4	1	30	SMAJ30A
36.7	44.9	1.0	59	1	33	SMAJ33
36.7	40.6	1.0	53.3	1	33	SMAJ33A
40.0	48.9	1.0	64.3	1	36	SMAJ36
40.0	44.2	1.0	58.1	1	36	SMAJ36A
25.7	28.4	1	37.5	1	23.1	TPSMA27A
28.5	31.5	1	41.4	1	25.6	TPSMA30A

277156

Unidirectional Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
		Price Each				
SMAJ5.0	SMD 955-0950● RL	0.280	0.210	0.178	0.117	0.116
SMAJ5.0A	SMD 955-0941● RL	0.270	0.200	0.173	0.127	0.114
SMAJ12	SMD 955-0810● RL	0.250	0.188	0.158	0.118	0.106
SMAJ12A	SMD 955-0801● RL	0.270	0.210	0.178	0.134	0.117
SMAJ15	SMD 955-0836● RL	0.260	0.194	0.162	0.120	0.109
SMAJ15A	SMD 955-0828● RL	0.260	0.194	0.162	0.120	0.109
SMAJ18	SMD 955-0852● RL	0.210	0.167	0.133	0.105	0.098
SMAJ18A	SMD 955-0844● RL	0.260	0.194	0.162	0.120	0.109
SMAJ24	SMD 955-0879● RL	0.260	0.194	0.162	0.120	0.109
SMAJ24A	SMD 955-0860● RL	0.260	0.194	0.162	0.119	0.109
SMAJ30	SMD 955-0895● RL	0.250	0.183	0.156	0.106	0.102
SMAJ30A	SMD 955-0887● RL	0.250	0.185	0.155	0.114	0.104
SMAJ33	SMD 955-0917● RL	0.250	0.188	0.158	0.116	0.106
SMAJ33A	SMD 955-0909● RL	0.250	0.185	0.155	0.115	0.104
SMAJ36	SMD 955-0933● RL	0.250	0.188	0.158	0.118	0.108
SMAJ36A	SMD 955-0925● RL	0.270	0.220	0.180	0.137	0.119
TPSMA27A	SMD 133-6583●	0.550	0.460	0.390	0.350	0.310
TPSMA30A	SMD 133-6584●	0.410	0.350	0.300	0.270	0.240

600W Unidirectional TransZorb™ Suppression Diodes



- 600W Peak Pulse Power, I_{FSM} = 100A
- Low clamping factor
- Low incremental surge resistance
- Fast response time

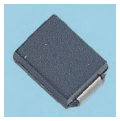
SMB: H = 2.45, W = 5.6, D = 3.95

Max. Reverse Leakage Current µA	@ V_{wm} V	V_{br} min. V	V_{br} max. V	@ I_{test} mA	V_{clamp} max. V	Mftrs. List No.
800	5	6.4	7.82	10	9.6	SMBJ5.0
800	5	6.4	7.07	1.0	9.2	SMBJ5.0A
5.0	12	13.3	16.3	1.0	22	SMBJ12
5.0	12	13.3	14.7	1.0	19.9	SMBJ12A
1.0	15	16.7	20.4	1.0	26.9	SMBJ15
1.0	15	16.7	18.5	1.0	24.4	SMBJ15A
1.0	18	20.0	24.4	1.0	32.2	SMBJ18
1.0	18	13.3	16.3	1.0	29.2	SMBJ18A
1.0	24	26.7	32.6	1.0	43	SMBJ24
1.0	24	26.7	29.5	1.0	38.9	SMBJ24A
1.0	30	33.3	40.7	1.0	53.5	SMBJ30
1.0	30	33.3	36.8	1.0	48.4	SMBJ30A
1.0	33	36.7	44.9	1.0	59	SMBJ33
1.0	33	36.7	40.6	1.0	53.3	SMBJ33A
1.0	36	40.0	48.9	1.0	64.3	SMBJ36
1.0	36	40.0	44.2	1.0	58.1	SMBJ36A

277214

Unidirectional Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
		Price Each				
SMBJ5.0	SMD 955-1115● RL	0.350	0.310	0.220	0.184	0.165
SMBJ5.0A	SMD 955-1107● RL	0.350	0.310	0.220	0.184	0.165
SMBJ12	SMD 955-0976● RL	0.350	0.310	0.220	0.184	0.165
SMBJ12A	SMD 955-0968● RL	0.350	0.310	0.220	0.184	0.165
SMBJ15	SMD 955-0992● RL	0.350	0.310	0.220	0.184	0.165
SMBJ15A	SMD 955-0984● RL	0.330	0.290	0.200	0.184	0.165
SMBJ18	SMD 955-1018● RL	0.320	0.280	0.200	0.171	0.154
SMBJ18A	SMD 955-1000● RL	0.350	0.310	0.220	0.184	0.165
SMBJ24	SMD 955-1034● RL	0.340	0.290	0.210	0.179	0.161
SMBJ24A	SMD 955-1026● RL	0.330	0.290	0.200	0.184	0.165
SMBJ30	SMD 955-1050● RL	0.350	0.310	0.220	0.184	0.165
SMBJ30A	SMD 955-1042● RL	0.350	0.310	0.220	0.184	0.165
SMBJ33	SMD 955-1077● RL	0.330	0.290	0.210	0.176	0.158
SMBJ33A	SMD 955-1069● RL	0.350	0.310	0.220	0.184	0.172
SMBJ36	SMD 955-1093● RL	0.320	0.280	0.200	0.171	0.154
SMBJ36A	SMD 955-1085● RL	0.350	0.310	0.220	0.184	0.165

1500W Transil™ Suppression Diodes



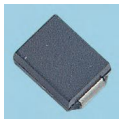
SMC
H=2.62,
W=8.23,
D=6.22

Max Reverse Leakage Current µA	V_{br} min. V	@	V_{clamp} max. V	Package Marking	Mftrs. List No. Unidirectional (d.c.)	Bidirectional (a.c.)
SMC Package, 1500W						
500	6.4		9.2	BBZ	SMCJ5.0A	SMCJ5.0CA
1	6.67		10.3	BBA	SMCJ6.0A	
1	53.3		77.4	BBW/BBW	—	SMCJ48CA

419548

Mftrs. List No.	Order Code	1+	25+	Price Each 100+	250+	1K+
Unidirectional						
SMCJ5.0A	SMD 988-6443● RL	0.97	0.72	0.53	0.45	0.39
SMCJ6.0A	SMD 988-6460● RL	0.86	0.66	0.35	0.28	0.26
Bidirectional						
SMCJ5.0CA	SMD 988-6451● RL	0.92	0.70	0.58	0.46	0.44
SMCJ48CA	SMD 988-6435● RL	1.33	1.02	0.86	0.70	0.64

1500W Unidirectional TransZorb™ Suppression Diodes



- 1500W Peak Pulse Power, I_{FSM} = 200A
- Low clamping factor
- Low incremental surge resistance
- Very fast response time

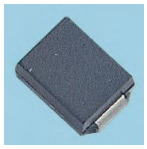
SMC: H = 2.45, W = 8.15, D = 6.25

Max. Reverse Leakage Current µA	@ V_{wm} V	V_{br} min. V	V_{br} max. V	@ I_{test} mA	V_{clamp} max. V	Mftrs. List No.
1000	5	6.4	7.82	10	9.6	SMCJ5.0
1000	5	6.40	7.07	10	9.2	SMCJ5.0A
800	5	6.4	7.07	1.0	9.2	SMCJ12
5.0	12	13.3	16.3	1.0	22	SMCJ12A
1.0	15	16.7	20.4	1.0	26.9	SMCJ15
1.0	15	16.7	18.5	1.0	24.4	SMCJ15A
1.0	18	20.0	24.4	1.0	32.2	SMCJ18
1.0	18	20.0	22.1	1.0	29.2	SMCJ18A
1.0	24	26.7	32.6	1.0	43	SMCJ24
1.0	24	26.7	29.5	1.0	38.9	SMCJ24A
1.0	30	33.3	40.7	1.0	53.5	SMCJ30
1.0	30	33.3	36.8	1.0	48.4	SMCJ30A
1.0	33	36.7	44.9	1.0	59	SMCJ33
1.0	33	36.7	40.6	1.0	53.3	SMCJ33A
1.0	36	40.0	48.9	1.0	64.3	SMCJ36
1.0	36	40.0	44.2	1.0	58.1	SMCJ36A

277215

Unidirectional Mftrs. List No.	Order Code	1+	25+	Price Each 100+	250+	1K+
SMCJ5.0	SMD 955-1271● RL	0.69	0.52	0.45	0.31	0.29
SMCJ5.0A	SMD 955-1263● RL	0.69	0.52	0.45	0.31	0.29
SMCJ12	SMD 955-1131● RL	0.69	0.52	0.45	0.31	0.29
SMCJ12A	SMD 955-1123● RL	0.69	0.52	0.45	0.31	0.29
SMCJ15	SMD 955-1158● RL	0.69	0.52	0.45	0.31	0.29
SMCJ15A	SMD 955-1140● RL	0.69	0.52	0.45	0.31	0.29
SMCJ18	SMD 955-1174● RL	0.67	0.50	0.44	0.29	0.28
SMCJ18A	SMD 955-1166● RL	0.69	0.52	0.45	0.31	0.29
SMCJ24	SMD 955-1190● RL	0.56	0.43	0.37	0.26	0.25
SMCJ24A	SMD 955-1182● RL	0.69	0.52	0.45	0.31	0.29
SMCJ30	SMD 955-1212● RL	0.67	0.50	0.44	0.29	0.28
SMCJ30A	SMD 955-1204● RL	0.69	0.52	0.45	0.31	0.29
SMCJ33	SMD 955-1239● RL	0.69	0.52	0.45	0.31	0.29
SMCJ33A	SMD 955-1220● RL	0.69	0.52	0.45	0.31	0.29
SMCJ36	SMD 955-1255● RL	0.67	0.50	0.44	0.29	0.28
SMCJ36A	SMD 955-1247● RL	0.69	0.52	0.45	0.31	0.29

1500W Transient Voltage Suppression Diodes



- Glass passivated junction
- 1500W peak pulse power capability
- Excellent clamping capability
- Fast response time
- Typical I_R less than 1A above 10V
- Plastic case to **UL 94V-0**

SMC H = 2.62, W = 8.23, D = 6.22

V_{rm} Stand-off Voltage V	V_{br} Breakdown Voltage Min. V	Max. V	I_{test} mA	V_{clamp} max. V	Max. Peak Pulse Current A	Max. Reverse Leakage Current µA	Package Marking*	Mftrs. List No. Unidirectional (d.c.)	Bidirectional (a.c.)
1500W Peak Pulse Power									
5	6.4	7	1	9.2	171	1000	GDE	SMCJ5.0A	SMCJ5.0CA
6	6.67	7.37	1	10.3	152	1000	GDG	SMCJ6.0A	SMCJ6.0CA
9	10	11.1	1	15.4	102	10	GDV	SMCJ9.0A	SMCJ9.0CA
12	13.3	14.7	1	19.9	79	5	GEE	SMCJ12A	SMCJ12CA
15	16.7	18.5	1	24.4	64	5	GEM	SMCJ15A	SMCJ15CA
22	24.4	29.8	1	39.4	39	5	GEW	SMCJ22A	SMCJ22CA
33	36.7	40.6	1	53.3	29	5	GFM	SMCJ33A	SMCJ33CA
48	53.3	58.9	1	77.4	20	5	GFX	SMCJ48A	SMCJ48CA

* Coloured band denotes cathode on unidirectional devices only.
No coloured band on bidirectional devices.

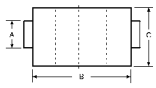
Mftrs. List No.	Order Code	1+	25+	Price Each 100+	250+	1K+
1500W Unidirectional						
SMCJ5.0A	SMD 727-7652● RL	0.54	0.42	0.33	0.24	0.20
SMCJ6.0A	SMD 727-7679● RL	0.93	0.72	0.55	0.40	0.36
SMCJ9.0A	SMD 727-7695● RL	0.86	0.66	0.50	0.36	0.33
SMCJ12A	SMD 727-7555● RL	0.57	0.44	0.34	0.24	0.22
SMCJ15A	SMD 727-7571● RL	0.58	0.45	0.35	0.25	0.22
SMCJ22A	SMD 727-7598● RL	0.57	0.44	0.34	0.24	0.22
SMCJ33A	SMD 727-7610● RL	0.53	0.41	0.32	0.23	0.20
SMCJ48A	SMD 727-7636● RL	0.72	0.56	0.43	0.31	0.28
1500W Bidirectional						
SMCJ5.0CA	SMD 727-7660● RL	0.80	0.62	0.48	0.34	0.32
SMCJ6.0CA	SMD 727-7687● RL	1.06	0.83	0.64	0.45	0.42
SMCJ9.0CA	SMD 727-7709● RL	1.13	0.89	0.68	0.48	0.45
SMCJ12CA	SMD 727-7563● RL	0.80	0.62	0.48	0.34	0.32
SMCJ15CA	SMD 727-7580● RL	0.80	0.62	0.48	0.34	0.32
SMCJ22CA	SMD 727-7601● RL	0.80	0.62	0.48	0.34	0.32
SMCJ33CA	SMD 727-7628● RL	0.85	0.66	0.51	0.36	0.34
SMCJ48CA	SMD 727-7644● RL	0.80	0.62	0.48	0.34	0.32

343814

Reel of 3000 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
SMCJ48A R6	NEW SMD 156-2406●	360.89	324.80

Transient Voltage Suppressors





600W: A=2.11 B=4.57 C=3.94
1500W: A=3.15 B=7.11 C=6.22

- Silicon surface mount transient voltage suppressors
- Low profile package
- Excellent clamping capability
- Fast response time
- Glass passivated junction
- High temperature soldering 250°C/10 seconds at terminals
- Plastic package has flammability rating **UL94V-0**

Stand-Off Voltage V_{rm}, V	V_{br} V	V_{clamp} V	I_{test} mA	Peak Pulse Current A	Mftrs. List No.
600W Unidirectional and Bidirectional					
5	6.4 - 7.25	9.2	10	65.2	P6SMBJ5.0A /CA
7.5	8.33 - 9.58	12.9	1	46.5	P6SMBJ7.5A /CA
12	13.3 - 15.3	19.9	1	30.2	P6SMBJ12A /CA
15	16.7 - 19.2	24.4	1	24	P6SMBJ15A /CA
24	26.7 - 30.7	38.9	1	15.4	P6SMBJ24A /CA
30	33.3 - 38.3	48.4	1	12.4	P6SMBJ30A /CA
1500W Unidirectional and Bidirectional					
5	6.4 - 7.25	9.2	10	163	1.5SMCJ5.0A /CA
6	6.67 - 7.67	10.3	10	145.6	1.5SMCJ6.0A /CA
9	10 - 11.5	15.4	1	97.4	1.5SMCJ9.0A /CA
12	13.3 - 15.3	19.9	1	75.3	1.5SMCJ12A /CA
15	16.7 - 19.2	24.4	1	61.5	1.5SMCJ15A /CA
22	24.4 - 28	35.5	1	42.2	1.5SMCJ22A /CA
33	36.7 - 42.2	53.3	1	28.1	1.5SMCJ33A /CA
48	53.3 - 61.3	77.4	1	19.4	1.5SMCJ48A /CA

204135

Order Multiple=5

Mftrs List No.	Order Code	5+	50+	Price Each 100+	250+	1K+	3K+
600W Unidirectional							
P6SMBJ5.0A	SMD 938-1554● RL	0.86	0.72	0.67	0.54	0.52	0.43
P6SMBJ7.5A	SMD 938-1562● RL	0.86	0.72	0.67	0.54	0.52	0.43
P6SMBJ12A	SMD 938-1570● RL	0.88	0.75	0.69	0.57	0.53	0.44
P6SMBJ15A	SMD 938-1589● RL	0.86	0.72	0.67	0.54	0.52	0.43
P6SMBJ24A	SMD 938-1597● RL	0.86	0.72	0.67	0.54	0.52	0.43
P6SMBJ30A	SMD 938-1600● RL	0.76	0.65	0.59	0.43	0.42	0.35
1500W Unidirectional							
1.5SMCJ5.0A	SMD 938-1619● RL	1.09	0.93	0.86	0.70	0.67	0.54
1.5SMCJ6.0A	SMD 938-1627● RL	1.09	0.93	0.86	0.70	0.67	0.54
1.5SMCJ9.0A	SMD 938-1635● RL	0.80	0.68	0.63	0.52	0.50	0.40
1.5SMCJ12A	SMD 938-1643● RL	1.09	0.93	0.86	0.70	0.67	0.54
1.5SMCJ15A	SMD 938-1651● RL	1.09	0.93	0.86	0.70	0.67	0.54
1.5SMCJ22A	SMD 938-1660● RL	1.09	0.93	0.86	0.70	0.67	0.54
1.5SMCJ33A	SMD 938-1678● RL	1.09	0.93	0.86	0.70	0.67	0.54
1.5SMCJ48A	SMD 938-1686● RL	1.09	0.93	0.86	0.70	0.67	0.54
600W Bidirectional							
P6SMBJ5.0CA	SMD 938-1708● RL	0.95	0.84	0.77	0.61	0.57	0.48
P6SMBJ7.5CA	SMD 938-1716● RL	0.95	0.84	0.77	0.61	0.57	0.48
P6SMBJ12CA	SMD 938-1724● RL	0.95	0.84	0.77	0.61	0.57	0.48
P6SMBJ15CA	SMD 938-1732● RL	0.95	0.84	0.77	0.61	0.57	0.48
P6SMBJ24CA	SMD 938-1740● RL	0.95	0.84	0.77	0.61	0.57	0.48
P6SMBJ30CA	SMD 938-1759● RL	0.95	0.84	0.77	0.61	0.57	0.48
1500W Bidirectional							
1.5SMCJ5.0CA	SMD 938-1767● RL	1.19	1.02	0.93	0.78	0.73	0.63
1.5SMCJ6.0CA	SMD 938-1775● RL	1.19	1.02	0.93	0.78	0.73	0.63
1.5SMCJ9.0CA	SMD 938-1783● RL	0.97	0.83	0.76	0.57	0.54	0.47

RL Re-reeling available

Protection Diodes - continued

Transient Voltage Suppressors - continued

Order Multiple=5 Mftrs List No.	Order Code	5+	50+	100+	250+	1K+	3K+
1500W Bidirectional							
1.5SMCJ12CA	SMD 938-1791● RL	1.19	1.02	0.93	0.78	0.73	0.63
1.5SMCJ15CA	SMD 938-1805● RL	1.19	1.02	0.93	0.78	0.73	0.63
1.5SMCJ22CA	SMD 938-1813● RL	1.19	1.02	0.93	0.78	0.73	0.63
1.5SMCJ33CA	SMD 938-1821● RL	1.19	1.02	0.93	0.78	0.73	0.63
1.5SMCJ48CA	SMD 938-1830● RL	1.19	1.02	0.93	0.78	0.73	0.63

Transil™ Suppression Diodes, Telecommunication Protection

DO-15, Bi-directional, Telecommunication protection



DO-15

- Bidirectional crowbar transient voltage protection
- Especially designed to protect highly sensitive telecommunications equipment against lightning and transient voltages induced by AC power lines.
- 150 mA Holding Current
- Non repetative surge peak on-state current, I_{TSM} = 30A

Stand-Off Voltage V_{rm} V	Breakdown Voltage V_{br} V	Holding Current mA	I_{TSM} A	Mftrs. List No.
56	62	150	30	TPA62

428472

Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
TPA62	990-8080●	0.57	0.45	0.35	0.29	0.27

400W TVS Diodes

BZW04 Series

multicomp New



DO-15

- Exceeds environmental standards of MIL-STD-19500
- 400W surge capability
- Low impedancesurge resistance

V_{br} Voltage Stand-off V	V_{clamp} max. V	I_{fsm} A	Mftrs. List No. Unidirectional	Bidirectional
13.7	11.1	18.2	40	BZW04-11	BZW04-11B
158	128	207	40	BZW04-128	BZW04-128B
15.8	12.8	21.2	40	BZW04-13	BZW04-13B
16.8	13.6	22.5	40	BZW04-14	BZW04-14B
179	145	234	40	BZW04-145	BZW04-145B
18.9	15.3	25.2	40	BZW04-15	BZW04-15B
189	154	246	40	BZW04-154	BZW04-154B
21	17.1	27.7	40	BZW04-17	BZW04-17B
210	171	274	40	BZW04-171	BZW04-171B
23.1	18.8	30.6	40	BZW04-19	BZW04-19B
25.2	20.5	33.2	40	BZW04-20	BZW04-20B
28.4	23.1	37.5	40	BZW04-23	BZW04-23B
31.5	25.6	41.5	40	BZW04-26	BZW04-26B
34.7	28.2	45.7	40	BZW04-28	BZW04-28B
37.8	30.8	49.9	40	BZW04-31	BZW04-31B
420	342	548	40	BZW04-342	BZW04-342B
462	376	603	40	BZW04-376	BZW04-376B
49.4	40.2	64.8	40	BZW04-40	BZW04-40B
53.6	43.6	70.1	40	BZW04-44	BZW04-44B
58.8	47.8	77	40	BZW04-48	BZW04-48B
78.8	64.1	103	40	BZW04-64	BZW04-64B
105	85.5	137	40	BZW04-85	BZW04-85B

509374

Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
400W Unidirectional						
BZW04-11	157-8732●	0.088	0.058	0.052	0.048	0.044
BZW04-128	157-8734●	0.088	0.058	0.052	0.048	0.044
BZW04-13	157-8736●	0.088	0.058	0.052	0.048	0.044
BZW04-14	157-8738●	0.088	0.058	0.052	0.048	0.044
BZW04-145	157-8739●	0.088	0.058	0.052	0.048	0.044
BZW04-15	157-8743●	0.088	0.058	0.052	0.048	0.044
BZW04-154	157-8744●	0.088	0.058	0.052	0.048	0.044
BZW04-17	157-8747●	0.088	0.058	0.052	0.048	0.044
BZW04-171	157-8748●	0.088	0.058	0.052	0.048	0.044
BZW04-19	157-8752●	0.088	0.058	0.052	0.048	0.044
BZW04-20	157-8755●	0.088	0.058	0.052	0.048	0.044
BZW04-23	157-8757●	0.088	0.058	0.052	0.048	0.044
BZW04-26	157-8759●	0.088	0.058	0.052	0.048	0.044
BZW04-28	157-8761●	0.088	0.058	0.052	0.048	0.044
BZW04-31	157-8763●	0.088	0.058	0.052	0.048	0.044
BZW04-342	157-8766●	0.088	0.058	0.052	0.048	0.044
BZW04-376	157-8768●	0.088	0.058	0.052	0.048	0.044
BZW04-40	157-8770●	0.088	0.058	0.052	0.048	0.044
BZW04-44	157-8772●	0.088	0.058	0.052	0.048	0.044
BZW04-48	157-8774●	0.088	0.058	0.052	0.048	0.044
BZW04-64	157-8776●	0.088	0.058	0.052	0.048	0.044
BZW04-85	157-8779●	0.088	0.058	0.052	0.048	0.044

Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
400W Bidirectional						
BZW04-11B	157-8733●	0.168	0.112	0.101	0.093	0.085
BZW04-128B	157-8735●	0.168	0.112	0.101	0.093	0.085
BZW04-13B	157-8737●	0.168	0.112	0.101	0.093	0.085
BZW04-14B	157-8742●	0.168	0.112	0.101	0.093	0.085
BZW04-145B	157-8740●	0.168	0.112	0.101	0.093	0.085
BZW04-15B	157-8746●	0.168	0.112	0.101	0.093	0.085
BZW04-154B	157-8745●	0.168	0.112	0.101	0.093	0.085
BZW04-17B	157-8751●	0.168	0.112	0.101	0.093	0.085
BZW04-171B	157-8749●	0.168	0.112	0.101	0.093	0.085
BZW04-19B	157-8754●	0.168	0.112	0.101	0.093	0.085
BZW04-20B	157-8756●	0.168	0.112	0.101	0.093	0.085
BZW04-23B	157-8758●	0.168	0.112	0.101	0.093	0.085
BZW04-26B	157-8760●	0.168	0.112	0.101	0.093	0.085
BZW04-28B	157-8762●	0.168	0.112	0.101	0.093	0.085
BZW04-31B	157-8764●	0.168	0.112	0.101	0.093	0.085
BZW04-342B	157-8767●	0.168	0.112	0.101	0.093	0.085
BZW04-376B	157-8769●	0.168	0.112	0.101	0.093	0.085
BZW04-40B	157-8771●	0.168	0.112	0.101	0.093	0.085
BZW04-44B	157-8773●	0.168	0.112	0.101	0.093	0.085
BZW04-48B	157-8775●	0.168	0.112	0.101	0.093	0.085
BZW04-64B	157-8778●	0.168	0.112	0.101	0.093	0.085
BZW04-85B	157-8780●	0.168	0.112	0.101	0.093	0.085

400W Transil™ Suppression Diodes

Bidirectional



F-126: L=6.35, Dia.=3.05, Lead Dia.=0.86 **CB-429:** L=9.8, Dia.=5.1, Lead Dia.=1.06

- Bidirectional transient voltage suppressors offering a high surge capability and ultra fast clamping times
- Typical applications include the protection of IC's, MOS, hybrids and other voltage sensitive components
- Bidirectional types are suitable for ac applications.

Stand-Off Voltage V_{rm} V	Breakdown Voltage V_{br} V	Clamping Voltage Max. 8/20µs (8/20µs)V	Max. Peak Pulse Current 8/20µs A	Temp. Co-efficient (10^4/°C)	Package	Mftrs. List No.
5.8	6.45 min.	10.5	30	5.7	DO-15	BZW04-5V8B
12.8	14.3 min.	21.2	30	8.4	DO-15	BZW04-13B
28.2	28.2 min.	45.7	30	9.8	DO-15	BZW04-28B

429877

Order Multiple=5 Mftrs. List No.	Order Code	5+	25+	100+	500+	1K+
BZW04-5V8B	980-2207●	0.520	0.390	0.290	0.250	0.200
BZW04-13B	980-2177●	0.500	0.360	0.280	0.230	0.198
BZW04-28B	980-2193●	0.620	0.490	0.370	0.300	0.290

1500W Transil™ Suppression Diodes

I_{FSM} = 200 A



CB-429: L=9.8, Dia.=5.1, Lead Dia.=1.06

- Unidirectional and bidirectional transient voltage suppressors offering a high surge capability and ultra fast clamping times
- Typical applications include the protection of IC's, MOS, hybrids and other voltage sensitive components
- Unidirectional types are suitable for dc applications and bidirectional types are suitable for ac applications.

Stand-Off Voltage @ V_{rm} V	I_{RM} max µA	Breakdown Voltage V_{br}* V	Clamping Voltage Max. 8/20µs V(8/20µs)	Max. Peak Pulse Current 8/20µs A	Mftrs. List No.
1500W, Unidirectional(A Suffix) und Bidirectional (CA Suffix)**					
5.8	1000	6.45 - 7.48	10.5	746	1.5KE6V8A.. / CA
6.4	500	7.13 - 7.88	11.3	690	1.5KE7V5CA
8.55	10	9.5 - 10.5	14.5	538	1.5KE10A
10.2	1	114 - 126	16.7	461	1.5KE12A / CA
12.8	1	14.3 - 15.8	21.2	662	1.5KE15A / CA
15.3	1	17.1 - 18.9	25.2	59.5	1.5KE18A / CA
18.8	1	20.9 - 23.1	30.6	254	1.5KE22A / CA
20.5	1	22.8 - 25.2	33.2	234	1.5KE24A / CA
23.1	1	25.7 - 28.4	37.5	40	1.5KE27A
28.2	1	31.4 - 34.7	45.7	305	1.5KE33A / CA
25.6	1	28.5 - 31.5	41.5	36	1.5KE30A / CA
30.8	1	34.2 - 37.8	49.9	30	1.5KE36A / CA
33.3	1	37.1 - 41	53.9	143	1.5KE39A / CA
36.8	1	40.9 - 45.2	59.3	25.3	1.5KE43A / CA
40.2	1	44.7 - 49.4	64.3	214	1.5KE47A
47.8	1	53.2 - 58.8	77	100	1.5KE56A
53	1	58.9 - 65.1	85	162	1.5KE62A
58.1	1	64.6 - 71.4	92	83	1.5KE68A
70.1	1	77.9 - 86.1	113	69	1.5KE82A
64.1	1	71.3 - 78.8	103	14.6	1.5KE75CA
85.5	1	95 - 105	137	11	1.5KE100A / CA
102	1	114 - 126	165	47	1.5KE120A / CA
128	1	143 - 158	207	38	1.5KE150A / CA
154	1	171 - 189	246	31.5	1.5KE180A / CA
171	1	190 - 210	274	51	1.5KE200A / CA
171	1	209 - 231	328	26	1.5KE220A / CA
213	1	237 - 263	344	23	1.5KE250A / CA
256	1	285 - 315	414	19	1.5KE300A / CA

RL Re-reeling available

Farnell

Stand-Off Voltage @ V_{rm} V	I_{RM} max µA	Breakdown Voltage V_{br}* V	Clamping Voltage Max. 8/20µs V(8/20µs)	Max. Peak Pulse Current 8/20µs A	Mftrs. List No.
1500W, Unidirectional(A Suffix) und Bidirectional (CA Suffix)**					
299	1	332 - 368	482	16	1.5KE350A / CA
342	1	380 - 420	548	37	1.5KE400A / CA
376	1	418 - 462	603	13	1.5KE440A / CA

* Impulse Test: t_p bei 50 ms, δ > 2 %
** 10/1000 µs Wellenform

203997

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	500+	1K+
1500W Unidirectional						
1.5KE6V8A..	980-1170●	0.710	0.510	0.370	0.310	0.270
1.5KE10A	988-4750●	0.530	0.410	0.330	0.260	0.220
1.5KE12A	988-4785●	0.530	0.410	0.330	0.260	0.220
1.5KE15A	980-1090●	0.570	0.410	0.330	0.260	0.250
1.5KE18A	988-4831●	0.380	0.270	0.230	0.200	0.182
1.5KE22A	988-4874●	0.450	0.310	0.260	0.230	0.210
1.5KE24A	988-4890●	0.530	0.410	0.330	0.260	0.220
1.5KE27A	988-4939●	0.530	0.410	0.330	0.260	0.220
1.5KE30A	988-4963●	0.530	0.410	0.330	0.260	0.220
1.5KE33A	980-1138●	0.570	0.410	0.330	0.260	0.250
1.5KE36A	988-5013●	0.450	0.310	0.260	0.230	0.210
1.5KE39A	988-5030●	0.450	0.310	0.260	0.230	0.210
1.5KE43A	988-5064●	0.530	0.410	0.330	0.260	0.240
1.5KE47A	980-1154●	0.570	0.410	0.330	0.260	0.250
1.5KE56A	988-5099●	0.450	0.310	0.260	0.230	0.210
1.5KE62A	980-1162●	1.070	0.660	0.480	0.310	0.270
1.5KE68A	988-5102●	0.450	0.310	0.260	0.230	0.210
1.5KE82A	988-5153●	0.530	0.410	0.330	0.260	0.220
1.5KE100A	988-4734●	0.450	0.310	0.260	0.230	0.210
1.5KE120A	988-4769●	0.420	0.310	0.230	0.200	0.182
1.5KE150A	988-4793●	0.450	0.310	0.260	0.230	0.210
1.5KE180A	988-4815●	0.710	0.520	0.410	0.310	0.270
1.5KE200A	980-1120●	0.570	0.410	0.330	0.260	0.250
1.5KE220A	988-4858●	0.740	0.580	0.470	0.360	0.330
1.5KE250A	988-4912●	0.450	0.340	0.280	0.260	0.230
1.5KE300A	988-4947●	0.740	0.580	0.470	0.360	0.330
1.5KE350A	988-4998●	0.510	0.430	0.370	0.340	0.300
1.5KE400A	980-1146●	0.740	0.580	0.470	0.360	0.310
1.5KE440A	988-5072●	0.450	0.340	0.280	0.260	0.230
1500W Bidirectional		**1+**	**25+**	**100+**	**500+**	**1K+**
1.5KE6V8CA	988-5129●	0.730	0.530	0.430	0.330	0.280
1.5KE7V5CA	988-5145●	0.730	0.530	0.430	0.330	0.280
1.5KE12CA	980-1081●	0.710	0.460	0.370	0.280	0.250
1.5KE15CA	980-1103●	0.710	0.460	0.370	0.280	0.250
1.5KE18CA	980-1111●	1.260	0.750	0.560	0.360	0.310
1.5KE22CA	988-4882●	0.580	0.460	0.370	0.280	0.240
1.5KE24CA	988-4904●	0.580	0.460	0.370	0.280	0.240
1.5KE30CA	988-4971●	0.580	0.460	0.370	0.280	0.240
1.5KE33CA	988-4980●	0.580	0.460	0.370	0.280	0.240
1.5KE36CA	988-5021●	0.580	0.460	0.370	0.280	0.240
1.5KE39CA	988-5048●	0.540	0.410	0.320	0.270	0.240
1.5KE75CA	988-5137●	0.950	0.730	0.600	0.500	0.460
1.5KE68CA	988-5110●	0.580	0.460	0.370	0.280	0.240
1.5KE82CA	988-5161●	0.580	0.460	0.370	0.280	0.240
1.5KE100CA	988-4742●	0.580	0.460	0.370	0.280	0.240
1.5KE120CA	988-4777●	0.730	0.530	0.430	0.330	0.280
1.5KE150CA	988-4807●	0.650	0.500	0.380	0.280	0.240
1.5KE180CA	988-4823●	0.560	0.430	0.330	0.240	0.210
1.5KE200CA	988-4840●	0.820	0.620	0.500	0.400	0.330
1.5KE220CA	988-4866●	0.820	0.640	0.510	0.400	0.350
1.5KE250CA	988-4920●	0.700	0.560	0.400	0.280	0.240
1.5KE300CA	988-4955●	0.820	0.640	0.510	0.400	0.330
1.5KE350CA	988-5005●	0.700	0.540	0.410	0.320	0.300
1.5KE400CA	988-5056●	0.560	0.430	0.340	0.280	0.230
1.5KE440CA	988-5080●	0.820	0.640	0.510	0.400	0.350

500W Transient Voltage Suppression Diodes

FAIRCHILD SEMICONDUCTOR



DO-15 Body L=7.62, Dia.=3.56

- Glass passivated junction
- 500W Peak Pulse Power capability at 1.0ms
- Excellent clamping capability
- Low incremental surge resistance
- Fast response time

V_{rm} Stand-off Voltage V	V_{br} Breakdown Voltage Min. V	I_{test} mA	Clamping Voltage V_{clamp} max. V	Max. Peak Pulse Current A	Mftrs. List No. Unidirec- tional (d.c.)	Bidirec- tional (a.c.)
500W Peak Pulse Power (1.0W Steady State @ T_a=75°C)						
5	6.4	10	9.2	54.3	SA5V0A	SA5V0CA
6	6.7	10	10.3	48.5	SA6V0A	
12	13.3	1	19.9	25.1	SA12A	SA12CA
13	14.4	1	21.9	23.2	SA13A	SA13CA
15	16.7	1	24.4	20.6	SA15A	SA15CA
18	20	1	29.2	17.2	SA18A	SA18CA
20	22.2	1	32.4	15.4	SA20A	SA20CA
24	26.7	1	38.9	12.8	SA24A	SA24CA
28	31.1	1	45.4	11	SA28A	
30	33.3	1	48.4	10.3	SA30A	SA30CA

211324

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	500+	1K+
Unidirectional						
SA5V0A	101-7823●	0.570	0.560	0.500	0.380	0.360
SA6V0A	101-7825●	0.550	0.370	0.250	0.160	0.126
SA12A	101-7805●	0.560	0.400	0.310	0.176	0.150
SA13A	101-7807●	0.610	0.420	0.290	0.177	0.141
SA15A	101-7811●	0.550	0.400	0.300	0.170	0.150
SA18A	101-7813●	0.610	0.420	0.290	0.177	0.141
SA20A	101-7815●	0.610	0.420	0.290	0.177	0.141
SA24A	101-7817●	0.910	0.660	0.510	0.290	0.240
SA28A	101-7819●	0.610	0.420	0.290	0.177	0.141
SA30A	101-7820●	0.830	0.590	0.460	0.250	0.220
Bidirectional						
SA5V0CA	101-7824●	0.770	0.550	0.370	0.230	0.182
SA12CA	101-7806●	0.440	0.310	0.240	0.188	0.151
SA13CA	101-7808●	0.590	0.420	0.290	0.178	0.141
SA15CA	101-7812●	0.560	0.400	0.310	0.188	0.151
SA18CA	101-7814●	0.230	0.220	0.210	0.141	0.132
SA20CA	101-7816●	0.750	0.540	0.350	0.220	0.176
SA24CA	101-7818●	0.910	0.650	0.510	0.290	0.240
SA30CA	101-7821●	0.890	0.640	0.500	0.280	0.240

Reels of 4000 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
SA12A	NEW 156-2398●	287.66	258.89
SA5V0A	NEW 156-2399●	303.64	273.27
SA12CA	NEW 156-2410●	415.51	373.95
SA30CA	NEW 156-2412●	415.51	373.95

600W TVS Diodes

P6KE Series

multicomp

New



DO-15

- Exceeds environmental standards of MIL-STD-19500
- 400W surge capability
- Low zener impedance

V_{br} Voltage Stand-off V	V_{clamp} max. V	Current Peak Pulse A	Mftrs. List No. Unidirectional	Bidirectional
105	85.5	137	4.5	P6KE100A	P6KE100CA
10.5	8.55	14.5	43	P6KE10A	P6KE10CA
116	94	152	4.1	P6KE110A	P6KE110CA
126	102	165	3.8	P6KE120A	P6KE120CA
12.6	10.2	16.7	37	P6KE12A	P6KE12CA
13.7	11.1	18.2	34	P6KE13A	P6KE13CA
158	128	207	3	P6KE150A	P6KE150CA
15.8	12.8	21.2	29	P6KE15A	P6KE15CA
168	136	219	2.8	P6KE160A	P6KE160CA
16.8	13.6	22.5	28	P6KE16A	P6KE16CA
189	154	246	2.5	P6KE180A	P6KE180CA
18.9	15.3	25.2	25	P6KE18A	P6KE18CA
210	171	274	2.2	P6KE200A	P6KE200CA
21	17.1	27.7	22	P6KE20A	P6KE20CA
23.1	18.8	30.6	20	P6KE22A	P6KE22CA
25.2	20.5	33.2	19	P6KE24A	P6KE24CA
28.4	23.1	37.5	16.8	P6KE27A	P6KE27CA
315	256	414	1.5	P6KE300A	P6KE300CA
31.5	25.6	41.4	15	P6KE30A	P6KE30CA
34.7	28.2	45.7	13.8	P6KE33A	P6KE33CA
37.8	30.8	49.9	12.6	P6KE36A	P6KE36CA
41	33.3	53.9	11.6	P6KE39A	P6KE39CA
420	342	548	1.1	P6KE400A	P6KE400CA
462	376	600	1.04	P6KE440A	P6KE440CA
49.4	40.2	64.8	9.7	P6KE47A	P6KE47CA
65.1	53	85	7.4	P6KE62A	P6KE62CA
71.4	58.1	92	6.8	P6KE68A	P6KE68CA
7.88	6.4	11.3	55	P6KE7.5A	P6KE7.5CA
8.61	7.02	12.1	52	P6KE8.2A	P6KE8.2CA
9.55	7.78	13.4	47	P6KE9.1A	P6KE9.1CA
95.5	77.8	125	5	P6KE91A	P6KE91CA

509379

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	250+	1K+
600W Unidirectional						
P6KE100A	157-8794●	0.160	0.117	0.101	0.089	0.079
P6KE10A	157-8796●	0.200	0.149	0.128	0.111	0.099
P6KE110A	157-8798●	0.160	0.117	0.101	0.089	0.079
P6KE120A	157-8800●	0.160	0.117	0.101	0.089	0.079
P6KE12A	157-8802●	0.160	0.117	0.101	0.089	0.079
P6KE13A	157-8804●	0.160	0.117	0.101	0.089	0.079
P6KE150A	157-8806●	0.160	0.117	0.101	0.089	0.079
P6KE15A	157-8809●	0.160	0.117	0.101	0.089	0.079
P6KE160A	157-8811●	0.176	0.131	0.111	0.098	0.087
P6KE16A	157-8813●	0.160	0.117	0.101	0.089	0.079
P6KE180A	157-8815●	0.176	0.131	0.111	0.098	0.087
P6KE18A	157-8817●	0.160	0.117	0.101	0.089	0.079
P6KE200A	157-8821●	0.176	0.131	0.111	0.098	0.087
P6KE20A	157-8823●	0.160	0.117	0.101	0.089	0.079
P6KE22A	157-8825●	0.160	0.117	0.101	0.089	0.079
P6KE24A	157-8827●	0.160	0.117	0.101	0.089	0.079
P6KE27A	157-8829●	0.160	0.117	0.101	0.089	0.079
P6KE300A	157-8831●	0.220	0.166	0.143	0.124	0.110
P6KE30A	157-8834●	0.160	0.117	0.101	0.089	0.079
P6KE33A	157-8836●	0.160	0.117	0.101	0.089	0.079
P6KE36A	157-8838●	0.160	0.117	0.101	0.089	0.079
P6KE39A	157-8840●	0.160	0.117	0.101	0.089	0.079
P6KE400A	157-8842●	0.220	0.166	0.143	0.124	0.110
P6KE440A	157-8845●	0.220	0.166	0.143	0.124	0.110
P6KE47A	157-8847●	0.160	0.117	0.101	0.089	0.079

RL Re-reeling available

Farnell

Protection Diodes - continued

600W TVS Diodes - continued

P6KE Series - continued

Order Multiple=5		Price Each				
Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
600W Unidirectional						
P6KE62A	157-8849●	0.160	0.117	0.101	0.089	0.079
P6KE68A	157-8851●	0.160	0.117	0.101	0.089	0.079
P6KE7.5A	157-8853●	0.220	0.166	0.143	0.124	0.110
P6KE8.2A	157-8855●	0.220	0.166	0.143	0.124	0.110
P6KE9.1A	157-8858●	0.220	0.166	0.143	0.124	0.110
P6KE91A	157-8860●	0.160	0.117	0.101	0.089	0.079
600W Bidirectional						
P6KE100CA	157-8795●	0.177	0.131	0.111	0.098	0.088
P6KE10CA	157-8797●	0.360	0.270	0.220	0.195	0.172
P6KE110CA	157-8799●	0.177	0.131	0.111	0.098	0.088
P6KE120CA	157-8801●	0.177	0.131	0.111	0.098	0.088
P6KE12CA	157-8803●	0.177	0.131	0.111	0.098	0.088
P6KE13CA	157-8805●	0.177	0.131	0.111	0.098	0.088
P6KE150CA	157-8808●	0.177	0.131	0.111	0.098	0.088
P6KE15CA	157-8810●	0.177	0.131	0.111	0.098	0.088
P6KE160CA	157-8812●	0.194	0.142	0.121	0.106	0.095
P6KE16CA	157-8814●	0.177	0.131	0.111	0.098	0.088
P6KE180CA	157-8816●	0.194	0.142	0.121	0.106	0.095
P6KE18CA	157-8818●	0.177	0.131	0.111	0.098	0.088
P6KE200CA	157-8822●	0.194	0.142	0.121	0.106	0.095
P6KE20CA	157-8824●	0.177	0.131	0.111	0.098	0.088
P6KE22CA	157-8826●	0.177	0.131	0.111	0.098	0.088
P6KE24CA	157-8828●	0.177	0.131	0.111	0.098	0.088
P6KE27CA	157-8830●	0.177	0.131	0.111	0.098	0.088
P6KE300CA	157-8833●	0.250	0.179	0.153	0.135	0.119
P6KE30CA	157-8835●	0.177	0.131	0.111	0.098	0.088
P6KE33CA	157-8837●	0.177	0.131	0.111	0.098	0.088
P6KE36CA	157-8839●	0.177	0.131	0.111	0.098	0.088
P6KE39CA	157-8841●	0.177	0.131	0.111	0.098	0.088
P6KE400CA	157-8843●	0.250	0.179	0.153	0.135	0.119
P6KE440CA	157-8846●	0.250	0.179	0.153	0.135	0.119
P6KE47CA	157-8848●	0.177	0.131	0.111	0.098	0.088
P6KE62CA	157-8850●	0.177	0.131	0.111	0.098	0.088
P6KE68CA	157-8852●	0.177	0.131	0.111	0.098	0.088
P6KE7.5CA	157-8854●	0.360	0.270	0.220	0.195	0.172
P6KE8.2CA	157-8857●	0.360	0.260	0.220	0.194	0.172
P6KE9.1CA	157-8859●	0.360	0.260	0.220	0.194	0.172
P6KE91CA	157-8861●	0.177	0.131	0.111	0.098	0.088

600W TVS Diodes

BZW06 Series

multicomp

New



DO-15

- Exceeds environmental standards of MIL-STD-19500
- 600W surge capability
- Excellent clamping capability
- Low impedancesurge resistance

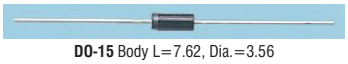
V_{br}	Peak Pulse @ 8/20µs	Peak Pulse @ 10/1000µs	V_{clamp}	Mftrs. List No.	
			8/20us max.	Unidirectional	Bidirectional
V	A	A	V		
120	3.6	19	212		BZW06-102B
15	147	28	27.2	BZW06-13	BZW06-13B
18	123	24	32.5	BZW06-15	BZW06-15B
24	93	28	42.8	BZW06-20	BZW06-20B
36	62	12	64.3	BZW06-31	BZW06-31B
39	57	11.1	69.7	BZW06-33	BZW06-33B

509376

Order Multiple=5		Price Each				
Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
600W Unidirectional						
BZW06-13	157-8782●	0.106	0.080	0.070	0.063	0.061
BZW06-15	157-8784●	0.106	0.080	0.070	0.063	0.061
BZW06-20	157-8786●	0.106	0.080	0.070	0.063	0.061
BZW06-31	157-8788●	0.106	0.080	0.070	0.063	0.061
BZW06-33	157-8792●	0.106	0.080	0.070	0.063	0.061
600W Bidirectional						
BZW06-102B	157-8781●	0.117	0.089	0.079	0.070	0.067
BZW06-13B	157-8783●	0.117	0.089	0.079	0.070	0.067
BZW06-15B	157-8785●	0.117	0.089	0.079	0.070	0.067
BZW06-20B	157-8787●	0.117	0.089	0.079	0.070	0.067
BZW06-31B	157-8791●	0.117	0.089	0.079	0.070	0.067
BZW06-33B	157-8793●	0.117	0.089	0.079	0.070	0.067

600W Transient Voltage Suppression Diodes

FAIRCHILD SEMICONDUCTOR



DO-15 Body L=7.62, Dia.=3.56

- Glass passivated junction
- 600W Peak Pulse Power capability at 1.0ms
- Excellent clamping capability
- Low incremental surge resistance
- Fast response time

V_{rm} Stand-off Voltage	V_{br} Breakdown Voltage Min.		I_{test}	Clamping Voltage V_{clamp} max.	Max. Peak Pulse Current		Mftrs. List No. Unidirec- tional (d.c.)	Bidirec- tional (a.c.)
V	V	V	mA	V	A	Package		
600W Peak Pulse Power (5.0W Steady State @ T_a=75°C)								
5.8	6.45	7.14	10	10.5	57.1	DO-15	P6KE6V8A	P6KE6V8CA
6.4	7.13	7.88	1	11.3	53.1	DO-15	P6KE7V5A	P6KE7V5CA
7.02	7.79	8.61	1	12.1	50	DO-15	P6KE8V2A	P6KE8V2CA
7.78	8.65	9.55	1	13.4	45	DO-15	P6KE9V1A	P6KE9V1CA
8.55	9.5	10.5	1	14.5	41	DO-15	P6KE10A	P6KE10CA
10.2	11.4	12.6	1	16.7	36	DO-15	P6KE12A	P6KE12CA
11.1	12.4	13.7	1	18.2	33	DO-15	P6KE13A	P6KE13CA
12.8	14.3	15.8	1	21.2	28	DO-15	P6KE15A	P6KE15CA
13.6	15.2	16.8	1	22.5	27	DO-15	P6KE16A	P6KE16CA
15.3	17.1	18.9	1	25.2	24	DO-15	P6KE18A	P6KE18CA
17.1	19	21	1	27.7	22	DO-15	P6KE20A	P6KE20CA
18.8	20.9	23.1	1	30.6	30.6	DO-15	—	P6KE22CA
20.5	22.8	25.2	1	33.2	20	DO-15	P6KE24A	P6KE24CA
25.6	28.5	31.5	1	41.4	14.5	DO-15	P6KE27A	P6KE30CA
28.2	31.4	34.7	1	45.7	13.2	DO-15	P6KE33A	P6KE33CA
30.8	34.2	37.8	1	49.9	12	DO-15	P6KE36A	P6KE36CA
33.3	37.1	41	1	53.9	11.2	DO-15	P6KE39A	P6KE39CA
40.2	44.7	49.4	1	64.8	9.3	DO-15	P6KE47A	P6KE47CA
53	58.9	65.1	1	85	7.1	DO-15	P6KE62A	P6KE62CA
58.1	64.6	71.4	1	92	6.5	DO-15	P6KE68A	P6KE68CA
85.5	95	105	1	137	4.4	DO-15	—	P6KE100CA
128	143	158	1	207	2.9	DO-15	P6KE150A	P6KE150CA
136	152	168	1	219	2.7	DO-15	P6KE160A	P6KE160CA
171	190	210	1	274	2.2	DO-15	P6KE200A	P6KE200CA
342	380	420	1	548	1.1	DO-15	P6KE400A	—
171	190	210	1	274	2.2	DO-15	P6KE200A	P6KE200CA
342	380	420	1	548	1.1	DO-15	P6KE400A	P6KE400CA
376	380	420	1	776	5.2	DO-15	P6KE440A	P6KE440CA

211325

Order Multiple=5		Price Each				
Mftrs. List No.	Order Code	5+	25+	100+	500+	1K+
Bidirectional						
P6KE6V8CA	101-7777●	0.500	0.310	0.240	0.164	0.152
P6KE7V5CA	101-7782●	0.470	0.300	0.230	0.164	0.152
P6KE8V2CA	101-7784●	0.400	0.240	0.195	0.132	0.120
P6KE9V1CA	101-7786●	0.500	0.310	0.240	0.164	0.152
P6KE10CA	101-7734●	0.340	0.260	0.210	0.163	0.132
P6KE12CA	101-7736●	0.340	0.260	0.210	0.163	0.132
P6KE13CA	101-7738●	0.340	0.260	0.210	0.159	0.126
P6KE15CA	101-7742●	0.340	0.260	0.210	0.163	0.132
P6KE16CA	101-7747●	0.340	0.260	0.210	0.163	0.132
P6KE18CA	101-7749●	0.340	0.260	0.210	0.163	0.132
P6KE20CA	101-7753●	0.340	0.260	0.210	0.163	0.132
P6KE22CA	101-7754●	0.410	0.280	0.200	0.134	0.107
P6KE24CA	101-7757●	0.340	0.260	0.210	0.163	0.132
P6KE30CA	101-7759●	0.340	0.260	0.210	0.163	0.132
P6KE33CA	101-7761●	0.340	0.260	0.210	0.163	0.132
P6KE36CA	101-7763●	0.340	0.260	0.210	0.157	0.132
P6KE39CA	101-7765●	0.360	0.230	0.186	0.126	0.107
P6KE47CA	101-7770●	0.460	0.300	0.230	0.153	0.130
P6KE62CA	101-7772●	0.340	0.260	0.210	0.163	0.132
P6KE68CA	101-7774●	0.340	0.260	0.210	0.163	0.132
P6KE100CA	101-7732●	0.340	0.260	0.210	0.163	0.132
P6KE150CA	101-7740●	0.340	0.260	0.210	0.163	0.132
P6KE160CA	101-7745●	0.360	0.220	0.178	0.117	0.107
P6KE200CA	101-7751●	0.340	0.260	0.210	0.163	0.132
P6KE400CA	101-7768●	0.680	0.470	0.340	0.230	0.167
Undirectional						
P6KE6V8A	101-7776●	0.460	0.290	0.230	0.152	0.135
P6KE7V5A	101-7781●	0.400	0.250	0.200	0.138	0.122
P6KE8V2A	101-7783●	0.400	0.250	0.200	0.138	0.122
P6KE9V1A	101-7785●	0.330	0.210	0.167	0.110	0.097
P6KE10A	101-7733●	0.320	0.230	0.187	0.145	0.117
P6KE12A	101-7735●	0.320	0.230	0.187	0.145	0.117
P6KE13A	101-7737●	0.300	0.230	0.187	0.145	0.117
P6KE15A	101-7741●	0.320	0.230	0.187	0.145	0.117
P6KE16A	101-7746●	0.300	0.230	0.187	0.145	0.117
P6KE18A	101-7748●	0.300	0.230	0.187	0.145	0.117
P6KE20A	101-7752●	0.320	0.230	0.187	0.145	0.117
P6KE24A	101-7756●	0.360	0.230	0.167	0.112	0.083
P6KE27A	101-7758●	0.300	0.230	0.187	0.145	0.117
P6KE33A	101-7760●	0.320	0.230	0.187	0.145	0.117
P6KE36A	101-7762●	0.320	0.230	0.187	0.145	0.117
P6KE39A	101-7764●	0.520	0.330	0.240	0.161	0.116
P6KE47A	101-7769●	0.520	0.330	0.240	0.161	0.116
P6KE62A	101-7771●	0.300	0.230	0.187	0.145	0.117
P6KE68A	101-7773●	0.300	0.230	0.187	0.145	0.117

1500W Transient Voltage Suppression Diodes

FAIRCHILD SEMICONDUCTOR



DO-201AE Body L=9.52, Dia.=5.33

- Glass passivated junction
- 1500W Peak Pulse Power capability at 1.0ms
- Excellent clamping capability
- Low incremental surge resistance
- Fast response time

V_{rm} Stand-off Voltage	V_{br} Breakdown Voltage Min.		I_{test}	V_{clamp} max.	Max. Peak Pulse Current	Max. Reverse Leakage Current	Mftrs. List No. Unidirectional (d.c.)	Bidirectional (a.c.)
V	V	V	mA	V	A	µA		
1500W Peak Pulse Power (5.0W Steady State @ T_a=75°C)								
5.8	6.45	7.14	10	10.5	143	1000	1V5KE6V8A	1V5KE6V8CA
6.4	7.13	7.88	10	11.3	133	500	1V5KE7V5A	—
7.02	7.79	8.61	10	12.1	124	200	—	1V5KE8V2CA
8.55	9.5	10.5	1	14.5	103	10	1V5KE10A	1V5KE10CA

V_{rm} Stand-off Voltage V	V_{br} Breakdown Voltage Min. V		I_{test} mA	V_{clamp} max. V	Max. Peak Pulse Current A	Max. Reverse Leakage Current µA	Mftrs. List No. Unidirectional (d.c.)	Bidirectional (a.c.)
1500W Peak Pulse Power (5.0W Steady State @ T_a=75°C)								
10.2	11.4	12.6	1	16.7	90	5	1V5KE12A	1V5KE12CA
12.8	14.3	15.8	1	21.2	71	5	1V5KE15CA	1V5KE15CA
13.6	15.2	16.8	1	22.5	67	5	—	1V5KE16CA
15.3	17.1	18.9	1	26.2	59.5	5	1V5KE18A	1V5KE18CA
17.1	19	21	1	27.7	54.2	5	1V5KE20A	1V5KE20CA
18.8	20.9	23.1	1	30.6	49	5	1V5KE22A	1V5KE22CA
20.5	22.8	25.2	1	33.2	45.2	5	1V5KE24A	1V5KE24CA
23.1	25.7	28.4	1	37.5	40	5	1V5KE27A	1V5KE27CA
25.6	28.5	31.5	1	41.4	36.2	5	1V5KE30A	1V5KE30CA
28.2	31.4	34.7	1	45.7	33	5	1V5KE33A	1V5KE33CA
30.8	34.2	37.8	1	49.9	30.1	5	1V5KE36A	1V5KE36CA
33.3	37.1	41	1	53.9	28	5	1V5KE39A	1V5KE39CA
40.2	44.7	49.4	1	64.8	23.2	5	1V5KE47A	1V5KE47CA
53	58.9	65.1	1	85	17.7	5	1V5KE62A	1V5KE62CA
58.1	65.6	71.4	1	92	16.3	5	1V5KE68A	1V5KE68CA
85.5	95	105	1	137	11	5	1V5KE100A	1V5KE100CA
128	143	158	1	207	7.2	5	1V5KE150A	1V5KE150CA
136	152	168	1	219	6.8	5	1V5KE160A	1V5KE160CA
171	190	210	1	274	5.5	5	1V5KE200A	1V5KE200CA
342	380	420	1	548	2.8	5	1V5KE400A	1V5KE400CA
376	418	462	1	462	2.6	5	1V5KE440A	—

211327

Mftrs. List No.		Price Each				
Unidirectional	**Order Code**	1+	25+	100+	500+	1K+
1V5KE6V8A	**101-7638●**	0.940	0.590	0.430	0.250	0.210
1V5KE7V5A	**101-7642●**	0.940	0.590	0.430	0.250	0.210
1V5KE10A	**101-7594●**	0.700	0.430	0.320	0.190	0.158
1V5KE12A	**101-7596●**	0.710	0.440	0.330	0.190	0.159
1V5KE15A	**101-7601●**	1.090	0.690	0.510	0.300	0.240
1V5KE18A	**101-7608●**	1.090	0.690	0.510	0.300	0.240
1V5KE20A	**101-7612●**	1.090	0.690	0.510	0.300	0.240
1V5KE22A	**101-7614●**	0.710	0.440	0.330	0.190	0.159
1V5KE24A	**101-7617●**	0.820	0.520	0.370	0.220	0.186
1V5KE27A	**101-7619●**	0.970	0.610	0.460	0.260	0.220
1V5KE30A	**101-7621●**	0.970	0.610	0.460	0.260	0.220
1V5KE33A	**101-7623●**	1.000	0.620	0.470	0.260	0.220
1V5KE36A	**101-7625●**	1.040	0.650	0.480	0.280	0.230
1V5KE39A	**101-7628●**	1.090	0.690	0.510	0.300	0.240
1V5KE47A	**101-7632●**	0.970	0.610	0.460	0.260	0.220
1V5KE62A	**101-7634●**	0.970	0.610	0.460	0.260	0.220
1V5KE68A	**101-7636●**	1.090	0.690	0.510	0.300	0.240
1V5KE100A	**101-7592●**	0.960	0.600	0.440	0.260	0.220
1V5KE150A	**101-7599●**	0.970	0.610	0.460	0.260	0.220
1V5KE160A	**101-7604●**	1.070	0.670	0.500	0.290	0.240
1V5KE200A	**101-7610●**	0.970	0.610	0.460	0.260	0.220
1V5KE400A	**101-7630●**	1.380	0.870	0.640	0.400	0.330
Bidirectional						
1V5KE6V8CA	**101-7641●**	1.190	0.760	0.560	0.350	0.290
1V5KE8V2CA	**101-7643●**	0.770	0.500	0.370	0.230	0.183
1V5KE10CA	**101-7595●**	1.030	0.650	0.490	0.300	0.240
1V5KE12CA	**101-7598●**	0.930	0.580	0.440	0.280	0.220
1V5KE15CA	**101-7602●**	1.080	0.680	0.510	0.310	0.250
1V5KE16CA	**101-7607●**	1.130	0.720	0.540	0.330	0.260
1V5KE18CA	**101-7609●**	1.120	0.720	0.530	0.330	0.260
1V5KE20CA	**101-7613●**	1.130	0.720	0.540	0.330	0.260
1V5KE22CA	**101-7616●**	0.740	0.470	0.350	0.210	0.175
1V5KE24CA	**101-7618●**	0.740	0.470	0.350	0.210	0.175
1V5KE27CA	**101-7620●**	1.130	0.720	0.540	0.330	0.260
1V5KE30CA	**101-7622●**	0.870	0.550	0.410	0.250	0.200
1V5KE33CA	**101-7624●**	1.100	0.690	0.520	0.320	0.260
1V5KE36CA	**101-7626●**	1.030	0.650	0.490	0.300	0.240
1V5KE39CA	**101-7629●**	1.130	0.720	0.540	0.330	0.260
1V5KE47CA	**101-7633●**	1.130	0.720	0.540	0.330	0.260
1V5KE62CA	**101-7635●**	1.080	0.680	0.510	0.310	0.250
1V5KE68CA	**101-7637●**	1.130	0.720	0.540	0.330	0.260
1V5KE100CA	**101-7593●**	1.130	0.720	0.540	0.330	0.260
1V5KE150CA	**101-7600●**	1.030	0.650	0.490	0.300	0.240
1V5KE160CA	**101-7605●**	0.870	0.550	0.410	0.250	0.200
1V5KE200CA	**101-7611●**	1.130	0.720	0.540	0.330	0.260
1V5KE400CA	**101-7631●**	1.420	0.890	0.680	0.400	0.340
1V5KE440A	NEW **155-5166●**	0.970	0.610	0.460	0.260	0.220

Transient Voltage Suppressors

multicomp



	min	max	min	max
500W Range:	L=5.8	7.6	Dia=2.6	3.6
1500W Range:	L=7.2	9.5	Dia=4.8	5.3

Silicone axial lead TVS's offering advantages of:-

- Low clamping voltages
- High transient power dissipation
- Small physical size
- Wide voltage range
- No wear-out limitation

Stand-off Voltage V_{rm} V	Breakdown Voltage V_{br} V	Clamping Voltage V_{clamp} V	I_{test} mA	P_{tot} @ T_L=75°C W	Max. Peak Pulse Current A	JEDEC No	Mftrs. List No.
500W Range (Unidirectional - dc)							
5	6.4 - 7.25	9.6	10	1	54.3	—	SA5A
6.5	7.22 - 7.98	11.2	10	3	46	—	SA6.5A
7	7.78 - 8.60	12	10	3	43	—	SA7.0A
7.5	8.33 - 9.21	12.9	1	3	40	—	SA7.5A
8	8.89 - 10.9	13.6	11	3	38	—	SA8.0A
9	10 - 11.1	15.4	1	3	34	—	SA9.0A
10	11.1 - 12.3	17	1	3	30	—	SA10A
12	13.3 - 15.3	19.9	1	1	25.1	—	SA12A
13	14.4 - 15.9	21.5	1	3	24	—	SA13A
15	16.7 - 18.5	24.4	1	1	20.6	—	SA15A
16	17.8 - 19.7	26	1	3	20	—	SA16A
18	22 - 22.1	29.2	1	3	17.9	—	SA18A
20	22.2 - 24.5	32.4	1	3	16	—	SA20A
22	24.4 - 26.9	35.5	1	3	14.7	—	SA22A
24	26.7 - 30.7	38.9	1	1	12.8	—	SA24A
28	31.1 - 34.4	45.4	1	3	11.5	—	SA28A
30	33.3 - 38.3	48.4	1	1	10.3	—	SA30A
33	36.7 - 40.6	53.3	1	3	9.8	—	SA33A
36	40 - 44.2	58.1	1	3	9	—	SA36A
48	53.3 - 58.9	77.4	1	3	6.7	—	SA48A
51	56.7 - 62.7	82.4	1	3	6.3	—	SA51A
75	88.3 - 92.1	121	1	3	4.3	—	SA75A
100	111 - 123	162	1	3	3.2	—	SA100A
120	133 - 147	193	1	3	2.7	—	SA120A
150	167 - 185	243	1	3	2.1	—	SA150A
1500W Range (Unidirectional - dc)							
5.5	6.45 - 7.14	10.5	10	5	143	1N6267A	1.5KE6.8A
9.4	10.5 - 11.6	15.6	1	5	96	1N6272A	1.5KE11A
13.6	15.2 - 16.8	22.5	1	5	67	1N6276A	1.5KE16A
15.3	17.1 - 18.9	25.2	1	5	59.5	1N6277A	1.5KE18A
18.8	20.9 - 23.1	30.6	1	5	49	1N6279A	1.5KE22A
23.1	25.7 - 28.4	37.5	1	5	40	1N6281A	1.5KE27A
25.6	28.5 - 31.5	41.4	1	5	36	1N6282A	1.5KE30A
28.2	31.4 - 34.7	45.7	1	5	33	1N6283A	1.5KE33A
30.8	34.2 - 37.8	49.9	1	5	30	1N6284A	1.5KE36A
40.2	44.7 - 49.4	64.8	1	5	23.2	1N6287A	1.5KE47A
136	152 - 162	219	1	5	6.8	1N6300A	1.5KE160A
342	380 - 420	548	1	5	4	—	1.5KE400A
500W Range (Bidirectional - ac)							
5	6.4 - 7	9.2	10	1	54.3	—	SA5CA
6.5	7.22 - 7.98	11.2	10	3	46	—	SA6.5CA
7	7.78 - 8.60	12	10	3	43	—	SA7.0CA
7.5	8.33 - 9.21	12.9	1	3	40	—	SA7.5CA
75	88.3 - 92.1	121	1	3	4.3	—	SA75CA
8	8.89 - 10.9	13.6	1	3	38	—	SA8.0CA
9	10 - 11.1	15.4	1	3	34	—	SA9.0CA
10	11.1 - 12.3	17	1	3	30	—	SA10CA
12	13.3 - 14.7	19.2	1	1	25.1	—	SA12CA
13	14.4 - 15.9	21.5	1	3	24	—	SA13CA
15	16.7 - 18.5	24.4	1	1	20.6	—	SA15CA
16	17.8 - 19.7	26	1	3	20	—	SA16CA
18	20 - 22.1	29.2	1	3	17.9	—	SA18CA
20	22.2 - 24.5	32.4	1	3	16	—	SA20CA
22	24.4 - 26.9	35.5	1	3	14.7	—	SA22CA
24	26.7 - 29.5	38.9	1	1	12.8	—	SA24CA
28	31.1 - 34.4	45.4	1	3	11.5	—	SA28CA
30	33.3 - 36.8	48.4	1	1	10.3	—	SA30CA
33	36.7 - 40.6	53.3	1	3	9.8	—	SA33CA
36	40 - 44.2	58.1	1	3	9	—	SA36CA
48	53.3 - 58.9	77.4	1	3	6.7	—	SA48CA
51	56.7 - 62.7	82.4	1	3	6.3	—	SA51CA
100	111 - 123	162	1	3	3.2	—	SA100CA
120	133 - 147	193	1	3	2.7	—	SA120CA
150	167 - 185	243	1	3	2.1	—	SA150CA
1500W Range (Bidirectional - ac)							
5.8	6.45 - 7.14	10.5	10	5	143	1N6267CA	1.5KE6.8CA
9.4	10.5 - 11.6	15.6	1	5	96	1N6272CA	1.5KE11CA
13.6	15.2 - 16.8	22.5	1	5	67	1N6276CA	1.5KE16CA
15.3	17.1 - 18.9	25.2	1	5	59.5	1N6277CA	1.5KE18CA
18.8	20.9 - 23.1	30.6	1	5	49	1N6279CA	1.5KE22CA
23.1	25.7 - 28.4	37.5	1	5	40	1N6281CA	1.5KE27CA
25.6	28.5 - 31.5	41.4	1	5	36	1N6282CA	1.5KE30CA
28.2	31.4 - 34.7	45.7	1	5	33	1N6283CA	1.5KE33CA
30.8	34.2 - 37.8	49.9	1	5	30	1N6284CA	1.5KE36CA
40.2	44.7 - 49.4	64.8	1	5	23.2	1N6287CA	1.5KE47CA
136	152 - 168	219	1	5	6.8	1N6300CA	1.5KE160CA
342	380 - 420	548	1	5	4	—	1.5KE400CA

204084

Mftrs List No.	Order Code	Price Each 1+	25+	100+	500+	1K+
Unidirectional						
SA5A	**956-5329●**	0.710	0.640	0.570	0.460	0.410
SA12A	**956-5337●**	0.730	0.710	0.630	0.500	0.420
SA15A	**956-5345●**	0.730	0.710	0.630	0.500	0.420
SA24A	**956-5353●**	0.730	0.710	0.630	0.500	0.420
SA30A	**956-5361●**	0.730	0.710	0.630	0.500	0.420
1.5KE6.8A	**956-5370●**	1.420	1.310	1.200	0.900	0.820
1.5KE11A	**956-5388●**	1.540	1.400	1.260	0.900	0.820
1.5KE16A	**956-5396●**	1.540	1.400	1.260	0.900	0.820
1.5KE18A	**956-5400●**	1.420	1.310	1.200	0.900	0.820
1.5KE22A	**956-5418●**	1.130	1.030	0.920	0.660	0.600
1.5KE27A	**956-5426●**	1.540	1.400	1.260	0.900	0.820
1.5KE30A	**956-5434●**	1.430	1.310	1.200	0.900	0.820
1.5KE33A	**956-5442●**	1.430	1.310	1.200	0.900	0.820
1.5KE36A	**956-5450●**	1.540	1.400	1.260	0.900	0.820
1.5KE47A	**956-5469●**	1.110	1.020	0.940	0.700	0.640
1.5KE160A	**956-5477●**	1.790	1.590	1.460	1.120	0.980
1.5KE400A	**956-5485●**	1.690	1.530	1.420	1.090	1.030
SA100A	NEW **157-8895●**	0.220	0.145	0.113	0.096	0.091
SA10A	NEW **157-8897●**	0.220	0.145	0.113	0.096	0.091
SA120A	NEW **157-8899●**	0.220	0.145	0.113	0.096	0.091
SA13A	NEW **157-8902●**	0.220	0.145	0.113	0.096	0.091
SA150A	NEW **157-8904●**	0.220	0.145	0.113	0.096	0.091
SA16A	NEW **157-8906●**	0.220	0.145	0.113	0.096	0.091
SA18A	NEW **157-8908●**	0.220	0.145	0.113	0.096	0.091
SA20A	NEW **157-8910●**	0.220	0.145	0.113	0.096	0.091
SA22A	NEW **157-8913●**	0.220	0.145	0.113	0.096	0.091
SA28A	NEW **157-8915●**	0.220	0.145	0.113	0.096	0.091
SA33A	NEW **157-8917●**	0.220	0.145	0.113	0.096	0.091
SA36A	NEW **157-8919●**	0.220	0.145	0.113	0.096	0.091
SA48A	NEW **157-8921●**	0.220	0.145	0.113	0.096	0.091
SA51A	NEW **157-8924●**	0.220	0.145	0.113	0.096	0.091

RL Re-reeling available

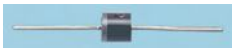
Protection Diodes - continued

Transient Voltage Suppressors - continued

Mftrs List No.	Order Code	Price Each 1+	25+	100+	500+	1K+
Unidirectional						
SA6.5A	NEW 157-8926●	0.220	0.145	0.113	0.096	0.091
SA7.0A	NEW 157-8928●	0.220	0.145	0.113	0.096	0.091
SA7.5A	NEW 157-8930●	0.220	0.145	0.113	0.096	0.091
SA75A	NEW 157-8932●	0.220	0.145	0.113	0.096	0.091
SA8.0A	NEW 157-8934●	0.220	0.145	0.113	0.096	0.091
SA9.0A	NEW 157-8937●	0.220	0.145	0.113	0.096	0.091
Bidirectional						
SA5CA	956-5493●	0.840	0.800	0.720	0.530	0.500
SA12CA	956-5507●	0.800	0.770	0.720	0.550	0.500
SA15CA	956-5515●	0.800	0.770	0.720	0.550	0.500
SA24CA	956-5523●	0.800	0.770	0.720	0.550	0.500
SA30CA	956-5531●	0.800	0.770	0.720	0.550	0.500
1.5KE6.8CA	956-5540●	1.620	1.450	1.370	1.050	0.970
1.5KE11CA	956-5558●	1.780	1.580	1.440	1.050	0.970
1.5KE16CA	956-5566●	1.780	1.580	1.440	1.050	0.970
1.5KE18CA	956-5574●	1.620	1.450	1.370	1.050	0.970
1.5KE22CA	956-5582●	1.780	1.580	1.440	1.050	0.970
1.5KE27CA	956-5590●	1.780	1.580	1.440	1.050	0.970
1.5KE30CA	956-5604●	1.340	1.180	1.080	0.790	0.720
1.5KE33CA	956-5612●	1.620	1.450	1.370	1.050	0.970
1.5KE36CA	956-5620●	1.780	1.580	1.440	1.050	0.970
1.5KE47CA	956-5639●	1.620	1.450	1.370	1.050	0.970
1.5KE160CA	956-5647●	1.960	1.850	1.820	1.460	1.180
1.5KE400CA	956-5655●	1.620	1.520	1.480	1.210	1.050
SA100CA	NEW 157-8896●	0.250	0.161	0.128	0.108	0.101
SA10CA	NEW 157-8898●	0.360	0.240	0.186	0.157	0.147
SA120CA	NEW 157-8901●	0.250	0.161	0.128	0.108	0.101
SA13CA	NEW 157-8903●	0.250	0.161	0.128	0.108	0.101
SA150CA	NEW 157-8905●	0.250	0.161	0.128	0.108	0.101
SA16CA	NEW 157-8907●	0.250	0.161	0.128	0.108	0.101
SA18CA	NEW 157-8909●	0.250	0.161	0.128	0.108	0.101
SA20CA	NEW 157-8912●	0.250	0.161	0.128	0.108	0.101
SA22CA	NEW 157-8914●	0.250	0.161	0.128	0.108	0.101
SA28CA	NEW 157-8916●	0.250	0.161	0.128	0.108	0.101
SA33CA	NEW 157-8918●	0.250	0.161	0.128	0.108	0.101
SA36CA	NEW 157-8920●	0.250	0.161	0.128	0.108	0.101
SA48CA	NEW 157-8922●	0.250	0.161	0.128	0.108	0.101
SA51CA	NEW 157-8925●	0.250	0.161	0.128	0.108	0.101
SA6.5CA	NEW 157-8927●	0.360	0.240	0.186	0.157	0.147
SA7.0CA	NEW 157-8929●	0.360	0.240	0.186	0.157	0.147
SA7.5CA	NEW 157-8931●	0.360	0.240	0.186	0.157	0.147
SA75CA	NEW 157-8933●	0.250	0.161	0.128	0.108	0.101
SA8.0CA	NEW 157-8936●	0.360	0.240	0.186	0.157	0.147
SA9.0CA	NEW 157-8938●	0.360	0.240	0.186	0.157	0.147

Reels of 3500 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
SA15A R0	NEW 156-2408●	232.62	209.37
SA12CA R0	NEW 156-2428●	257.67	231.91
SA30CA R0	NEW 156-2429●	257.67	231.91
SA5A R0	NEW 156-2407●	250.52	225.46

5 KW Transil Suppression Diodes



R6

- Peak pulse power: 5000 W (10/1000uS)
- Low clamping factor
- Fast response time

Transil diodes provide high overvoltage protection by clamping action. Their instantaneous response to transient overvoltages makes them particulary suited to protect voltage sensitive devices such as MOS technology and low voltage supplied IC's

Reverse Leakage Current Max mA	@	V_{rm} V	V_{br} min. V	@	I_t mA	P_{pp} W	V_{clamp} max. V	I_{fsm} A	Mftrs. List No.
0.005		15	16.6		1	5000	35	500	BZW50-15
0.005		22	24.4		1	5000	51	500	BZW50-22
0.005		33	36.6		1	5000	76	500	BZW50-33

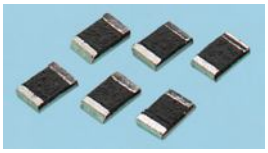
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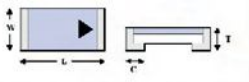
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	500+	1K+
BZW50-15	988-5250●	3.72	2.58	2.18	1.91	1.79
BZW50-22	988-5269●	3.72	2.58	2.18	1.91	1.79
BZW50-33	988-5277●	3.72	2.51	2.15	1.90	1.74

Low Power Signal Diodes

High Speed Switching

TAIWAN SEMICONDUCTOR





Item	1206	0805	0603
L	0.135(3.40) 0.119(3.0)	0.088(2.20) 0.072(1.8)	0.071(1.65) 0.59(1.45)
W	0.07(1.70) 0.054(1.30)	0.058(1.45) 0.042(1.05)	0.039(0.9) 0.027(0.7)
T	0.038(0.95) 0.03(0.75)	0.038(0.95) 0.03(0.75)	0.034(0.75) 0.026(0.55)
C	0.03(0.75) 0.014(0.35)	0.026(0.65) 0.01(0.25)	0.018(0.45) 0.010(0.25)

- Ceramic square package, easier to pick and place than round MELF equivalents
- Pad compatible with SOD523

(0603), SOD323 (0805), SOD123 (1206)

- Low forward voltage drop
- High current capability
- Polarity - arrow marks cathode

V_{rrm} V	V_r V	I_{fsm} A	$I_{f(av)}$ mA	V_f V	@	I_f mA	P_d mW	Package	Mftrs. List No.
100	75	2.0	150	1		350	100	0603	TS4148 RZ
100	75	2.0	150	1		500	100	0805	TS4148 RY
100	75	2.0	150	1		500	100	1206	TS4148 RX

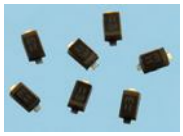
Order Multiple=10 Mftrs. List No.	Order Code	Price Each 10+	250+	1K+	5K+	10K+
TS4148 RZ	SMD 815-0192●	0.056	0.033	0.028	0.023	0.021
TS4148 RY	SMD 815-0206● RL	0.028	0.016	0.013	0.011	0.010
TS4148 RX	SMD 815-0214● RL	0.028	0.016	0.013	0.011	0.010

372230

Reel of 5000 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
TS4148 RY	NEW SMD 156-2350●	35.09	31.58

Small Signal Switching

BOURNS



Bourns small-signal high-speed Switching Diodes for switching digital signal applications in compact chip package0603 offers PCB real estate savings and have a lower profile than most competitive parts.

New

SMD

CD0603, H=1.7, W=0.8, D=0.6

V_{RRM} max. V	V_R max. V	I_F av max. mA	Ifs max. mA	V_F max. V	@ I_F mA	Mftrs. List No.
90	80	100	1000	1	100	CD0603-S0180
100	75	150	4000	1	50	CD0603-S01575

497089

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
CD0603-S01575	SMD 145-6535●	0.050	0.045	0.043	– –	– –
CD0603-S0180	SMD 145-6536●	0.050	0.045	0.043	– –	– –

High Speed Diodes

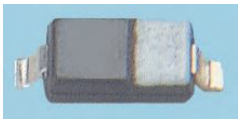
multicomp



Quadro MiniMelf



MiniMELF



SOD-123

SMD New

Vrrm V	Current, If av mA	Trr max. ns	Voltage, VF max. V	Package	Mftrs. List No.
75	100	4	1	SOD-123F	1N4448W
100	100	4	1000mV	MiniMELF	LL4448
—	100	4	1	MiniMELF	LL914B
—	—	4	1	QuadroMELF	LS4448
—	—	4	1	QuadroMELF	LS914B

516792

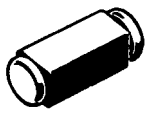
Order Multiple=10 Mftrs. List No.	Order Code	Price Each 10+	250+	1K+	3K+
1N4448W	SMD 162-1823●	0.037	0.027	0.022	0.018
LL4448	SMD 162-1882●	0.018	0.013	0.011	0.009
LL914B	SMD 162-1883●	0.018	0.013	0.011	0.009
LS4448	SMD 162-1885●	0.024	0.017	0.014	0.012
LS914B	SMD 162-1886●	0.024	0.017	0.015	0.012

Switching

multicomp VISHAY



Mini-melf L=3.7, Dia.=1.5



Quadro-melf H=1.5, W=1.5, D=3.7



Micro-melf L=1.9, Dia.=1.35

SMD

Leadless, hermetically sealed versions of the IN4148. The quadro-melf and micro-melf packages have square cross-sectional housings designed to provide stability, and greater 'pick and place' accuracy. Micro-melf has the same footprint as industry standard SOT-23/ SOD-232 outlines. Supplied on 8mm tape.

V_{rrm} V	V_r V	I_{fsm} A	I_{frm}	I_f mA	$I_{f(av)}$ mA	P_d mW	Package	Mftrs. List No.	Mftrs. List No.
100	75	2	500 mA	500	150	500	MiniMELF	MC	LL4148
100	75	2	0.45 mA	200	150	500	MiniMELF	SLX	LL4148
100	75	2	0.45 mA	200	150	500	QuadroMELF	SLX	LS4148
100	75	2	0.45 mA	200	0.15	500	MicroMELF	SLX	MCL4148
—	—	2	—	450	—	500	QuadroMELF	MC	LS4148

RL Re-reeling available

Farnell

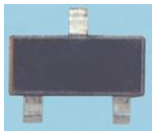
Order Multiple=10				Price Each			
Mftrs. List No.	Mftr.	Order Code		10+	250+	1K+	2K5+
LL4148	MC	SMD 735-5513●	RL	0.073	0.043	0.029	0.023
LL4148	SLX	SMD 954-9986●	RL	0.080	0.046	0.033	0.024
LS4148	SLX	SMD 954-9994●	RL	0.049	0.024	0.016	0.009
MCL4148	SLX	SMD 955-0089●	RL	0.039	0.032	0.019	0.011
LS4148	MC	SMD 162-1884●		0.024	0.017	0.014	0.012

211252

Reel of 2500		Price Per Reel	
Mftrs. List No.	Order Code	1+	3+
LL4148-GS08	NEW SMD 156-2352●	29.85	26.87

SOT-23

ON Semiconductor



- Low capacitance
- Fast reverse recovery times
- Popular compact Industry standard footprint
- Dual versions available in various configurations

New

SMD

14311 V_R max. V	I_F av max. mA	I_{FS} (t<1 sec) non-rep, max. mA	V_F max. V	@ I_F mA	Configuration	Mftrs. List No.
30	200	600	0.4	10	Common Anode	BAT54ALT1G
30	200	600	0.4	10	Common Cathode	BAT54CLT1G
30	200	600	0.8	100	Common Anode	BAT54LT1G
30	200	600	0.4	10	Series	BAT54SLT1G
50	200	500	1	100	Common Anode	BAV74LT1G
70	100	—	1.25	150	Single	BAL99LT1G
70	15	100	1	15	Series	BAS70-04LT1G
70	215	500	1.25	150		BAV199LT1G
70	200	500	1.25	150	Common Cathode	BAV70LT1G
70	215	500	1.25	150	Series	BAV99LT1G
70	200	500	1.25	150	Series	BAW56LT1G
75	200	500	1.25	150	Single	BAS116LT1G
100	200	500	1	10	Single	MMBD914LT1G
120	200	625	1.25	200	Single	BAS19LT1G
200	200	625	1.25	200	Single	BAS20LT1G
250	200	625	1.25	200	Single	BAS21LT1G

496718

Mftrs. List No.	Order Code		Price Each 5+	25+	100+	1K+
BAL99LT1G	SMD 143-1103●		0.051	0.036	0.031	0.028
BAS116LT1G	SMD 143-1104●		0.093	0.066	0.057	0.050
BAS19LT1G	SMD 143-1105●		0.043	0.031	0.027	0.024
BAS20LT1G	SMD 143-1106●		0.040	0.030	0.026	0.023
BAS21LT1G	SMD 143-1107●		0.043	0.031	0.027	0.024
BAS70-04LT1G	SMD 143-1108●		0.127	0.093	0.076	0.068
BAT54ALT1G	SMD 143-1111●		0.103	0.074	0.061	0.045
BAT54CLT1G	SMD 143-1112●		0.086	0.062	0.050	0.045
BAT54LT1G	SMD 143-1113●		0.074	0.054	0.043	0.039
BAT54SLT1G	SMD 143-1114●		0.103	0.074	0.061	0.045
BAV199LT1G	SMD 143-1115●		0.130	0.093	0.076	0.056
BAV70LT1G	SMD 143-1116●		0.051	0.036	0.031	0.026
BAV74LT1G	SMD 143-1117●		0.051	0.036	0.031	0.026
BAV99LT1G	SMD 143-1118●		0.051	0.036	0.031	0.026
BAW56LT1G	SMD 143-1119●		0.051	0.036	0.031	0.026
MMBD914LT1G	SMD 143-1125●		0.043	0.031	0.027	0.024

High Speed Diodes



SOD-80C



SOT-23

Application code key:
HS=High speed
LL=Low Leakage

V_{rrm} V	I_f mA	V_f V	@	I_f mA	Package	Mftrs. List No.
60	125	1		125	SOT-23	BAV74
75	200	—		200	SOD-80C	PMLL4448

211361

Order Multiple=10			Preis pro Stück				
Typ	Best.-Nr.		10+	100+	250+	1K+	3K+
BAV74	SMD 108-1210●	RL	0.122	0.075	0.051	0.021	0.011
PMLL4448	SMD 109-7279●	RL	0.043	0.030	0.023	0.019	0.016

High Speed Switching

SMD

Infineon technologies

V_r V	I_f mA	V_{br} V	$I_{r\ (max.)}$ µA	V_r V	V_f V	@	I_f mA	t_{rr} ns	Package	Device I.D.	Mftrs. List No.
Single Diodes											
40	750	40	50	30	0.44		250	—	SOD-323	C	BAT165
75	250	75	5	75	1.25		150	—	SOT-23	JVs	BAS116
85	200	75	1	75	1		50	4	SOT-23	A6s	BAS16
200	250	250	100	200	1.25		100	50	SOT-23	JSs	BAS21
Dual Diode - Common Cathode											
70	200	70	2.5	70	1		50	4	SOT-23	A4s	BAV70
70	200	70	2.5	70	1.25		50	4	SOT-23	A1s	BAW56
Dual Diode - Series											
25	125	75	30	25	1.25		150	4	SOT-23	A7*	BAV99
40	250	40	2	30	0.75		100	—	SOT-323	64	BAT6404WE6327
70	200	70	5	70	1.25		50	3	SOT-23	Jys	BAV199
70	200	70	2.5	70	1.25		150	4	SOT-323	A7s	BAV99W
Quad Diode - Series											
70	200	70	2.5	70	1.25		150	4	SOT-363	A7s	BAV99S

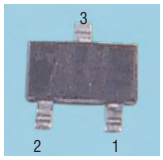
348902

Order Multiple=10			Price Each				
Mftrs List No.	Order Code		10+	100+	1K+	3K+	
BAS16	SMD 105-6496●	RL	0.095	0.051	0.022	0.014	
BAS21	SMD 105-6498●	RL	0.122	0.075	0.052	0.029	
BAS116	SMD 115-6416●	RL	0.093	0.067	0.054	0.030	
BAV70	SMD 105-6503●	RL	0.105	0.042	0.017	0.010	
BAV99	SMD 105-6504●	RL	0.147	0.057	0.028	0.011	
BAV199	SMD 115-6415●	RL	0.148	0.100	0.092	0.053	
BAW56	SMD 105-6508●	RL	0.174	0.080	0.058	0.039	
			10+	100+	250+	1K+	3K+
BAT165	SMD 105-6502●	RL	0.300	0.250	0.159	0.073	0.071
BAT6404WE6327	SMD 115-6417●		0.250	0.172	0.143	0.081	0.067
BAV99S	SMD 105-6506●		0.220	0.153	0.117	0.055	0.054
BAV99W	SMD 105-6507●		0.081	0.057	0.045	0.031	0.022
			Price Per Reel, 3000 Qty				
			1+	5+	10+		
BAV99	SMD 115-6418●		76.960	75.410	71.270		
BAV199E6327-BOX	SMD 156-2357●		58.200	52.390			

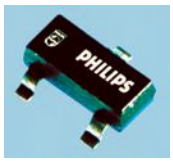
High Speed Switching

NXP founded by Philips

SMD



SOT-323



SOT-23



SOD-80C



SOT-143



SOD-110

V_r V	I_f mA	$I_{r\ (max.)}$ µA	V_f V	@	I_f mA	t_{rr} ns	Package	Device I.D.	Mftrs. List No.
5	200	—	—		—	—	SOT-23	*A9	BAS17
60	125	30	1		100	4	SOT-23	JA	BAV74
70	215	500	—		—	4	SOT-23	*5D	PMBD914
75	215	30	1.25		150	4	SOT-23	A6*	BAS16
75	175	30	1.25		150	4	SOT-323	A6	BAS16W
75	215	30	1.25		150	4	SOT-143	JTp	BAS28
75	200	25	1		100	4	SOD-80C	—	BAS32L
75	250	5	1.25		150	—	SOT-23	JVs	BAS116
75	250	30	1.25		150	4	SOD-110	A6	BAS216
75	250	500	—		—	4	SOD-323	A6	BAS316
75	200	500	—		—	3000	SOD-323	D4	BAS416
75	250	500	—		—	4	SOD-523	6	BAS516
75	200	500	—		—	3000	SOD-523	S1	BAS716
75	125	30	1.25		150	4	SOT-23	A4*	BAV70
75	100	30	1.25		150	4	SOT-323	A4	BAV70W
75	125	30	1.25		150	4	SOT-23	A7*	BAV99
75	200	450	—		—	4	SOT-363	K1*	BAV99S
75	130	30	1.25		150	4	SOT-323	A7	BAV99W
75	135	500	—		—	3000	SOT-323	JY*	BAV199W
75	125	30	1.25		150	4	SOT-23	A1*	BAW56
100	200	25	1		10	4	SOD-80C	—	PMLL4148L
100	215	450	—		1	—	SOT-23	—	PMBD7000
100	200	450	—		200	4	SOT-363	16*	BAS16VY
150	200	100	1.25		200	50	SOT-23	JR*	BAS20
150	250	100	1.25		200	50	SOD-80C	—	BAV102
200	125	100	1.25		200	50	SOT-143	L30	BAV23
200	225	625	—		—	50	SOT-23	*V5	BAV23S
200	250	100	1.25		200	50	SOD-80C	—	BAV103
200	200	625	—		—	50	SOT-23	JS*	BAS21
200	200	625	—		—	50	SOD-323	A7	BAS321
300	250	1000	—		—	50	SOD-523	L4	BAS521

452270

Order Multiple=10				Price Each		
Mftrs List No.	Mftr.	Order Code		10+	100+	250+
BAV74	NXP	SMD 108-1210●	RL	0.122	0.075	0.051
PMLL4448	NXP	SMD 109-7279●	RL	0.043	0.030	0.023
				10+	100+	1K+
BAS16	NXP	SMD 108-1180●	RL	0.066	0.048	0.033
BAS16VY	NXP	SMD 873-4240●	RL	0.300	0.149	0.106
BAS16W	NXP	SMD 108-1181●	RL	0.076	0.039	0.029
BAS17	NXP	SMD 873-4259●	RL	0.500	0.270	0.195
BAS20	NXP	SMD 108-1182●	RL	0.093	0.059	0.039
BAS21	NXP	SMD 873-4267●	RL	0.100	0.053	0.040
BAS28	NXP	SMD 108-1185●	RL	0.104	0.075	0.060
BAS32L	NXP	SMD 109-7173●	RL	0.036	0.028	0.016
BAS116	NXP	SMD 873-4232●	RL	0.171	0.091	0.067

RL Re-reeling available

Farnell

Low Power Signal Diodes - continued

High Speed Switching - continued

Order Multiple=10

			Price Each 10+	100+	1K+
BAS216	NXP	SMD 108-1183● RL	0.105	0.057	0.040
BAS316	NXP	SMD 873-4275● RL	0.079	0.043	0.031
BAS321	NXP	SMD 873-4283● RL	0.135	0.072	0.051
BAS416	NXP	SMD 873-4399● RL	0.150	0.080	0.059
BAS516	NXP	SMD 873-4402● RL	0.182	0.097	0.070
BAS521	NXP	SMD 873-4410● RL	0.135	0.072	0.051
BAS716	NXP	SMD 873-4500● RL	0.182	0.097	0.070
BAV23	NXP	SMD 108-1207● RL	0.300	0.191	0.132
BAV23S	NXP	SMD 873-4623● RL	0.195	0.106	0.075
BAV70	NXP	SMD 108-1208● RL	0.177	0.042	0.032
BAV70W	NXP	SMD 108-1209● RL	0.062	0.029	0.024
BAV99	NXP	SMD 108-1211● RL	0.210	0.063	0.044
BAV99S	NXP	SMD 873-4631● RL	0.169	0.093	0.065
BAV99W	NXP	SMD 108-1212● RL	0.067	0.037	0.022
BAV102	NXP	SMD 109-7174● RL	0.064	0.063	0.041
BAV103	NXP	SMD 109-7175● RL	0.099	0.060	0.039
BAV199W	NXP	SMD 873-4615● RL	0.146	0.078	0.057
BAW56	NXP	SMD 108-1213● RL	0.082	0.040	0.030
PMLL4148L	NXP	SMD 109-7176● RL	0.100	0.044	0.036
PMBD914	NXP	SMD 873-7800● RL	0.055	0.030	0.021
			10+	50+	100+
PMBD7000	NXP	NEW SMD 162-6499●	0.041	0.035	0.026

Reels of 3000

Mftrs. List No.	Order Code	Price Per Reel 1+	3+
BAS16.215	NEW SMD 156-2354●	30.00	27.00
BAV99.215	NEW SMD 156-2355●	31.35	28.21
BAS216.115	NEW SMD 156-2353●	68.87	

LL-34 and SOT-23


LL-34


SOT-23

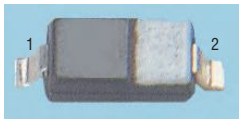
Characteristic	V_{rrm} V	$I_{f(av)}$ mA	V_f V	@	I_f mA	Device Marking	Package	Mftrs. List No.
	75	200	1		10	5	SOT-23	MMBD914
	75	200	1		10	5H	SOT-23	MMBD4148
High conductance	100	200	1		10	—	LL-34	FDLL4148
	90	200	1		200	L21	SOT-23	BAS31
	100	200	1		100	A8.	SOT-23	BAS19
Small Signal	100	400	0.72		5	—	LL-34	FDLL4448
	180	200	1.1		200	A13	SOT-23	MMBD1503A
	180	200	1.1		200	A14	SOT-23	MMBD1504A
	200	200	1		100	29	SOT-23	BAS21

211295

Mftrs. List No.	Order Code	Price Each 10+	100+	1K+	10K+
BAS19	SMD 984-3833● RL	0.079	0.051	0.036	0.023
BAS21	SMD 984-3728● RL	0.073	0.059	0.040	0.022
BAS31	SMD 984-3671● RL	0.031	0.028	0.024	0.021
FDLL4148	SMD 984-3710● RL	0.028	0.022	0.016	0.010
FDLL4448	NEW SMD 149-5127●	0.050	0.035	0.028	0.020
MMBD1503A	SMD 984-3639● RL	0.132	0.089	0.061	0.024
MMBD1504A	SMD 984-3647● RL	0.104	0.063	0.047	0.021
MMBD4148	SMD 984-4040● RL	0.086	0.054	0.037	0.016
MMBD914	SMD 984-4058● RL	0.092	0.061	0.042	0.017

SOT-23 and SOT-223 High Speed Switching


SOT-23
h=1.12, W=3.05, D=2.5



SOD-123

V_{rrm} V	$I_{f(av)}$ mA	V_f V	@	I_f mA	Device Marking	Package	Mftr.	Mftrs. List No.
70	200	1		50	A4	SOT-23	MC	TBAV70
70	200	1.25		150	A1	SOT-23	MC	TBAW56
70	200	1		100	A4	SOT-23	FCH	BAV70
70	200	1		50	A7	SOT-23	FCH	BAV99
70	215	1		50	A7	SOT-23	ON	BAV99LT1G.
70	200	1.25		150	A1	SOT-23	FCH	BAW56
75	200	1		50	A6	SOT-23	ON	BAS16LT1G
75	—	0.855		10	A6	SOT-23	MC	BAS16
75	200	0.855		10	A4	SOT-23	MC	BAV70
75	200	0.855		10	A7	SOT-23	MC	BAV99
75	200	0.855		10	A1	SOT-23	MC	BAW56
85	200	1		50	A6	SOT-23	FCH	BAS16
85	200	1		50	A6	SOT-23	MC	TBAS16
85	215	1		10	—	SOT-23	MC	BAS116
100	200	1		10	51	SOD-123	ON	MMSD4148T1G

Order Multiple=10

Mftrs. List No.	Mftr.	Order Code	Price Each 10+	100+	1K+	3K+
BAS16	FCH	SMD 984-3957● RL	0.082	0.065	0.045	0.019
TBAS16	MC	SMD 920-7147● RL	0.059	0.043	0.030	0.025
BAS16LT1G	ON	SMD 955-8659● RL	0.064	0.040	0.027	0.022
BAV70	FCH	SMD 984-3604● RL	0.059	0.039	0.024	0.016
TBAV70	MC	SMD 920-7180● RL	0.122	0.061	0.046	0.040
BAV99	FCH	SMD 984-3612● RL	0.059	0.039	0.024	0.016
BAV99LT1G.	ON	SMD 955-8667● RL	0.072	0.041	0.034	0.022
BAW56	FCH	SMD 984-3620● RL	0.054	0.032	0.024	0.016
TBAW56	MC	SMD 920-7198● RL	0.122	0.061	0.046	0.040
MMSD4148T1G	ON	SMD 955-6079● RL	0.097	0.066	0.058	0.042
BAS116	MC	NEW SMD 162-1824●	0.040	0.029	0.023	0.020
BAS16	MC	NEW SMD 162-1825●	0.037	0.027	0.021	0.018
BAV70	MC	NEW SMD 162-1836●	0.040	0.029	0.023	0.020
BAV99	MC	NEW SMD 162-1837●	0.039	0.028	0.023	0.019
BAW56	MC	NEW SMD 162-1838●	0.040	0.029	0.023	0.020

211140

Reels of 1000

Mftrs. List No.	Order Code	Price Per Reel 1+	5+	10+
BAV99	NEW SMD 115-6418●	76.96	75.41	71.27
		1+	3+	
BAS16	NEW SMD 156-2358●	41.95	37.75	

Small Signal



Application code key:
HS=High speed

V_{rrm} V	$I_{f(av)}$ mA	V_f V	@	I_f mA	Package	App'n Code	Mftrs List No.
30	200	0.4		10	DO-34	HS	BAT85◆
50	200	0.38		0.1	DO-34	HS	BAT86
75	100	1.0		100	DO-35	HS	BAW62
100	200	1.0		10	DO-35	HS	1N4148
75	150	0.72		5	DO-35	HS	1N4448
200	250	1.2		200	DO-35	HS	BAV20
250	250	1.2		200	DO-35	HS	BAV21

◆ Schottky barrier

Order Multiple=5

Mftrs. List No.	Order Code	Price Each 5+	25+	100+	1K+	3K+
BAT85	109-7299●	0.193	0.126	0.109	0.071	0.049
BAT86	109-7300●	0.270	0.185	0.146	0.112	0.093
BAV20	109-7302●	0.036	0.024	0.018	0.013	0.012
BAV21	109-7303●	0.038	0.027	0.021		
BAW62	109-7304●	0.107	0.053	0.026		
Order Multiple=10		10+	100+	250+	1K+	
1N4148	108-1177●	0.034	0.020	0.014	0.009	
1N4448	109-7294●	0.026	0.014	0.012		

211427

Reel of 10000

Mftrs. List No.	Order Code	Price Per Reel 1+
BAT85.113	NEW 156-2331●	378.22

Small Signal



Application code key:
GP=General Purpose, HV=High Voltage, SW=High Freq. Switching

V_{rrm} max V	$I_{f(av)}$ max mA	V_f V	@	I_f mA	App'n Code	Mftrs List No.
100	200	1		100	SW	1N4448
100	200	1		10	SW	1N4148
75	200	1		10	SW	1N914

211294

Order Multiple=10

Mftrs. List No.	Order Code	Price Each 10+	100+	1K+	10K+
1N4448	984-3698●	0.036	0.025	0.024	0.010
1N914	984-3817●	0.039	0.016	0.014	0.006
		10+	250+	1K+	5K+
1N4148	984-3680●	0.014	0.012	0.008	0.006

£ € 40,000 PRICES REDUCED

RL Re-reeling available

Farnell

Small Signal



a) L=4.25, Dia=1.85
b) L=5.2, Dia=2.7
c) L=3.81, Dia=1.71
d) L=7.6, Dia=2.7
Coloured band indicates cathode

V_{rrm} V	$I_{f(av)}$ mA	V_f V	@	I_f mA	Package	Mftr	Mftrs List No.
20	350	0.44		10	(a)	ST	BAT47
30	100	0.4		10	(a)	ST	BAT42
30	100	0.45		15	(a)	ST	BAT43
30	110	0.45		10	(d)	SEM	OA47
40	350	0.4		200	(a)	ST	BAT48
75	100	1		100	—	MC	1N4448
75	10	1		100	—	MC	1N4148W
100	150	1		10	(a)	MC	1N4148.
100	100	0.45		1	(a)	ST	BAT41
100	150	0.45		10	(a)	ST	BAT46
100	200	1.2		200	(c)	FCH	1S921TR
115	50	2.1		30	(d)	SEM	OA91/05
115	50	1.85		30	(d)	SEM	OA95/05
150	200	1.3		100	(a)	FCH	BAX16TR
200	200	1.2		200	(c)	FCH	1S923
350	400	1.5		2	(b)	VSH	BY206GP

■ Germanium ◆ Silicon Schottky barrier

Order Multiple=5

Mftrs. List No.	Mftr.	Order Code	Price Each 5+	25+	100+	1K+
BAT41	ST	980-1421●	0.360	0.260	0.162	0.118
BAT42	ST	980-1430●	0.360	0.260	0.162	0.118
BAT43	ST	980-1448●	0.360	0.260	0.147	0.118
BAT46	ST	980-1456●	0.420	0.290	0.191	0.147
BAT47	ST	980-1464●	0.360	0.260	0.167	0.118
BAT48	ST	980-1472●	0.240	0.152	0.116	0.074
			5+	**25+**	**100+**	**1K+**
BY206GP	VSH	102-1751●	0.310	0.175	0.173	0.102
OA47	SEM	120-8634●	1.070	0.930	0.820	0.440
OA91/05	SEM	120-8635●	0.550	0.430	0.350	0.220
OA95/05	SEM	120-8636●	0.550	0.430	0.350	0.220
Order Multiple=10			**10+**	**100+**	**1K+**	**3K+**
BAX16TR	FCH	107-6355●	0.045	0.023	0.022	0.007
1N4448	MC	NEW 162-1822●	0.037	0.027	0.022	0.018
1N4148W	MC	NEW SMD 162-1821●	0.038	0.028	0.022	0.019
			10+	**250+**	**1K+**	**5K+**
1N4148	FCH	984-3680●	0.014	0.012	0.008	0.006
1N4148.	MC	956-5124●	0.011	0.008	0.007	0.006
			10+	**100+**	**250+**	**1K+**
1S921TR	FCH	105-7672●	0.047	0.031	0.018	0.011
1S923	FCH	984-3825●	0.063	0.041	0.022	0.014

211387

Mftrs. List No.		Order Code	Price Per Reel 1+	3+	+
1N4148TR	REEL 10000	NEW 156-2351●	59.94	53.95	– –
			1+	**3+**	
BAT42	REEL 4000	NEW 156-2336●	211.02	189.90	
BAT48	REEL 4000	NEW 156-2337●	234.94	211.43	

High Voltage



DO-41: Plastic, L=5.2, Dia.=2.7
Coloured band indicates cathode

V_{rwm} kV	V_{rrm} kV	$I_{f(av)}$ mA	I_{trm} A	Package	Mftr.	Mftrs. List No.
0.18	1.6	360	15.0	DO-41	GS	BYX10GP
—	—	250	—	SOD-57	TFK	BY203-20S-TAP

Order Multiple=5

Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	3K+
BY203-20S-TAP	107-5763●	0.550	0.290	0.210	0.160
BYX10GP	954-9218●	0.350	0.186	0.185	0.110

211395

Box of 5000 Mftrs. List No.	Order Code	Price Per Box 1+
BY203-20STAP	NEW 156-2359●	1,105.45

Low Power, Low Leakage Diodes

DO-34



V_{rrm} V	I_F mA	V_F mV	@	I_F mA	Package	Mftrs List No.
125	0.25	1000		100	DO-34	BAS45A

Order Multiple=5

Mftrs. List No.	Order Code	Price Each 5+	25+	100+	1K+
BAS45A	109-7293●	0.670	0.350	0.260	0.139

211425

Reel of 10000 Mftrs. List No.	Order Code	Price Per Reel 1+
BAS45A.113	NEW 156-2360●	928.03

Low Leakage



DO-35 L=3.8, Dia.=1.88



TO-18





LL-34 L=3.5, Dia.=1.5

V_{RRM} max V	I_F (av) max mA	V_F V	@	I_F mA	Package	Mftr.	Mftrs List No.
150	200	1		200	DO-35	FCH	FDH300
150	200	1.15		300	DO-35	FCH	FDH333
125	200	0.8		10	DO-35	FCH	1N3595
45	50	1.5		1	TO-18	SLX	PAD5

V_{RWM} V	V_{BR} max. V	Test Current mA	Package	Mftr.	Mftrs List No.
5	7.25	10	DO-15	MC	SA5A
12	15.3	1	DO-15	MC	SA12A
24	30.7	1	DO-15	MC	SA24A
30	38.3	1	DO-15	MC	SA30A

211257

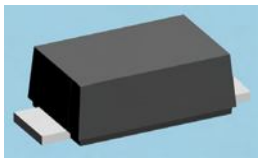
Order Multiple=1

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	1K+
FDH300	984-3752●	0.090	0.055	0.039	0.023
FDH333	984-3760●	0.135	0.087	0.060	0.040
PAD5	105-7867●	6.550	3.360	2.300	1.660
SA5A	956-5329●	0.710	0.640	0.570	0.460
SA12A	956-5337●	0.730	0.710	0.630	0.500
SA30A	956-5361●	0.730	0.710	0.630	0.500
Order Multiple=10		**10+**	**100+**	**250+**	**1K+**
1N3595	984-3744●	0.420	0.260	0.210	0.126
SA24A	956-5353●	0.730	0.710	0.630	0.500

Low Power Schottky Diodes

Diode, Schottky SMF

I_F = 1A, I_{FSM}=30A*



V_{RRM} V	V_F @ 1A V	Mftr.	Mftrs. List No.
20	0.45	TSC	SS12L
30	0.50	TSC	SS13L
40	0.55	TSC	SS14L
60	0.70	TSC	SS16L
90	0.80	TSC	SS19L
100	0.80	TSC	SS110L

* Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)

503615

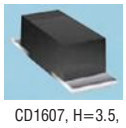
Order Multiple=10

Mftrs. List No.	Description	Order Code	Price Each 10+	100+	250+	1K+
SS12L	Diode Schottky SMF 1A 20V	SMD 155-9157●	0.093	0.062	0.047	0.042
SS13L	Diode Schottky SMF 1A 30V	SMD 155-9158●	0.093	0.062	0.047	0.042
SS14L	Diode Schottky SMF 1A 40V	SMD 155-9159●	0.093	0.062	0.047	0.042
SS16L	Diode Schottky SMF 1A 60V	SMD 155-9160●	0.099	0.066	0.050	0.044
SS19L	Diode Schottky SMF 1A 90V	SMD 155-9161●	0.106	0.070	0.053	0.047
SS110L	Diode Schottky SMF 1A 100V	SMD 155-9156●	0.108	0.072	0.054	0.048

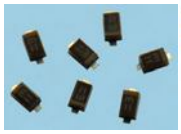
Schottky Barrier Chip Diode Series



SMA, H=3.7, W=2.1, D=1.27



CD1607, H=3.5, W=1.5, D=1.5



CD0603, H=1.7, W=0.8, D=0.6

Bourns offers small-signal Schottky Barrier Diodes for switching and rectification applications in compact chip packages.

V_{RRM} max. V	I_F av max. A	Ifs max. A	V_F max. V	@ I_F A	Package	Mftrs. List No.
40	1	30	0.5	1	Mini SMA	CD1607-B140LF
40	3	100	0.5	3	SMA	CD214A-B340LF
45	30	—	0.37	0.001	0603	CD0603-B00340
60	1	30	0.7	1	SMA	CD214A-B160LF

RL Re-reeling available

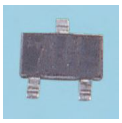
Low Power Schottky Diodes - continued

Schottky Barrier Chip Diode Series - continued

497076

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
CD1607-B140LF	SMD 145-6527●	0.146	0.129	0.120	– –	– –
CD214A-B160LF	SMD 145-6528●	0.082	0.072	0.067	– –	– –
CD214A-B340LF	SMD 145-6529●	0.195	0.174	0.161	– –	– –
CD0603-B00340	SMD 145-6534●	0.072	0.064	0.059	– –	– –

Small Signal Schottky Barrier Diodes



SOT-323



SOT-666

V_{RRM}	I_F (mA)	Mftr. List No.	V_{RRM}	I_F (mA)	Mftr.	V_{RRM}	I_F (mA)	Mftr.
SOD-323			10	3000	PMEG1030EH	70	70	BAS70W
10	2000	PMEG1020EA	20	500	PMEG2005EH	70	70	BAS70-04W
10	2000	PMEG1020EJ	20	1000	PMEG2010AEH	70	70	BAS70-05W
20	1000	PMEG2010BEA	20	2000	PMEG2020EH	70	70	BAS70-06W
20	1000	PMEG2010EA	30	1500	PMEG3015EH	**SOT-363**		
20	1500	PMEG2015EA	30	2000	PMEG3020EH	15	30	1PS88SB82
20	2000	PMEG2020AEA	40	500	PMEG4005EH	30	200	BAT74S
20	2000	PMEG2020EJ	40	1000	PMEG4010CEH	40	120	1PS88SB48
20	500	PMEG2005AEA	40	1000	PMEG4010EH	70	70	BAS70-07S
20	1000	BAT760	60	1000	PMEG6010CEH	**SOD-87**		
30	500	PMEG3005AEA	**SOD-523**			20	1A	PRLL5817
30	1000	PMEG3010BEA	4	30	1PS79SB17	40	A1	PRLL5819
40	500	PMEG4005AEA	20	500	PMEG2005EB	**SOD-880**		
40	1000	PMEG4010BEA	20	1000	PMEG2010AEB	30	200	1PS70SB10
40	200	1PS76SB21	30	200	1PS79SB10	**SOT-416**		
40	120	1PS76SB40	30	200	PMEG3002AEB	40	120	1PS75SB45
70	70	1PS76SB70	40	200	1PS79SB30	**SOT-143**		
SOT-23			30	200	1PS79SB31	40	120	BAS40-07
4	30	PMBD353	40	120	1PS79SB40	70	70	BAS70-07
20	1000	PMEG2010AET	70	70	1PS79SB70	**SOD-80**		
20	500	PMEG2005ET	**SOT-323**			50	200	BAS86
40	500	BAT720	15	30	1PS70SB84	**SOT-457**		
40	120	BAS40-06	30	200	1PS70SB14	60	1000	PMEG6010AED
40	120	BAS40-05	30	200	1PS70SB15	**SOT-666**		
40	120	BAS40	30	200	1PS70SB16	40	1000	PMEG4010BEV
40	500	PMEG4005ET	40	120	BAS40-04W	20	500	PMEG2005AEV
70	70	BAS70	40	120	BAS40-05W	10	2000	PMEG1020EV
70	70	BAS70-05	40	120	BAS40-06W	30	200	BAT54VV
SOD-123F			40	500	1PS70SB20	40	120	BAS40-05V
10	2000	PMEG1020EH	40	120	BAS40W			

211400

Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	3K+
SOD-123F					
PMEG1020EH	SMD 151-0669●	0.260	0.210	0.180	0.137
PMEG1030EH	SMD 151-0670●	0.200	0.161	0.139	0.123
PMEG2005EH	SMD 151-0671●	0.200	0.161	0.139	0.118
PMEG2010AEH	SMD 151-0673●	0.220	0.178	0.153	0.125
PMEG2020EH	SMD 151-0679●	0.320	0.260	0.183	0.137
PMEG3015EH	SMD 151-0686●	0.220	0.178	0.153	0.135
PMEG3020EH	SMD 151-0687●	0.200	0.161	0.139	0.123
PMEG4005EH	SMD 151-0688●	0.200	0.161	0.139	0.118
PMEG4010CEH	SMD 151-0690●	0.220	0.178	0.153	0.131
PMEG4010EH	SMD 151-0692●	0.220	0.178	0.153	0.125
PMEG6010CEH	SMD 151-0694●	0.220	0.178	0.153	0.131
SOD-323					
1PS76SB21	SMD 873-4038● RL	0.300	0.128	0.100	0.082
1PS76SB70	SMD 873-4062● RL	0.133	0.058	0.046	0.038
BAT760	SMD 873-4593● RL	0.340	0.200	0.149	0.114
PMEG1020EA	SMD 873-7819● RL	0.420	0.260	0.180	0.141
PMEG1020EJ	SMD 873-7827● RL	0.270	0.171	0.120	0.093
PMEG2005AEA	SMD 873-7843● RL	0.330	0.200	0.142	0.111
PMEG2010BEA	SMD 873-7886● RL	0.360	0.220	0.158	0.121
PMEG2010EA	SMD 873-7908● RL	0.360	0.220	0.158	0.121
PMEG2015EA	SMD 873-7924● RL	0.320	0.191	0.138	0.106
PMEG2020AEA	SMD 873-7940● RL	0.490	0.300	0.210	0.165
PMEG3005AEA	SMD 873-7975● RL	0.330	0.200	0.142	0.111
PMEG3010BEA	SMD 873-7991● RL	0.360	0.220	0.158	0.121
PMEG4005AEA	SMD 873-8025● RL	0.310	0.188	0.134	0.104
PMEG4010BEA	SMD 873-8041● RL	0.340	0.200	0.149	0.114
PMEG2020EJ	SMD 873-7959● RL	0.400	0.250	0.175	0.137
SOD-523					
1PS79SB10	SMD 873-4070● RL	0.310	0.133	0.104	0.086
1PS79SB17	SMD 873-4089● RL	0.250	0.109	0.085	0.069
1PS79SB30	SMD 873-4097● RL	0.440	0.280	0.192	0.150
1PS79SB31	SMD 873-4100● RL	0.440	0.280	0.192	0.150
1PS79SB40	SMD 873-4119● RL	0.270	0.159	0.114	0.089
1PS79SB70	SMD 873-4143● RL	0.270	0.159	0.114	0.089
PMEG2005EB	SMD 873-7860● RL	0.330	0.200	0.142	0.111
PMEG2010AEB	SMD 873-7878● RL	0.310	0.188	0.134	0.104
PMEG3002AEB	SMD 873-7967● RL	0.320	0.194	0.138	0.107
SOD-80					
BAS86	SMD 873-4542● RL	0.153	0.080	0.058	0.039
SOD-880					
1PS70SB10	SMD 873-3880● RL	0.104	0.046	0.036	0.030
SOT-143					
BAS40-07	SMD 873-4364● RL	0.210	0.130	0.092	0.071
BAS70-07	SMD 873-4461● RL	0.210	0.130	0.092	0.071

Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	3K+
SOT-23					
BAS40	SMD 873-4291● RL	0.153	0.082	0.058	0.039
BAS70	SMD 873-4429● RL	0.153	0.082	0.058	0.039
BAT720	SMD 873-4569● RL	0.340	0.180	0.128	0.085
BAS40-06	SMD 873-4348● RL	0.153	0.082	0.058	0.039
BAS40-05	SMD 873-4313● RL	0.153	0.082	0.058	0.039
PMEG2005ET	SMD 151-0672●	0.200	0.161	0.139	0.110
PMEG2010AET	SMD 151-0674●	0.166	0.135	0.115	0.102
PMEG4005ET	SMD 151-0689●	0.200	0.161	0.139	0.110
BAS70-05	SMD 108-1186● RL	0.104	0.071	0.055	0.047
SOT-323					
1PS70SB20	SMD 873-3929● RL	0.300	0.128	0.100	0.082
1PS70SB84	SMD 873-3988● RL	0.480	0.200	0.162	0.131
BAS40W	SMD 873-4380● RL	0.133	0.082	0.058	0.046
BAS70W	SMD 873-4496● RL	0.158	0.093	0.066	0.053
1PS70SB14	SMD 873-3899● RL	0.106	0.047	0.036	0.031
1PS70SB16	SMD 873-3910● RL	0.100	0.044	0.034	0.029
1PS70SB15	SMD 873-3902● RL	0.109	0.048	0.037	0.032
BAS40-05W	SMD 873-4330● RL	0.129	0.080	0.056	0.045
BAS40-06W	SMD 873-4356● RL	0.129	0.080	0.056	0.045
BAS70-06W	SMD 873-4453● RL	0.133	0.082	0.058	0.046
BAS70-05W	SMD 873-4445● RL	0.133	0.082	0.058	0.046
BAS40-04W	SMD 873-4305● RL	0.133	0.082	0.058	0.046
BAS70-04W	SMD 873-4437● RL	0.132	0.093	0.066	0.053
SOT-363					
BAS70-07S	SMD 873-4470● RL	0.270	0.139	0.100	0.067
BAT74S	SMD 873-4577● RL	0.340	0.180	0.128	0.085
1PS88SB82	SMD 873-4160● RL	0.880	0.460	0.330	0.220
1PS88SB48	SMD 873-4151● RL	0.650	0.340	0.250	0.164
SOT-416					
1PS75SB45	SMD 873-4020● RL	0.111	0.042	0.029	0.027
SOT-457					
PMEG6010AED	SMD 873-8068● RL	0.360	0.220	0.158	0.121
SOT-666					
PMEG1020EV	SMD 873-7835● RL	0.350	0.210	0.153	0.120
PMEG2005AEV	SMD 873-7851● RL	0.250	0.150	0.106	0.084
PMEG4010BEV	SMD 873-8050● RL	0.260	0.153	0.110	0.085
BAS40-05V	SMD 873-4321● RL	0.470	0.290	0.200	0.150
BAT54VV	SMD 873-4550● RL	0.340	0.200	0.139	0.106
1PS76SB40	SMD 134-9646●	0.075	0.055	0.043	0.036
PMBD353	SMD 873-7789● RL	0.330	0.200	0.145	0.113
SOD-87		5+	25+	100+	250+
PRLL5817	SMD 108-1485● RL	0.370	0.270	0.198	0.184
PRLL5819	NEW SMD 162-6505●	0.220	0.173	0.133	0.094

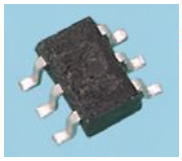
Small Signal Schottky Barrier Diodes



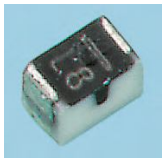
SOD-87



SOT-23, SOT-323



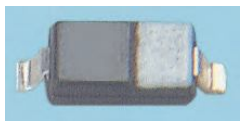
SOT-457



SOD-110



SOT-143B



SOD323

Double Diode

V_{RRM} V	I_F A	Configuration (Dual)	Case Style	Marking	Mfftrs List No.
30	0.2	Common Cathode	SOT-323	43	BAT54CW
30	0.2	Common : K1+A2	SOT-323	44	BAT54SW
30	0.2	Common Anode	SOT-23	L42/*V3	BAT54A
30	0.2	Common : K1+A2	SOT-23	—	BAT54S
30	0.2	Common Cathode	SOT-23	L43/*W1	BAT54C
30	0.2	Common Anode	SOT-23	2L	BAT754A
30	0.2	Common Cathode	SOT-23	2M	BAT754C
30	0.2	Common : K1+A2	SOT-23	2N	BAT754S
30	0.2	Diodes	SOT-143B	L41*	BAT74
40	0.2	Common Anode	SOT-23	L8*	BAT721A
40	0.2	Common Cathode	SOT-23	L9*	BAT721C
40	0.2	Common : K1+A2	SOT-23	L0*	BAT721S
70	70	Common Cathode	SOT-23	75*	BAS70-05
70	0.07	Common Cathode	SOT-23	74	BAS70-04

Single Diode

V_{RRM} V	I_F A	Case Style	Marking	Mfftrs List No.
4	0.03	SOT-23	A3*	BAT17
20	1	SOD-87	—	PRLL5817
25	1	SOT-457	—	1PS74SB23
30	0.2	SOT-23	—	BAT54
30	0.2	SOT-23	2K*	BAT754
30	0.2	SOT-323	L4*	BAT54W
30	0.2	SOD-323	S0	1PS76SB10
30	0.2	SOD-110	—	BAT254
30	0.2	SOD-80C	—	BAS85

RL Re-reeling available

Mftrs. List No.	Order Code		5+	25+	100+	1K+	3K+
			Price Each				
1PS74SB23	SMD 108-1178●		0.450	0.270	0.220	0.164	0.151
1PS76SB10	SMD 108-1179●	RL	0.087	0.054	0.041	0.032	0.031
BAS70-05	SMD 108-1186●	RL	0.104	0.071	0.055	0.047	0.042
BAS85	SMD 109-7282●	RL	0.167	0.104	0.071	0.045	0.040
BAT17	SMD 108-1187●	RL	0.340	0.171	0.137	0.103	– –
BAT254	SMD 108-1189●	RL	0.320	0.186	0.114	0.086	0.071
BAT54	SMD 108-1190●	RL	0.097	0.065	0.045	0.031	0.021
BAT54A	SMD 108-1191●	RL	0.220	0.079	0.053	0.033	– –
BAT54C	SMD 108-1192●	RL	0.186	0.095	0.066	0.040	0.027
BAT54CW	SMD 108-1193●	RL	0.124	0.072	0.071	0.054	0.041
BAT54S	SMD 108-1194●	RL	0.162	0.075	0.052	0.023	– –
BAT54SW	SMD 108-1195●	RL	0.124	0.072	0.071	0.054	0.041
BAT54W	SMD 108-1197●	RL	0.147	0.073	0.053	0.037	0.027
BAT721A	SMD 108-1198●	RL	0.152	0.117	0.097	0.090	0.083
BAT721C	SMD 108-1199●	RL	0.350	0.200	0.166	0.119	0.113
BAT721S	SMD 108-1200●	RL	0.350	0.200	0.166	0.119	0.113
BAT74	SMD 108-1201●	RL	0.360	0.200	0.155	0.117	– –
BAT754	SMD 108-1203●	RL	0.105	0.064	0.050	0.036	0.035
BAT754A	SMD 108-1204●	RL	0.114	0.081	0.061	0.057	0.048
BAT754C	SMD 108-1205●	RL	0.115	0.069	0.056	0.042	0.040
BAT754S	SMD 108-1206●	RL	0.115	0.069	0.056	0.042	0.040
PRLL5817	SMD 108-1485●	RL	0.370	0.270	0.198	0.184	0.171
BAS70-04	NEW SMD 162-6495●		0.122	0.091	0.065	0.043	0.027

423176

Mftrs. List No.		Order Code	Price Per Reel 1+	3+
BAT54.215	REEL 3000	NEW SMD 156-2315●	56.41	50.77
BAT54C.215	REEL 3000	NEW SMD 156-2316●	57.31	51.58
BAT54S.215	REEL 3000	NEW SMD 156-2317●	56.41	50.77
BAT254.115	REEL 3000	NEW SMD 156-2303●	192.89	
PRLL5817.115	REEL 2000	NEW SMD 156-2312●	222.96	200.67
BAS85.115	REEL 2500	NEW SMD 156-2311●	85.81	77.23

'Mini-melf Schottky'



I_F (av) A	I_{FSM} A	I_{FRM} A	V_{RRM} V	P_{tot} mW	Mftrs List No.
0.2	4	.5	30	0.2	TMMBAT42
0.35	7.5	1	40	330	TMMBAT48

Ring denotes cathode

L=3.6, Dia=1.62

211259

Order Multiple=5 Mftrs. List No.	Order Code		5+	100+	250+	1K+	3K+
			Price Each				
TMMBAT42	SMD 980-4226●	RL	0.480	0.310	0.240	0.118	0.092
TMMBAT48	SMD 980-4234●		0.550	0.340	0.290	0.160	0.131

Reels of 2500 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
TMMBAT42FILM	NEW SMD 156-2280●	115.57	104.02
TMMBAT48FILM	NEW SMD 156-2339●	115.57	104.02

Schottky Diodes, 0.03A – 1A



L=3.7, Dia.=1.6
Grey band denotes cathode

SOD80C (Mini-melf)



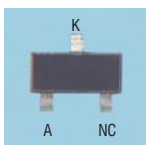
SOT-23

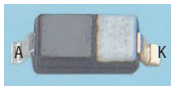
I_F A	V_{RRM} V	Device Marking	Package	Mftrs List No.
0.2	30	—	SOD-80C	BAS85
0.03	4	A3*	SOT-23	BAT17

211404

Order Multiple=5 Mftrs. List No.	Order Code		5+	25+	100+	250+
			Price Each			
BAS85	SMD 109-7282●	RL	0.167	0.104	0.071	0.045
			5+	100+	1K+	3K+
BAT17	SMD 108-1187●	RL	0.340	0.171	0.137	0.103

High Current, 'SuperBAT' Schottky





- High current capability
- Low forward voltage

SOT-23: H=1.12, W=3.05, D=2.5

SOD-323: H=1.16, W=2.71, D=1.37

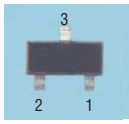
V_{RRM} V	I_F mA	V_F mV	@	I_F mA	I_{FSM} A	P_{tot} mW	Package	Device Marking	Mftrs. List No.
	1000	425		1000	12	500	SOT-23	ZS1	ZHCS1000
30	750	490		750	12	500	SOT-23	ZS7	ZHCS750
40	2000	500		2000	20	1100	SOT-23	ZS2	ZHCS2000
40	1500	640		1500	36	1100	SOT-23	L10	ZLLS2000
40	1000	560	SPANER-ROR	1000	22	625	SOT-23	L10	ZLLS1000
40	750	1000		750	13	500	SOT-23	L05	ZLLS500
40	500	550		500	6.75	330	SOT-23	ZS5	ZHCS500
40	400	500		400	3	250	SOD-323	BD	ZHCS400
40	400	610		400	12	330	SOD-323	40	ZLLS400
60	1000	600		1000	12	500	SOT-23	S16	ZHCS1006
60	750	610		750	12	500	SOT-23	S76	ZHCS756
60	500	630		500	5.5	330	SOT-23	S56	ZHCS506

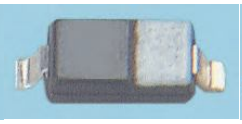
211059

Order Multiple=5 Mftrs. List No.	Order Code		5+	25+	100+	1K+	5K+
			Price Each				
ZHCS400	SMD 952-5149●	RL	0.430	0.340	0.260	0.157	0.121
ZHCS500	SMD 952-5068●	RL	0.430	0.340	0.230	0.144	0.119
ZHCS506	SMD 952-5076●	RL	0.570	0.430	0.310	0.156	0.144
ZHCS750	SMD 952-6765●	RL	0.710	0.520	0.350	0.210	0.169
ZHCS756	SMD 952-5084●	RL	0.790	0.620	0.400	0.240	0.210
ZHCS1000	SMD 952-6773●	RL	0.850	0.660	0.450	0.290	0.220
ZHCS1006	SMD 952-5092●	RL	0.940	0.740	0.490	0.290	0.230
ZHCS2000	SMD 952-5653●	RL	0.560	0.440	0.320	0.220	0.185
ZLLS400	SMD 952-5661●	RL	0.320	0.240	0.176	0.123	0.102
ZLLS500	SMD 952-5670●	RL	0.330	0.260	0.210	0.149	0.124
ZLLS1000	SMD 952-5688●	RL	0.440	0.370	0.260	0.178	0.151
ZLLS2000	SMD 952-5696●	RL	0.650	0.510	0.370	0.260	0.220

Reels of 3000 Mftrs. List No.	Order Code	Price Per Reel 1+
ZHCS400TA	NEW SMD 156-2308●	325.45
ZHCS500TA	NEW SMD 156-2318●	322.06
ZHCS1006TA	NEW SMD 156-2321●	529.70
ZLLS1000TA	NEW SMD 156-2322●	406.81
ZHCS750TA	NEW SMD 156-2323●	457.66
ZHCS1000TA	NEW SMD 156-2324●	529.70
ZHCS2000TA	NEW SMD 156-2330●	529.60

SOT-23, SOD-323(F), DO-35 Schottky







SOT-23
H=1.12, W=3.0, D=2.5

SOD-323

SOD-323F

Very low turn-on voltage and ultra-fast switching diodes, suitable for UHF detectors and other high frequency switching circuits. Supplied on 8mm tape.

V_{RRM} max. V	I_F av max. mA	V_F max. V	@	I_F mA	Device Marking	Package	Mftr.	Mftrs. List No.
30	300	0.4		10	D86	SOD-323	ST	BAT54J
30	300	0.4		10	D86	SOT-23	ST	BAT54
30	200	0.4		10	L4p	SOT-23	ZET	BAT54
30	100	0.4		10	D94	SOT-23	ST	BAR42
30	200	0.4		10	—	DO-35	MC	BAT42
30	—	0.4		10	S7	SOD-123	MC	BAT42W
30	200	0.4		10	—	SOD-323F	MC	BAT42WS
30	200	0.4		10	LV3	SOT-23	MC	BAT54
30	200	0.4		10	B6	SOT-23	MC	BAT54A
30	200	0.4		10	L43	SOT-23	MC	BAT54C
30	200	0.4		10	L44	SOT-23	MC	BAT54S
30	200	0.32		1	L42	SOT-23	FCH	BAT54A
30	200	0.4		10	L42	SOT-23	ZET	BAT54A
30	200	0.4		10	L42	SOT-23	ST	BAT54A
30	100	0.33		2	D95	SOT-23	ST	BAR43
30	100	0.33		2	DB1	SOT-23	ST	BAR43A
30	300	0.4		10	D87	SOT-23	ST	BAT54C
30	200	0.4		10	L43	SOT-23	ZET	BAT54C
30	200	0.4		10	L43	SOT-23	MC	TBAT54C
30	100	0.33		2	DB2	SOT-23	ST	BAR43C
30	200	0.4		10	L44	SOT-23	ZET	BAT54S
30	100	0.33		2	DA5	SOT-23	ST	BAR43S
40	500	0.7		250	C	SOD-323	INF	BAT165
40	300	0.4		10	D88	SOT-23	ST	BAT54S
40	120	0.38		1	44	SOT-23	INF	BAS40-04
70	70	0.7		1	74	SOT-23	INF	BAS70-04
70	30	0.41		1	D96	SOT-23	ST	BAS70-04
70	30	0.41		1	D76	SOT-23	ST	BAR18
70	15	0.41		1	D76	SOD-323	ST	BAS70J
70	200	0.41		1	74	SOT-23	MC	BAS70-04

Order Multiple=5 Mftrs. List No.	Mftr.	Order Code		5+	25+	100+	1K+	3K+
				Price Each				
BAR18	ST	SMD 980-1340●	RL	0.860	0.440	0.330	0.196	0.175
BAR42	ST	SMD 980-1359●	RL	0.580	0.310	0.220	0.126	0.114
BAR43	ST	SMD 980-1367●	RL	0.810	0.460	0.340	0.186	0.183
BAR43A	ST	SMD 980-1375●	RL	0.930	0.460	0.340	0.186	0.183
BAR43C	ST	SMD 980-1383●	RL	0.930	0.460	0.340	0.186	0.183
BAR43S	ST	SMD 980-1391●	RL	0.520	0.260	0.188	0.104	0.103
BAS40-04	INF	SMD 105-6500●	RL	0.580	0.440	0.330	0.143	0.139
BAS70-04	INF	SMD 105-6501●	RL	0.620	0.460	0.360	0.150	0.146
BAS70-04	ST	SMD 980-1405●	RL	0.600	0.410	0.280	0.167	0.133
BAS70J	ST	SMD 980-1413●	RL	0.610	0.510	0.410	0.310	0.210
BAT54	ST	SMD 980-1480●	RL	0.330	0.195	0.182	0.104	0.103
BAT54	ZET	SMD 952-6480●	RL	0.260	0.210	0.111	0.077	0.071

RL Re-reeling available

Low Power Schottky Diodes - continued

SOT-23, SOD-323(F), DO-35 Schottky - continued

Order Multiple=5

Mftrs. List No.	Mftr.	Order Code	Price Each 5+	25+	100+	1K+	3K+
TBAT54	MC	SMD 920-7155● RL	0.270	0.121	0.098	0.084	0.073
BAT54A	ST	SMD 988-5188● RL	0.115	0.086	0.055	0.046	0.036
BAT54A	ZET	SMD 952-6498● RL	0.500	0.380	0.270	0.139	0.138
BAT54A	FCH	SMD 122-8222●	0.059	0.042	0.034	0.027	0.022
BAT54S	ZET	SMD 952-6510● RL	0.270	0.200	0.143	0.074	0.073
TBAT54A	MC	SMD 920-7163● RL	0.171	0.079	0.055	0.031	0.030
TBAT54A	MC	SMD 920-7163● RL	0.171	0.079	0.055	0.031	0.030
BAT54C	ST	SMD 980-1499●	0.340	0.240	0.161	0.084	0.081
BAT54C	ZET	SMD 952-6501● RL	0.500	0.380	0.270	0.139	0.138
TBAT54C	MC	SMD 920-7171● RL	0.171	0.079	0.055	0.031	0.030
BAT54J	ST	SMD 980-1502● RL	0.210	0.137	0.121	0.068	0.067
BAT54S	ST	SMD 980-1510●	0.122	0.075	0.052	0.043	0.024
BAT165	INF	SMD 105-6502● RL	0.300	0.250	0.159	0.073	0.071

Order Multiple=10

Mftrs. List No.	Mftr.	Order Code	Price Each 10+	250+	1K+	3K+	
BAS70-04	MC	NEW SMD 162-1826●	0.066	0.048	0.040	0.034	– –
BAT42	MC	NEW 162-1827●	0.036	0.026	0.021	0.018	– –
BAT42W	MC	NEW SMD 162-1829●	0.065	0.047	0.040	0.034	– –
BAT42WS	MC	NEW SMD 162-1831●	0.056	0.040	0.034	0.029	– –
BAT54	MC	NEW SMD 162-1832●	0.048	0.035	0.029	0.024	– –
BAT54A	MC	NEW SMD 162-1833●	0.058	0.042	0.035	0.030	– –
BAT54C	MC	NEW SMD 162-1834●	0.058	0.042	0.035	0.030	– –
BAT54S	MC	NEW SMD 162-1835●	0.058	0.042	0.035	0.030	– –

450739

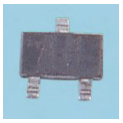
Reels of 3000

Mftrs. List No.	Order Code	Price Per Reel 1+	3+
BAS70JFILM	NEW SMD 156-2309●	557.17	
BAT54JFILM	NEW SMD 156-2310●	158.25	142.44
BAS4004E6327	NEW SMD 156-2313●	134.31	120.88
BAS7004E6327	NEW SMD 156-2314●	134.31	120.88
BAR43FILM	NEW SMD 156-2325●	110.13	99.10
BAR43CFILM	NEW SMD 156-2326●	130.52	117.46
BAR43SFILM	NEW SMD 156-2327●	122.36	110.13
BAS70-04FILM	NEW SMD 156-2328●	228.40	205.56
BAT54FILM	NEW SMD 156-2329●	158.25	142.44
BAT54SFILM	NEW SMD 156-2338●	115.78	
+BAT165E6327	NEW SMD 156-2306●	183.56	165.21

General Purpose Schottky Diodes

AVAGO TECHNOLOGIES

SMD



- Small footprint
- Superior high frequency operation
- Low resistance and General Purpose options available
- Low F.I.T (Failure In Time) rate

SOT-323. H=1.4,W=2.25,D=1

V_{RRM} max. V	I_F av max. mA	V_F max. V	@ I_F mA	Device Marking	Package	Mftr.	Mftrs. List No.
Double Diode - Unconnected Pair							
2	1	0.25	1	P5	SOT-143		HSMS-2855-BLKG
4	—	0.35	1	—	SOT-143		HSMS-2865-BLKG
15	1	0.5	10	C5	SOT-143		HSMS-2825-BLKG
Double Diode - Series Configuration							
2	1	0.25	1	P2	SOT-323		HSMS-285C-BLKG
15	1	0.5	10	C2	SOT-323		HSMS-282C-BLKG
Single Diode							
2	—	0.25	1	Rx	SOD-523		HSMS-285Y-BLKG
4	—	0.35	1	Px	SOD-523		HSMS-286Y-BLKG
15	1	—	—	Yx	SOD-523		HSMS-282Y-BLKG

465448

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
HSMS-2825-BLKG	SMD 134-7248●	0.480	0.350	0.300	0.270	0.260
HSMS-282C-BLKG	SMD 134-7249●	0.580	0.410	0.360	0.320	0.310
HSMS-282Y-BLKG	SMD 134-7250●	0.197	0.153	0.133	0.117	0.113
HSMS-2855-BLKG	SMD 134-7252●	1.230	0.880	0.760	0.670	0.650
HSMS-285C-BLKG	SMD 134-7253●	1.170	0.850	0.720	0.650	0.620
HSMS-285Y-BLKG	SMD 134-7254●	0.360	0.320	0.280	0.240	0.200
HSMS-2865-BLKG	SMD 134-7255●	0.960	0.680	0.590	0.520	0.500
HSMS-286Y-BLKG	SMD 134-7256●	0.270	0.200	0.176	0.156	0.151

SOT-23, SOT-143, SOT-363 and SOT-323

AVAGO TECHNOLOGIES

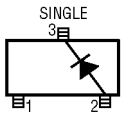
SMD



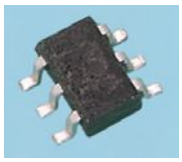
SOT-23



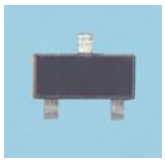
SOT-143



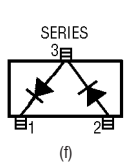
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SOT-363

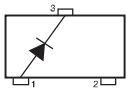


SOT-323

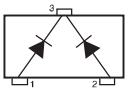


(Top view)

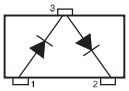
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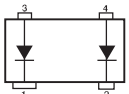
(a)



(b)



(c)



(d)

General Purpose Schottky

Supplied on 8mm tape

Min V_{BR} @ I_R 10µA V	Max V_F mv	Max Power @ 25°C mW	Max C_T @ 1 MHz pF	Device Marking	Package	Pin Config.	Mftrs. List No.
8	340	250	1	C2	SOT-23	c	HSMS-2822-TR1G
15	340	—	1	C0	SOT-23	a	HSMS-2820-TR1G
15	340	—	1	CK	SOT-363	-	HSMS-282K-TR1G
20	410	250	1.2	B0	SOT-23	a	HSMS-2810-TR1G
20	410	250	1.2	B2	SOT-23	c	HSMS-2812-TR1G
				B4	SOT-23	b	HSMS-2814-TR1G
20	410	250	1.2	B5	SOT-143	d	HSMS-2815-TR1G
70	410	250	2	A0	SOT-23	a	HSMS-2800-TR1G
70	410	250	2	A2	SOT-23	c	HSMS-2802-TR1G

◆I_F=100µA

Order Multiple=5

Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	5K+
HSMS-2800-TR1G	SMD 105-6832● RL	0.60	0.40	0.38	0.25
HSMS-2802-TR1G	SMD 105-6834● RL	0.80	0.56	0.49	0.35
HSMS-2810-TR1G	SMD 105-6833● RL	0.62	0.42	0.41	0.28
HSMS-2812-TR1G	SMD 105-6835● RL	0.83	0.68	0.58	0.36
HSMS-2814-TR1G	SMD 105-6837● RL	0.87	0.59	0.57	0.37
HSMS-2815-TR1G	SMD 105-6838● RL	0.87	0.59	0.57	0.37
HSMS-2820-TR1G	SMD 105-6826● RL	0.58	0.42	0.36	0.28
HSMS-2822-TR1G	SMD 105-6836● RL	0.64	0.52	0.46	0.37
HSMS-282K-TR1G	SMD 105-6828● RL	1.07	0.81	0.68	0.49

Reels of 3000

Mftrs. List No.	Order Code	Price Per Reel 1+	4+
HSMS-2815-TR1G	NEW SMD 156-2341●	1,047.98	943.17
HSMS-2800-TR1G	NEW SMD 156-2342●	631.71	568.54
HSMS-2812-TR1G	NEW SMD 156-2343●	1,018.03	916.23
HSMS-2822-TR1G	NEW SMD 156-2345●	947.33	852.60
HSMS-2814-TR1G	NEW SMD 156-2346●	1,047.98	943.17

Microwave Mixer

Min V_{BR}@ I_R10µA V	Max V_F mV	Max Power @ 25°C mW	Max C_T @ 1MHz pF	Device Marking	Package	Pin Config.	Mftrs. List No.
4	350	75	0.26	R1	SOT-23	e	HSMS-8101-TR1G
4	350	75	0.26	2R	SOT-23	f	HSMS-8202-TR1G

Mftrs. List No.	Order Code	Price Each 1+	100+	1K+	2K5+
HSMS-8101-TR1G	SMD 105-6851● RL	1.80	1.23	1.13	0.77
HSMS-8202-TR1G	SMD 105-6853● RL	1.45	1.29	1.19	0.88

Reel of 3000

Mftrs. List No.	Order Code	Price Per Reel 1+
HSMS-8202-TR1G	NEW SMD 156-2348●	1,956.53

Transient Suppression Microwave Detector

Max. V_F mV @ 1 mA	Max. Power @ 25°C mW	Typ C_T @ 1MHz mW pF	Typical Video Resistance RV (KΩ)	Device Marking	Package	Pin Config.	Mftrs. List No.
250	75	0.3	8.0	P0	SOT-23	a	HSMS-2850-TR1G
250	75	0.3	8.0	P2	SOT-23	f	HSMS-2852-TR1G
350	-	0.3	5.0	T2	SOT-323	c	HSMS-286C-TR1G
350	-	0.3	5.0	TK	SOT-363	-	HSMS-286K-TR1G

Mftrs. List No.	Order Code	Price Each 1+	100+	1K+	2K5+
HSMS-2850-TR1G	SMD 105-6849● RL	1.39	0.97	0.90	0.58
HSMS-2852-TR1G	SMD 105-6850● RL	2.13	1.42	1.32	0.84
HSMS-286C-TR1G	SMD 105-6829● RL	1.37	1.07	0.90	0.69
HSMS-286K-TR1G	SMD 105-6830● RL	1.00	0.79	0.66	0.52

227432

Reel of 3000

Mftrs. List No.	Order Code	Price Per Reel 1+
HSMS-2850-TR1G	NEW SMD 156-2347●	1,162.77

RL Re-reeling available

Schottky Barrier



(a) L=4.32, D=1.93 (b) L=4.06, D=1.85

High performance devices for UHF/VHF applications, detecting, mixing, switching etc. Low turn-off voltage, as low as 0.34V @ 1mA. Pico-second switching speed. High breakdown voltage, up to 70V.

Min V_{BR}@ I_R10µA V	Max V_F mV	Max Power @ 25°C mW	Max C_T @ 1MHz pF	Mftr.	Package	Mftrs. List No.
60	410	400	2.2	ST	(b)	1N6263
70	410	250	2	ST	(a)	1N5711

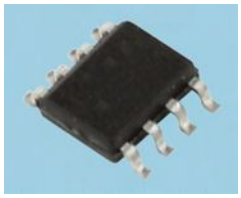
◇I_R=100 µA

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	1K+	3K+
1N5711	980-1189●	0.360	0.260	0.162	0.118	0.092
1N6263	980-1251●	0.360	0.260	0.162	0.118	0.093

211399

Reel of 4000 Mftrs. List No.	Order Code	Price Per Reel 1+
1N5711	NEW 156-2349●	355.38

Bridge Rectifier, Schottky + Diode



Case Style	SM-8
Current, If av	0.4
Current, Ifs max	13
Time on for IFSM	100
Voltage Vrrm	40

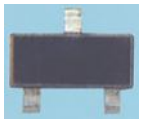
This low leakage Schottky bridge and freewheel diode have been specifically designed for the MR16 LED driver solution.
The key benefits for the ZXSBMR16PT8TA is a compact surface mount solution and reduced component count in MR16 LED drive circuit.

Features
- Optimised bridge and freewheel diode for use in MR16 LED diode circuitry
- Low VF and low reverse leakage current

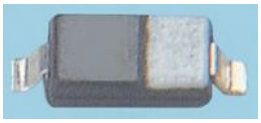
509617

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
ZXSBMR16PT8TA	SMD 158-3672●	1.05	0.70	0.60	0.54	0.50

General Purpose Schottky Diodes



SOT-346, L=2.9, W=1.6, H=1.1



SOD-523, L=1.2, W=0.8, H=0.6
VMD2, L=1, W=0.6, H=0.5
PMDS, L=4.5, W=2.6, D=2
PMDU, L=2.6, W=1.6, D=0.8



UMD-6 (SOT-363), L=2, W=1.25, H=0.9



DO-34, L=2.7, Dia=1.8

498356

V_{RM} (V)	I_O av (A)	Mftrs. List No.	Order Code	Price Each 5+	100+	250+	1K+
DO-34							
40	0.03	RB721Q-40T-77	152-5513●	0.166	0.138	0.118	0.068
PMDS							
60	1	RB160L-60TE25	SMD 152-5478●	0.260	0.210	0.184	0.108
95	1	RB160L-90TE25	SMD 152-5479●	0.240	0.200	0.174	0.101
PMDU							
25	1	RB161M-20TR	SMD 152-5484●	0.195	0.162	0.139	0.082
30	1	RB160M-30TR	SMD 152-5480●	0.125	0.105	0.090	0.053
60	1	RB160M-60TR	SMD 152-5481●	0.170	0.142	0.121	0.071
90	1	RB160M-90TR	SMD 152-5482●	0.210	0.176	0.151	0.088
SC-82							
30	0.2	RB481KTL	SMD 152-5494●	0.240	0.200	0.171	0.100
SOT-323							
20	0.7	RB461FT106	SMD 152-5490●	0.220	0.181	0.156	0.134
SOD-523							
30**	0.2	RB520S-30TE61	SMD 152-5500●	0.110	0.091	0.078	0.046
30**	0.2	RB521S-30TE61	SMD 152-5504●	0.158	0.132	0.113	0.065
40	0.2	RB520S-40TE61	SMD 152-5501●	0.132	0.110	0.093	0.055
SOD-343							
45	0.1	RB480KTL	SMD 152-5491●	0.197	0.165	0.141	0.082
SOT-346							
40	0.5	RB411DT146	SMD 152-5486●	0.141	0.118	0.100	0.058

**Reverse voltage continuous DC

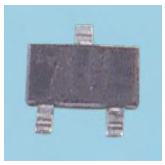
RF Diodes

465414

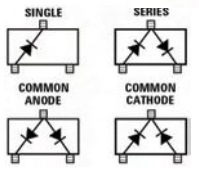
There are 3 types of PIN diodes available:
Attenuation PIN Diodes
Specifically designed to lower the RF power by having a consistant impedance across their designed frequency range.
Switching PIN Diodes
Have relatively lower capacitance then other PIN diodes, facilitating superior switching speeds.
General Purpose PIN Diodes
Can be used as in most general purpose RF applications where superior switching or attenuation characteristics are not needed.

General Purpose RF PIN Diodes

SOT-323 Surface Mount Package



SOT-323.
H=1.4,W=2.25,D=1





SOD-323.
H=2.6,W=1.25,D=1

- Small footprint
- Superior high frequency operation
- Low resistance and General Purpose options available
- Low F.I.T (Failure In Time) rate

R_T (Ω)	(I_F), f (mA), (MHz)	C_T max. (pf)	I_F max. (A)	I_F max. (A)	Configuration	Mftrs. List No.
General Purpose						
3.5/1.5*	10mA/100mA*, 100MHz	0.2	1	SOT-323	Series	HSMP-386C-BLKG
3.5/1.5*	10mA/100mA*, 100MHz	0.2	1	SOT-323	Common Cathode	HSMP-386F-BLKG
Low Resistance						
2.5	5mA, 1MHz	0.2	1	SOT-323	Series	HSMP-389C-BLKG
2.5	100mA, 100MHz	0.2	1	SOD-323	Band denotes Cathode	HSMP-389Z-BLKG
Low Distortion						
3	5mA, 100MHz	0.2	1	SOD-323	Band denotes Cathode	HSMP-381Z-BLKG

465305

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
HSMP-386C-BLKG	SMD 134-7242●	0.580	0.410	0.360	0.320	0.310
HSMP-386F-BLKG	SMD 134-7243●	0.600	0.420	0.370	0.330	0.320
HSMP-389C-BLKG	SMD 134-7245●	0.580	0.410	0.360	0.320	0.310
HSMP-381Z-BLKG	SMD 134-7239●	0.250	0.187	0.162	0.143	0.139
HSMP-389Z-BLKG	SMD 134-7247●	0.153	0.118	0.104	0.092	0.089

PIN Diodes



SOT-23 | SOT-323 | SOT-343 SOT-143, H=3, W=1.4, D=1.1 | SOD-323 (SC-76), H=1.8, W=1.35, D=1.1 SC-79 (SOD-523), H=1.25, W=0.85, D=0.65

- Low capacitance
- High switching speed
- Single and Dual Diode Configurations

Max $C_{T(typ)}$ @1MHz pF	@ $V_{R(max)}$ V	$I_{f(av)}$ mA	Mftrs. List No.
SOT-23, Single Diode			
0.9	150	200	BAR66
SOT-23, Dual Diode			
0.25	100	140	BAR14-1
0.25	100	140	BAR15-1
0.25	100	140	BAR16-1
SOT-323, Single Diode			
0.6	30	100	BAR65-03W
0.92	35	100	BA592
SOT-323, Dual Diode			
0.23	150	100	BAR64-04W
0.23	150	100	BAR64-05W
0.23	150	100	BAR64-06W
SOD-323 (SC-79), Single Diode			
—	50	50	BAP50-03
0.21	50	100	BAR63-02V
0.22	50	50	BA595
0.23	150	100	BAR64-02V

RL Re-reeling available

RF Diodes - continued

PIN Diodes - continued

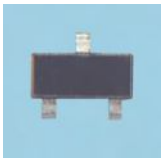
Max $C_{T(typ)}$ @1MHz pF	@	$V_{R(max)}$ V	$I_{f(av)}$ mA	Mftrs. List No.
SOD-323 (SC-79), Single Diode				
0.24		50	100	BAR50-02V
0.25**		50	100	BAP70-03
0.35		150	100	BAR67-02V
0.6		30	100	BAR65-02V
0.92		35	100	BA892-02V
SOT-343, Single Diode				
0.6		30	100	BAR81W

** f=100 MHz, I_F=100mA

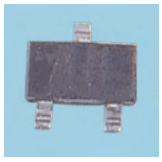
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Mftrs. List No.	Mftr.	Order Code	Price Each 5+	25+	100+	250+
BA592	INF	SMD 109-5636● RL	0.116	0.074	0.060	0.049
BA595	INF	SMD 109-5637● RL	0.300	0.180	0.129	– –
BA892-02V	INF	SMD 109-5639● RL	0.103	0.063	0.051	0.043
BAP70-03	NXP	SMD 134-9649●	0.120	0.086	0.067	0.058
BAR14-1	INF	SMD 109-5642● RL	0.460	0.300	0.240	0.192
BAR15-1	INF	SMD 109-5643● RL	0.450	0.290	0.220	0.187
BAR16-1	INF	SMD 109-5644● RL	0.460	0.300	0.240	0.192
BAR50-02V	INF	SMD 109-5645● RL	0.250	0.145	0.114	0.099
BAR63-02V	INF	SMD 109-5647● RL	0.260	0.149	0.117	0.102
BAR64-02V	INF	SMD 109-5648● RL	0.163	0.103	0.083	0.068
BAR64-04W	INF	SMD 109-5649● RL	0.360	0.240	0.182	0.153
BAR64-05W	INF	SMD 109-5652● RL	0.360	0.240	0.182	0.153
BAR64-06W	INF	SMD 109-5653●	0.270	0.166	0.133	0.112
BAR65-02V	INF	SMD 109-5654● RL	0.198	0.124	0.100	0.084
BAR65-03W	INF	SMD 109-5655● RL	0.148	0.094	0.074	0.063
BAR66	INF	SMD 109-5656● RL	0.780	0.480	0.380	0.330
BAR67-02V	INF	SMD 109-5657● RL	0.290	0.171	0.138	0.115
BAR81W	INF	SMD 109-5658● RL	0.660	0.430	0.340	0.290
BAP50-03	NXP	NEW SMD 162-6454●	0.260	0.200	0.152	0.106

PIN Diodes



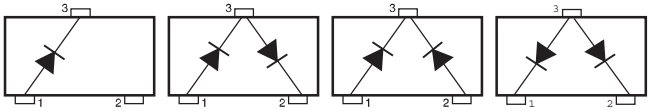
SOT-23



SOT-323

- I_F=1A (pulsed), P_{tot}=250mW
- Characterised for different applications
- Flexible packing options
- High reliability
- Supplied on 8mm tape

(Top view)



(a) Single diode (b) Dual series diode (c) Dual, common cathode (d) Dual, common anode

SOT-23, Low Distortion Attenuator Diodes

Min V_{BR} @I_R≤10µA V	Max C_T @1MHz pF	@ V_R V	Max R_S @100MHz Ω	@ I_f mA	t_{rr} typ. ns	Pin Config	Device Marking	Mftrs. List No.
50	0.2	50	1.5	100	-	b	L2	HSMP-3862-TR1G
200	0.3	50	1.5	100	80	a	K0	HSMP-3830-TR1G

Min V_{BR} @ I_R≤10µA V	Max C_T @ 1MHz V_R=50V pF	Max R_S @ 100MHz I_F 100mA Ω	Min R_H @ 100MHz Ω	Max R_H Ω	Pin Config	Mftrs. List No.
100	0.35	3	1500	10	c	HSMP-3810-TR1G
100	0.35	4	1500	10	c	HSMP-3814-TR1G

SOT-23 Low Resistance Switching Diodes

Min V_{BR} @ I_R≤10µA V	Max C_T @ 1MHz pF	@ V_R V	Max R_S @ 100MHz Ω	@ I_F mA	Pin Config	Device Marking	Mftrs. List No.
35	1	20	0.6	10	a	F0	HSMP-3820-TR1G
35	1	20	0.6	10	b	F2	HSMP-3822-TR1G
35	1	20	0.6	10	c	F4	HSMP-3824-TR1G
35	0.3	5	2.5	5	a	G0	HSMP-3890-TR1G
35	0.3	5	2.5	5	b	G2	HSMP-3892-TR1G
100	0.2	100	2.5	1	b	G3	HSMP-3893-TR1G
100	0.2	5	2.5	1	b	G4	HSMP-3894-BLKG

211173

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
HSMP-3810-TR1G	SMD 105-6823● RL	0.83	0.60	0.49	0.39
HSMP-3814-TR1G	SMD 105-6846● RL	1.16	0.83	0.70	0.49
HSMP-3820-TR1G	SMD 105-6841● RL	0.59	0.42	0.36	0.25
HSMP-3822-TR1G	SMD 105-6844● RL	0.83	0.60	0.49	0.35
HSMP-3824-TR1G	SMD 105-6847● RL	0.83	0.60	0.49	0.35
HSMP-3830-TR1G	SMD 105-6842● RL	3.01	2.16	1.83	1.24
HSMP-3862-TR1G	SMD 105-6848● RL	0.97	0.68	0.59	0.43
HSMP-3890-TR1G	SMD 105-6843● RL	0.66	0.48	0.39	0.34
HSMP-3892-TR1G	SMD 105-6845● RL	0.96	0.70	0.59	0.39
HSMP-3893-TR1G	SMD 105-6831● RL	0.91	0.65	0.56	0.37
HSMP-3894-BLKG	SMD 117-3148●	1.34	0.98	0.82	0.55

RL Re-reeling available

Reel of 3000 Mftrs. List No.	Order Code	Price Per Reel 1+
HSMP-3814-TR1G	NEW SMD 156-2340●	1,060.17

Variable Capacitance and Band Switching



SOT-23 H=1.1, W=3, D=2.5



SOD-323, H=1.25, W=0.85, D=0.65

Varicap diode specifications

● Excellant Linearity (dC/dv) ● Low series resistance

C_d min bei $V_R$high pF	(V)	C_d max bei $V_R$low (pf)	(V)	I_R max @ V_R=28V nA	r_s max. Ω	Konfig.	Package	Mftrs. List No.
1	28	17	0.5	10	3	Variable Capacitance	SOD-323	BB131
2.1	28	21	0.5	10	0.75	Variable Capacitance	SOD-323	BB135
2.225	28	21.26	1	10	0.75	Variable Capacitance	SOD-323	BB149A,115
2.75	28	41.8	1	10	0.9	Variable Capacitance	SOD-323	BB148
2.75	28	42.35	1	10	0.8	Variable Capacitance	SOD-323	BB153
2.25	28	21.26	1	10	0.75	Variable Capacitance	SOD-323	BB179
5	25	32	0.4	10	0.7	Variable Capacitance	SOT-23	BBY40

Variable capacitance (also known as varactors and varicap diodes), exhibit a reverse voltage to capactiance characteristic making them useful in a wide range of RF applications. Including voltage controlled oscillators and voltage controlled tuning circuits.

Band switching diode specifications

V_R max. V	I_R max @ V_R=25V nA	C_d max @ V_R=3V pF	R_D max. Ω	Package	Mftrs. List No.
35	100	1	0.7	SOT-23	BAT18
35	—	1.1	0.7	SOD-110	BA792

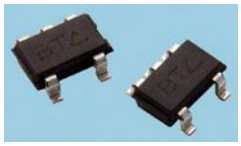
* p: made in Hong Kong, t: Malaysia, w: China

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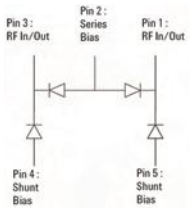
Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	100+	1K+	3K+
Diodes commutation					
BAT18	SMD 108-1188● RL	0.220	0.149	0.118	0.095
BA792	SMD 134-9647●	0.200	0.145	0.111	0.096
Diodes Varactor					
BB149A,115	SMD 121-2469● RL	0.153	0.075	0.058	0.039
BBY40	SMD 108-1217● RL	0.300	0.199	0.159	0.128
BB131	SMD 134-9651●	0.109	0.079	0.061	0.053
BB135	SMD 134-9652●	0.089	0.063	0.049	0.042
BB148	SMD 134-9653●	0.137	0.097	0.075	0.064
BB153	SMD 134-9654●	0.137	0.097	0.075	0.064
BB179	SMD 134-9655●	0.088	0.063	0.049	0.043

Quad PIN π Attenuator Diodes

SOT-25 Surface Mount Package



SOT-25. H=3,W=1.7,D=1.3



- Small quad diode footprint
- Superior high frequency operation
- 300 KHz to 3 GHz usable frequency band
- Low insertion loss

Total Resistance @ Ω	(I_F), f (mA), (MHz)	C_T typ. (pf)	C_T max. (pf)	I_F max. (A)	Mftrs. List No.
3	100mA, 100MHz	0.35	0.35	1	HSMP-3816-BLKG
22	1mA, 100MHz	0.22	0.22	1	HSMP-3866-BLKG

Low insertion loss (-2.5dB to -3.5dB) Quad package, offers almost flat attenuation over an extremely wide band.

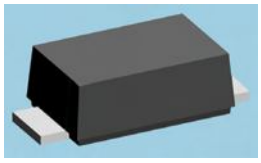
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Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
HSMP-3816-BLKG	SMD 134-7237●	0.94	0.67	0.58	0.50	0.48
HSMP-3866-BLKG	SMD 134-7241●	0.90	0.64	0.55	0.48	0.46

Power Diodes - Standard Recovery

Diode, SMF Glass Passivated

$I_{(AV)}$ = 1A*, I_{FSM} = 30A**



V_{RRM} V	V_F @ 1A V	Mftr.	Mftrs. List No.
50	1.1	TSC	S1AL
100	1.1	TSC	S1BL
200	1.1	TSC	S1DL
400	1.1	TSC	S1GL
600	1.1	TSC	S1JL
800	1.1	TSC	S1KL
1000	1.1	TSC	S1ML

*Maximum Average Forward Rectified Current@T_L =110 °C
**Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)

503783

Order Multiple=10

Mftrs. List No.	Description	Order Code	Price Each 10+	100+	250+	1K+
S1AL	Diode, SMF GP 1A 50V	SMD 155-9148	0.061	0.041	0.031	0.028
S1BL	Diode, SMF GP 1A 100V	SMD 155-9149	0.061	0.041	0.031	0.028
S1DL	Diode, SMF GP 1A 200V	SMD 155-9150	0.063	0.042	0.032	0.028
S1GL	Diode, SMF GP 1A 400V	SMD 155-9152	0.063	0.042	0.032	0.028
S1JL	Diode, SMF GP 1A 600V	SMD 155-9153	0.064	0.043	0.033	0.029
S1KL	Diode, SMF GP 1A 800V	SMD 155-9154	0.064	0.043	0.033	0.029
S1ML	Diode, SMF GP 1A 1000V	SMD 155-9155	0.064	0.043	0.033	0.029

1A Glass Passivated



- Reliable low-cost construction
- Surge overload rating to 30A peak
- Plastic package
- Forward voltage 1.1V @ 1A

MELF L=5.2, Dia.=2.7

Order Multiple=5

V_{RRM} max. V	Case Style	Mftr.	Mftrs. List No.	Order Code	Price Each 5+	250+	1K+	2K5+
50	MELF	MC	LL4001G	SMD 735-5521 RL	0.162	0.080	0.066	0.060
100	MELF	MC	LL4002G	SMD 735-5530 RL	0.167	0.082	0.068	0.061
200	MELF	TS	LL4003G	NEW! SMD 162-5105	0.181	0.120	0.091	0.072
400	MELF	MC	LL4004G	SMD 735-5548 RL	0.172	0.084	0.069	0.063
600	MELF	TS	LL4005G	NEW! SMD 162-5106	0.188	0.125	0.094	0.075
800	MELF	TS	LL4006G	NEW! SMD 162-5107	0.194	0.130	0.097	0.078
1000	MELF	MC	LL4007G	SMD 735-5556 RL	0.185	0.089	0.080	0.066

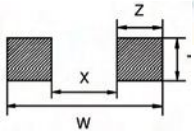
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Reel of 5000

Mftrs. List No.	Order Code	Price Per Reel 1+	3+
LL4007G L2	NEW! SMD 156-2262	178.94	161.05

SMA, SMB and SMC





Footprint

High reliability glass passivated rectifiers. GF1 and S1 series equivalent to the 1N4000 series. Supplied on 12mm tape in any quantity.

I_{AV} A	I_{FSM} A	V_F V	I_F @ 25°C A	Package	Mftr	Type/ Series
1	30	1	1	SMA	GS/FCH/MC	S1...
1	30	1.1	1	DO-213AB	VISH	BYM10...
1	30	1.1	1	DO-214BA	GS	GF1...
1	30	1.1	1	DO-213AB	VISH	GL4...
1.5	30	1.1	1.5	SMA	TFK	BYG10M
2	50	1.15	2	SMB	MC	S2...
3	100	1.15	1	SMC	FCH/GS/MC	S3...
4	100	1.15	4	SMC	MC	S4...
5	100	1.15	4	SMC	MC	S5...

	H	L	D	W	X	Y	Z
DO-214BA	3	5.76	2.9	5.9	2.3	1.7	1.8
SMB	2.43	5.45	3.58	6.9	3.3	2.2	1.8
SMC	2.62	2.62	6.22	8.13	5.08	3.2	1.52

211142

Order Multiple=10

V_{RRM} max. V	Mftr.	Order Code	Price Each 10+	100+	200+	500+
50	FCH S1A	SMD 984-3868 RL	0.117	0.099	0.083	0.045
50	GS S1A	SMD 955-0216 RL	0.127	0.103	0.092	0.046
50	MC S1A	SMD 727-7920 RL	0.085	0.057	0.053	0.050
50	GS GF1A	SMD 954-9560 RL	0.121	0.100	0.089	0.072
50	GS S2A	SMD 955-0259 RL	0.148	0.106	0.082	0.067
50	FCH S3A	SMD 101-7803 RL	0.490	0.280	0.195	0.099
50	GS S3A	SMD 955-0291 RL	0.260	0.184	0.151	0.130
50	VISH BYM10-50	SMD 133-6573	0.176	0.151	0.126	0.108
100	GS GF1B	SMD 954-9579 RL	0.135	0.111	0.102	0.081
100	GS S1B	SMD 955-0224 RL	0.143	0.113	0.093	0.046
100	MC S1B	SMD 408-5078 RL	0.085	0.073	0.055	0.045
100	VISH S2B	SMD 133-6565	0.121	0.085	0.068	0.063
100	VISH BYM10-100	SMD 133-6569	0.176	0.151	0.126	0.108
100	VISH S3B	SMD 133-6578	0.340	0.240	0.154	0.124
200	GS GF1D	SMD 954-9587 RL	0.145	0.124	0.114	0.088
200	GS S1D	SMD 955-0232 RL	0.167	0.138	0.117	0.065
200	MC S1D	SMD 408-5086 RL	0.089	0.079	0.057	0.047
200	GS S2D	SMD 955-0267 RL	0.186	0.143	0.112	0.086
200	MC S2D	SMD 408-5094 RL	0.132	0.115	0.086	0.069
200	GS S3D	SMD 955-0305 RL	0.280	0.197	0.161	0.128
200	FCH S3D	SMD 101-7804 RL	0.600	0.330	0.240	0.130
400	GS GF1G	SMD 954-9595 RL	0.152	0.123	0.114	0.093
400	FCH S1G	SMD 984-3850 RL	0.151	0.124	0.093	0.049
400	GS S1G	SMD 955-0240 RL	0.185	0.154	0.126	0.067
400	GS S2G	SMD 955-0275 RL	0.185	0.130	0.106	0.079
400	GS S3G	SMD 955-0313 RL	0.290	0.200	0.164	0.130

Order Multiple=10

V_{RRM} max. V	Mftr.	Order Code	Price Each 10+	100+	200+	500+
400	VISH BYM10-400	SMD 133-6571	0.176	0.151	0.126	0.108
400	VISH GL41G	SMD 133-6572	0.200	0.178	0.149	0.129
600	GS GF1J	SMD 954-9609 RL	0.250	0.199	0.175	0.103
600	FCH S1J	SMD 101-7802 RL	0.161	0.140	0.095	0.041
600	GS S2J	SMD 955-0283 RL	0.185	0.130	0.107	0.079
600	MC S2J	SMD 408-5108 RL	0.147	0.125	0.095	0.075
600	GS S3J	SMD 955-0321 RL	0.290	0.200	0.167	0.133
600	VISH BYM10-600	SMD 133-6574	0.176	0.151	0.126	0.108
800	GS GF1K	SMD 954-9617 RL	0.194	0.164	0.154	0.111
800	VISH S2K	SMD 133-6566	0.300	0.250	0.200	0.171
800	VISH S3K	SMD 133-6579	0.330	0.280	0.240	0.195
1000	GS GF1M	SMD 954-9625 RL	0.200	0.179	0.159	0.120
1000	TFK BYG10M	SMD 954-9170 RL	0.240	0.116	0.110	0.099
1000	FCH S1M	SMD 984-3841 RL	0.230	0.151	0.104	0.043
1000	VISH S2M	SMD 133-6564	0.310	0.260	0.210	0.180
800	VISH BYM10-800	SMD 133-6567	0.176	0.151	0.126	0.108
1000	VISH GL41M	SMD 133-6568	0.200	0.173	0.143	0.121
1000	VISH S3M	SMD 133-6577	0.330	0.280	0.240	0.195
1600	VISH GL41Y	SMD 133-6570	0.310	0.270	0.210	0.183

Order Multiple=5

			Order Code	5+	100+	250+	1K+
50	FCH	S3A	SMD 101-7803 RL	0.490	0.280	0.195	0.099
200	FCH	S3D	SMD 101-7804 RL	0.600	0.330	0.240	0.130
1000	FCH	S3M	SMD 984-3884 RL	0.540	0.290	0.210	0.104
400	MC	S4G	SMD 129-9271	0.210	0.125	0.095	0.081
400	MC	S5G	SMD 129-9273	0.350	0.200	0.154	0.131
1000	MC	S4M	SMD 129-9272	0.250	0.143	0.109	0.091
1000	MC	S5M	SMD 129-9274	0.380	0.220	0.168	0.143
				5+	100+	250+	500+
800	MC	S1K	NEW! SMD 162-5197	0.119	0.080	0.059	0.040
1000	MC	S1M	NEW! SMD 162-5198	0.125	0.084	0.062	0.042
100	MC	S2B	NEW! SMD 162-5199	0.192	0.128	0.096	0.064
800	MC	S2K	NEW! SMD 162-5200	0.199	0.133	0.100	0.066
1000	MC	S2M	NEW! SMD 162-5201	0.199	0.133	0.100	0.066
100	MC	S3B	NEW! SMD 162-5203	0.350	0.230	0.175	0.117
800	MC	S3K	NEW! SMD 162-5204	0.360	0.240	0.179	0.119
1000	MC	S3M	NEW! SMD 162-5205	0.360	0.240	0.179	0.119
60	MC	S4J	NEW! SMD 162-5206	0.154	0.138	0.120	0.110
100	MC	S5B	NEW! SMD 162-5207	0.183	0.163	0.143	0.131
200	MC	S5D	NEW! SMD 162-5208	0.183	0.163	0.143	0.131
600	MC	S5J	NEW! SMD 162-5209	0.187	0.166	0.146	0.134

Mftrs. List No.		Order Code	Price Per Reel 1+	3+
GF1G-E3/67A	REEL 1500	NEW! SMD 156-2260	111.50	– –
GF1M-E3/67A	REEL 1500	NEW! SMD 156-2261	140.33	126.30
S1M	REEL 7500	NEW! SMD 156-2263	210.69	– –

Controlled Avalanche



SMA (DO-214AC)



SOD-57

- High reliability glass passivation process
- Low leakage current
- Good stability
- Guaranteed avalanche energy absorption capability
- Supplied on 8mm tape

211367

Order Multiple=5

V_{rrm} max., V	Mftrs List No.	Case Style	Order Code	Price Each 5+	100+	1K+	3K+
200	BYG20D	SMA	SMD 133-6509	0.240	0.196	0.163	0.140
400	BYG10G	SMA	SMD 133-6581	0.198	0.173	0.142	0.072
400	BYG20G	SMA	SMD 133-6510	0.300	0.250	0.200	0.174
1000	BYW56-TAP	SOD-57	107-5758	0.360	0.210	0.137	0.101

1A to 6A, Standard Axial Rectifiers



194-04



DO-204AP, G3



DO-41, 30S, DO-201AD, 60S, P600, R-6

I_f (av) A	I_{fsm} A	Package	Mftr.	Type/ *Series
2	50	SOD-57	GS	1N5060
3	150	30S	MS	30Sx*
6	400	60S	MS	60Sx*
1	30	DO-41	MC	1N4007G
1	25	DO-204AL	VISH	GP10T/GP10Y
1	30	DO-204AL	VISH	GP10K
1.5	50	DO-15	MC	1N539x(G)*
6	250	R-6	TS/MC	6Ax(G)*
1	30	DO-41	GS	1N4007GP
3	125	G 3	VSH	1N5624
3	125	G 3	VSH	1N5626

I_f (av) A	I_{fsm} A	P600	VSH	Type/ GI75x*
6	400	P600	GS	P600M
6	400	194-04	ON	MR760G
1	30	DO-41	ON	1N4004RL
6	400	P600	MC	P600x*
1	30	DO-41	MC	1N400x*
3	200	DO-201AD	MC	1N54x*
3	200	DO-201AD	ON	1N54xRL*
3	150	DO-201AD	MC	BY25x*
3	125	DO-201AD	MC	1N54xG*
3	100	DO-201AD	VISH	BY255GP

RL Re-reeling available

Power Diodes - Standard Recovery - continued

1A to 6A, Standard Axial Rectifiers - continued

V_{RRM} max., V	Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+
Order Multiple=1						
50	P600A	MC	**956-4977**	0.850	0.830	0.430
200	P600D	MC	**956-4985**	0.830	0.820	0.460
400	P600G	MC	**956-4950**	0.820	0.710	0.450
400	1N4004RL	ON	**955-6109**	0.049	0.038	0.028
800	P600K	MC	**956-4969**	0.930	0.720	0.480
1000	P600M	MC	**956-4942**	1.030	0.860	0.540
1000	P600M	GS	**955-0097**	1.220	0.960	0.710
1000	1N4007G	MC	**132-4152**	0.089	0.077	0.054
Order Multiple=1				**1+**	**100+**	**500+**
100	60S1E3	MS	**119-3568**	2.040	1.480	1.170
200	60S2E3	MS	**119-3571**	2.300	1.670	1.310
600	60S6E3	MS	**119-3573**	2.900	2.070	1.710
Order Multiple=1				**1+**	**10+**	**500+**
100	1N5401RL	ON	**955-6125**	0.125	0.094	0.079
200	1N5402RL	ON	**955-6133**	0.125	0.094	0.079
400	1N5404RL	ON	**955-6141**	0.125	0.094	0.079
600	1N5406RL	ON	**955-6150**	0.125	0.094	0.079
1000	1N5408RL	ON	**955-6168**	0.125	0.094	0.079
Order Multiple=1				**1+**	**25+**	**100+**
200	1N5624	VSH	**954-9145**	0.860	0.520	0.500
600	1N5626	VSH	**954-9153**	0.900	0.550	0.540
Order Multiple=5				**5+**	**100+**	**500+**
600	30S6E3	MS	**119-3561**	1.030	0.740	0.590
Order Multiple=5				**5+**	**30+**	**100+**
50	GI750	VSH	**954-9633**	0.820	0.750	0.640
100	GI751	VSH	**954-9641**	0.830	0.780	0.670
200	GI752	VSH	**954-9650**	1.000	0.950	0.780
400	GI754	VSH	**954-9668**	0.850	0.810	0.630
600	GI756	GS	**954-9676**	1.000	0.920	0.750
Order Multiple=5				**5+**	**100+**	**250+**
200	1N5402G	MC	NEW **162-5004**	0.240	0.162	0.121
600	1N5406G	MC	NEW **162-5005**	0.260	0.171	0.129
1000	1N5408G	MC	NEW **162-5006**	0.290	0.190	0.142
Order Multiple=5				**5+**	**25+**	**100+**
50	6A05	MC	NEW **162-5010**	0.330	0.210	0.161
100	6A10	MC	NEW **162-5011**	0.340	0.230	0.169
1000	6A100	TS	NEW **162-5012**	0.350	0.230	0.172
1000	6A100G	TS	NEW **162-5013**	0.590	0.400	0.300
200	6A20	TS	NEW **162-5014**	0.340	0.230	0.169
400	6A40	TS	NEW **162-5015**	0.370	0.240	0.182
600	6A60	TS	NEW **162-5016**	0.370	0.240	0.182
600	6A60G	TS	NEW **162-5017**	0.500	0.340	0.250
800	6A80	TS	NEW **162-5018**	0.390	0.260	0.195
200	BY251	MC	NEW **162-5021**	0.159	0.106	0.080
400	BY252	MC	NEW **162-5022**	0.159	0.106	0.080
600	BY253	MC	NEW **162-5023**	0.159	0.106	0.080
800	BY254	MC	NEW **162-5024**	0.159	0.106	0.080
1300	BY255	MC	NEW **162-5025**	0.172	0.114	0.086
Order Multiple=10				**10+**	**500+**	**1K+**
100	1N5401	MC	**956-5060**	0.300	0.200	0.155
200	1N5402	MC	**956-5078**	0.300	0.200	0.155
400	1N5060	GS	**954-9137**	0.600	0.430	0.240
400	1N5404	MC	**956-5086**	0.300	0.200	0.155
600	1N5406	MC	**956-5094**	0.300	0.210	0.156
800	1N5407	MC	**956-5116**	0.300	0.200	0.155
1000	1N5408	MC	**956-5108**	0.300	0.200	0.155
Order Multiple=10				**10+**	**500+**	**1K+**
50	1N4001.	MC	**956-4993**	0.046	0.043	0.033
100	1N4002.	MC	**956-5000**	0.057	0.047	0.037
200	1N4003.	MC	**956-5019**	0.069	0.056	0.044
400	1N4004.	MC	**956-5027**	0.075	0.052	0.040
600	1N4005.	MC	**956-5035**	0.081	0.067	0.055
800	1N4006.	MC	**956-5043**	0.085	0.071	0.058
800	GP10K	VISH	**133-6507**	0.102	0.088	0.072
1000	1N4007.	MC	**956-5051**	0.053	0.049	0.038
1000	1N4007GP	GS	**954-9129**	0.155	0.108	0.093
1300	GP10T	VISH	**133-6505**	0.200	0.178	0.149
1300	BY255GP	VISH	**133-6508**	0.470	0.400	0.350
1600	GP10Y	VISH	**133-6506**	0.200	0.178	0.149
Order Multiple=10				**10+**	**100+**	**1K+**
50	1N5391	MC	NEW **162-4992**	0.067	0.045	0.034
100	1N5392	MC	NEW **162-4995**	0.071	0.047	0.036
200	1N5393	MC	NEW **162-4996**	0.071	0.047	0.036
400	1N5395	MC	NEW **162-4997**	0.075	0.050	0.038
600	1N5397	MC	NEW **162-4999**	0.075	0.050	0.038
600	1N5397G	MC	NEW **162-5000**	0.144	0.096	0.072
800	1N5398	MC	NEW **162-5001**	0.081	0.054	0.040
1000	1N5399	MC	NEW **162-5002**	0.081	0.054	0.040
1000	1N5399G	MC	NEW **162-5003**	0.158	0.105	0.080

211388

Mftrs. List No.		Order Code	Price Per Reel 1+	3+
P600M	REEL 800	NEW **156-2264**	58.90	53.01
P600G	REEL 800	NEW **156-2266**	53.17	47.86
P600D	REEL 800	NEW **156-2267**	53.17	47.86
1N4001 R0	REEL 5000	NEW **156-2268**	35.79	32.21
1N4002 R0	REEL 5000	NEW **156-2269**	35.79	32.21
1N4003 R0	REEL 5000	NEW **156-2270**	28.63	25.78
1N4004 R0	REEL 5000	NEW **156-2271**	28.63	25.78
1N4006 R0	REEL 5000	NEW **156-2272**	28.63	25.78
1N4007 R0	REEL 5000	NEW **156-2273**	35.79	32.21
1N5401 R0	REEL 1250	NEW **156-2274**	29.41	26.46
1N5404 R0	REEL 1250	NEW **156-2275**	30.67	27.60
1N5406 R0	REEL 1250	NEW **156-2276**	31.95	28.75
1N5408 R0	REEL 1250	NEW **156-2278**	34.51	31.06

RL Re-reeling available

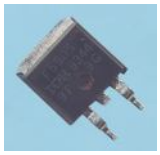
Input Rectifiers

VISHAY


TO-220AC


TO-247AC


TO-247


D2-Pak


D-Pak

$I_{F(AV)}$ A	V_{RRM} V	I_{FSM} A	V_F @ I_F V	A	Package	Mftrs. List No.
8	800	200	1	5	D-PAK	8EWS08SPBF
10	800	200	1.1	10	TO-220ACFP	10ETS12FPPBF
10	800	200	1.1	10	D2-PAK	10ETS08SPBF
10	1200	200	1.1	10	TO-220AC	10ETS12PBF
20	1200	300	1	10	TO-220AC	20ETS12PBF
20	1200	300	1	10	D2-PAK	20ETS12SPBF
40	1600	475	1	10	TO-247AC	40EPS16PBF
40	1200	475	1	10	TO-247AC	40EPS12PBF
60	1200	950	1	60	TO-247AC	60EPS12PBF

211180

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
8EWS08SPBF	SMD **910-0474**	0.98	0.59	0.45	0.35	0.34
10ETS08SPBF	SMD **909-9379**	1.77	1.07	0.81	0.62	0.59
10ETS12PBF	**909-9352**	1.63	0.98	0.73	0.57	0.55
10ETS12FPPBF	**909-9360**	2.34	1.40	1.05	0.83	0.79
20ETS12PBF	**909-9719**	2.45	1.47	1.10	0.87	0.82
20ETS12SPBF	SMD **909-9700**	2.69	1.62	1.21	0.94	0.90
40EPS12PBF	**909-9980**	3.59	2.16	1.62	1.27	1.21
40EPS16PBF	**910-0008**	4.77	2.72	2.09	1.54	1.51
60EPS12PBF	**910-0121**	5.99	3.61	2.72	2.13	2.02

Mftrs. List No.		Order Code	Price Per Tube 1+	4+	10+
20ETS12SPBF	TUBE 50	NEW SMD **156-3996**	68.56	54.59	52.55
8EWS08SPBF	TUBE 75	NEW SMD **156-3998**	30.19	23.89	23.36
20ETS12PBF	TUBE 50	NEW **156-4017**	55.35	44.32	42.83

11A to 56A, 800V to 1600V

IXYS


TO-247AD


TO-220AC


TO-220AB


Mini-Bloc (SOT-227B)


TO-247AD (2-pin)

$I_{F(AV)}$ A	V_{rrm} A	I_{fsm} @ 50Hz A	V_F @ I_F V	Single/Dual Diode	Mftrs. List No.
TO-220AB					
11	1200	100	1.15	Dual	DSP 8-12A
TO-220AC					
30	1200	300	1.45	Single	DSI 30-12A
30	800	300	1.45	Single	DSI 30-08A
TO-247AD					
28	1600	300	1.6	Dual	DSP 25-16A
28	1200	300	1.6	Dual	DSP 25-12A
45	1200	480	1.23	Dual	DSP 45-12A
45	1200	480	1.23	Dual	DSP 45-12A
45	1600	480	1.23	Dual	DSP 45-16A
TO-247AD (2-pin)					
48	1600	475	1.18	Single	DSI 45-16A
48	800	475	1.18	Single	DSI 45-08A
Dual Diode, Mini-Bloc (SOT-227B)					
56	1200	650	1.2	Dual	DSI 2 X 55-12A

422961

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
Single Diode						
DSI 30-08A	**108-0094●**	1.04	0.80	0.59	– –	– –
DSI 30-12A	**108-0095●**	1.16	0.88	0.66	– –	– –
DSI 45-08A	**108-0096●**	1.68	1.19	0.95	– –	– –
DSI 45-12A	**108-0097●**	1.85	1.34	1.06	– –	– –
DSI 45-16A	**108-0098●**	2.09	1.51	1.19	– –	– –
Dual Diode						
DSP 25-12A	**108-0100●**	2.97	2.27	1.70	– –	– –
DSP 25-16A	**108-0101●**	2.29	2.13	1.67	– –	– –
DSP 45-12A	**108-0102●**	3.19	2.17	1.82	– –	– –
DSP 45-16A	**108-0103●**	3.01	2.80	2.13	– –	– –
DSP 8-12A	**108-0104●**	1.09	1.02	0.76	– –	– –
DSI 2 X 55-12A	**108-0099●**	10.93	8.16	6.24	– –	– –

High Current, Metal Stud Diodes

SEMIKRON innovation+service



- Reverse voltages up to 1200V
- Hermetic metal cases with glass insulators
- Threaded studs ISO M6 (SKR26 also 10-32 UNF)
- SKN: Anode to stud
- SKR: Cathode to stud

333790

$I_{f\ (av)}$ A	V_{rrm} max. V	Package	Mftrs. List No	Order Code	Price Each 1+	25+	100+
Stud Anode							
25	1200	E8	SKN26/12	**956-4403●**	7.90	6.35	5.31
50	1200	E12	SKN45/12	**956-4411●**	10.73	8.71	7.33
95	400	E12	SKN70/04	**956-4420●**	5.83	4.79	4.08
95	1600	DO-203AB	SKN71/16	NEW **146-7139●**	12.18	11.43	10.28
95	1200	E12	SKN70/12	**956-4438●**	8.13	6.63	5.60
125	1600	DO-205AC	SKN100/16	NEW **146-7138●**	20.19	15.70	14.14
165	400	E14	SKN130/04	**956-4446●**	15.63	12.14	10.26
165	1200	E14	SKN130/12	**956-4454●**	20.56	16.90	14.34
320	400	E15	SKN240/04	**956-4462●**	20.33	16.63	14.07
Stud Cathode							
25	400	E8	SKR26/04	**956-4470●**	5.62	4.50	3.75
25	1200	E8	SKR26/12	**956-4489●**	7.89	6.32	5.27
25	1600	E9	SKR20/16	NEW **146-7142●**	5.72	4.65	4.19
50	1200	E12	SKR45/12	**956-4497●**	10.71	7.71	6.50
95	400	E12	SKR70/04	**956-4500●**	6.18	4.56	3.88
95	1200	E12	SKR70/12	**956-4519●**	8.13	6.63	5.60
95	1200	E11	SKR71/12	**956-4527●**	10.71	8.86	7.56
125	1600	DO-205AC	SKR100/16	NEW **146-7140●**	20.15	15.68	14.11
165	400	E14	SKR130/04	**956-4535●**	15.63	12.14	10.26
165	1200	E14	SKR130/12	**956-4543●**	20.01	16.45	13.96
165	1600	DO-205AC	SKR 130/16	NEW **145-6963●**	39.25	23.11	20.74
320	400	E15	SKR240/04	**956-4551●**	20.33	16.63	14.07

High Current, Metal Stud Diodes

Standard and Avalanche

VISHAY



DO-4 (10-32 UNF 2A)



DO-5 (¼-28 UNF 2A)



DO-8 (½-20 UNF 2A)
DO-9 (¾-16 UNF 2A)
DO-10 (¾-80UNF-2A)

Standard Diodes
(* denotes rotating tab)

497270

$I_{f\ (av)}$ A	V_{rrm} max. V	Pack-age	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
Stud Cathode							
12	200	DO-4	12F20	**365-397●**	3.55	2.02	1.55
12	600	DO-4	12F60	**393-8955●**	2.40	2.07	1.76
12	800	DO-4	12F80	**394-0731●**	2.42	2.08	1.75
12	1200	DO-4	12F120	**506-606●**	5.99	3.78	2.93
16	400	DO-4	16F40	**365-440●**	4.16	2.91	1.85
16	800	DO-4	16F80	**365-452●**	4.01	3.07	2.64
16	1200	DO-4	16F120	**365-476●**	6.51	3.69	2.83
25	100	DO-4	25F10	**394-0743●**	1.67	1.44	1.23
25	200	DO-4	25F20	**394-0767●**	3.00	2.57	2.20
25	400	DO-4	25F40	**393-9005●**	3.48	2.72	2.08
25	600	DO-4	25F60	**506-620●**	2.86	2.55	2.24
25	1000	DO-4	25F100	**394-0755●**	2.32	1.99	1.70
25	1200	DO-4	25F120	**506-643●**	6.41	4.04	3.14
40	100	DO-5	40HF10	**365-609●**	4.51	2.59	1.95
40	200	DO-5	40HF20	**365-622●**	3.82	2.19	1.65
40	400	DO-5	40HF40	**365-646●**	4.38	3.38	2.80
40	600	DO-5	40HF60	**365-660●**	5.65	3.25	2.45
40	800	DO-5	40HF80	**365-683●**	5.61	4.38	3.66
40	1000	DO-5	40HF100	**365-701●**	9.83	5.64	4.27
40	1200	DO-5	41HF120	**394-0809●**	3.76	3.20	2.75
40	1600	DO-5	40HF160	**393-9054●**	4.10	3.52	3.02
70	100	DO-5	70HF10	**365-920●**	7.11	4.84	3.24
70	200	DO-5	70HF20	**365-944●**	7.52	5.13	3.68
70	800	DO-5	70HF80	**366-006●**	10.22	7.35	5.27
70	1200	DO-5	70HF120	**366-043●**	13.08	9.85	6.28
70	1400	DO-5	70HF140	**393-9066●**	5.56	4.74	4.07
70	1600	DO-5	70HF160	**366-067●**	5.97	5.35	4.75
85	400	DO-5	85HF40	**366-201●**	9.15	7.07	5.97
85	800	DO-5	85HF80	**394-0810●**	11.12	7.01	5.43
85	800	DO-5**	86HF80	**394-0822●**	6.83	5.85	5.02
85	1200	DO-5	85HF120	**366-286●**	11.56	7.66	6.07
					1+	**10+**	**25+**
150	100	DO-8	45L10	**365-762●**	33.43	21.89	16.68
150	600	DO-8	45L60	**365-828●**	39.58	24.21	19.73
150	800	DO-8	150U80D	**489-6543●**	27.01	17.35	14.61
StudAnode					**1+**	**25+**	**100+**
12	200	DO-4	12FR20	**365-415●**	3.55	2.02	1.55
16	100	DO-4	16FR10	**365-488●**	3.77	2.16	1.64
16	1200	DO-4	16FR120	**365-531●**	5.06	3.90	3.34
25	400	DO-4	25FR40	**393-9029●**	2.63	2.13	1.59
25	800	DO-4	25FR80	**393-9030●**	2.39	2.04	1.74
25	1000	DO-4	25FR100	**394-0780●**	2.32	1.99	1.70
25	1200	DO-4	25FR120	**506-655●**	3.18	2.82	2.58
40	400	DO-5	40HFR40	**365-658●**	5.79	4.29	3.08
40	800	DO-5	40HFR80	**365-695●**	4.21	3.28	2.75
40	1000	DO-5	40HFR100	**365-713●**	8.99	6.13	3.90
40	1200	DO-5	40HFR120	**365-737●**	6.98	5.41	4.54
70	100	DO-5	70HFR10	**365-932●**	5.95	3.41	2.57
70	200	DO-5	70HFR20	**365-956●**	7.52	5.13	3.68
70	400	DO-5	70HFR40	**365-970●**	8.49	5.67	4.40
70	1400	DO-5	70HFR140	**393-9078●**	5.64	4.84	4.13
70	1600	DO-5	70HFR160	**366-079●**	17.39	10.14	7.89
85	400	DO-5	85HFR40	**366-213●**	9.15	7.07	5.97
85	400	DO-5	85HFR40	**366-213●**	9.15	7.07	5.97
85	1200	DO-5	85HFR120	**366-298●**	12.05	9.40	7.89
85	800	DO-5*	85HFR80	**393-9080●**	8.79	7.52	6.47
85	1200	DO-5	85HFR120	**366-298●**	12.05	9.40	7.89
					1+	**10+**	**25+**
150	200	DO-8	45LR20	**365-798●**	35.14	21.50	17.51

** 86HF series has DO-5 package with extended lead

High Voltage ADD-A-Pak™ Power Modules

International IOR Rectifier



H=37 (incl terminals), W=92, D=20
Mounting Holes=6.2 dia,
Fixing centres=80

- Industrial standard package
- Thick Al metal die and double stick bonding
- Thick copper baseplate
- **UL** recognised
- 3500V_{RMS} isolating voltage
- Full compatible TO-240AA
- High current surge capability
- Easy heatsink mounting
- Al_2O_3 DBC insulator
- Heatsink grounded

234923

$I_{f\ (AV)}$ T_C=100°C A	I_{FSM} A	V_{RRM}/ V_{DRM} V	Mftrs. List No.	Order Code	Price Each 1+	10+	25+
Single Diode Configuration							
100	2020	1200	IRKE91/12APBF	**909-9263●**	21.37	17.93	15.24
100	2020	1200	IRKE91/12APBF	**909-9263●**	21.37	17.93	15.24
Dual Diode Configuration							
60	1600	1200	IRKD56/12APBF	**909-9298●**	20.77	17.43	14.82
80	1790	1200	IRKD71/12APBF	**909-9301●**	21.09	17.71	15.03
100	2020	800	IRKD91/08APBF	**909-9344●**	24.40	20.47	17.39
100	2020	1200	IRKD91/12APBF	**909-9328●**	24.72	20.75	17.63
100	2020	1600	IRKD91/16APBF	**909-9336●**	24.87	20.88	17.74

165A INT-A-PAK™ Diode Modules

VISHAY



H=30 (excl. terminals), W=94, D=35
Mounting holes=6.5, fixing centres=80

- High voltage
- Electrically isolated DBC ceramic (Al_2O_3) base
- 3500V_{RMS} isolating voltage
- Industry standard package
- 4000A surge current rated
- Glass passivated chips

V_{rrm} V	V_{rsm} V	$I_{d\ (av)}$ A @	T_c C	I_{FSM} @50Hz A	Mftrs.List No.
1600	1700	165	100	4000	IRKD166/16PBF

241504

Mftrs. List No.	Order Code	Price Each 1+	10+	25+
IRKD166/16PBF	**909-9271●**	50.57	42.46	32.21

Diode Standard, 190A, Dual

SEMIKRON innovation+service

New



Features:
- Terminal height 17 mm
- Chips soldered directly to isolated substrate

Typical Applications:
- Input Bridge Rectifier for
- AC/DC motor control
- Power Supply

RL Re-reeling available

Farnell

RoHS ● Compliant ▲ Non-compliant

Power Diodes - Standard Recovery - continued

Diode Standard, 190A, Dual - continued

V_{RRM} (V)	I_{FAV} (A)	I_{FSM} (A)	T_j max °C	V_F max (V)	Case Style	Mftrs. List No.
1600	190	6000	25	1.5	SEMiX 1s	SEMIX191KD16S

504776

Mftrs. List No.	Order Code	Price Each 1+	3+	8+
SEMIX191KD16S	**146-7124●**	71.58	55.66	50.10

320A, 2000V MAGN-A-Pak™ Diode Modules

International IOR Rectifier



H=52, W=50, D=115
Mounting Holes = 38 x 80, dia. 5.5

- High voltage
- Electrically isolated base plate
- 3000 V_{RMS} isolating voltage
- Simplified mechanical designs, rapid assembly
- Industrial standard package
- High current surge capability
- Easy heatsink mounting
- Large creepage distances
- **UL E78996 approved**

$I_{f\ (AV)}$ T_C=100°C A	I_{FSM} A	V_{RRM}/ V_{DRM} V	Mftrs. List No.
320A	10110A	2000	IRKE320-20PBF

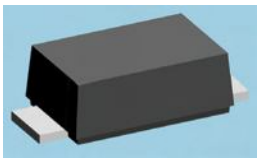
241501

Mftrs. List No.	Order Code	Price Each 1+	10+	25+
IRKE320-20PBF	**909-9280●**	74.98	68.87	54.27

Power Diodes - Fast Recovery

Diode, SMF Fast Glass Passivated

TAIWAN SEMICONDUCTOR



New

Features:

- Glass passivated junction chip
- Fast switching for high efficiency
- Plastic material used carries Underwriters Laboratory Classification 94V-0
- High temperature soldering

V_{RRM} V	$I_{(AV)}$ A	I_{FSM} A	V_F @ 0.5A V	Trr nS	Mftr.	Mftrs. List No.
50	0.8	30	1.3	150	TSC	RS1AL
100	0.8	30	1.3	150	TSC	RS1BL
200	0.8	30	1.3	150	TSC	RS1DL
400	0.8	30	1.3	150	TSC	RS1GL
600	0.8	30	1.3	250	TSC	RS1JL
800	0.8	30	1.3	500	TSC	RS1KL
1000	0.8	30	1.3	500	TSC	RS1ML
50	0.5	10	1.3	150	TSC	RSFAL
100	0.5	10	1.3	150	TSC	RSFBL
200	0.5	10	1.3	150	TSC	RSFDL
400	0.5	10	1.3	150	TSC	RSFGL
600	0.5	10	1.3	250	TSC	RSFJL
800	0.5	10	1.3	500	TSC	RSFKL
1000	0.5	10	1.3	500	TSC	RSFML

503788

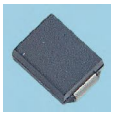
Order Multiple=10

Mftrs. List No.	Description	Order Code	Price Each 10+	100+	250+	1K+
RS1AL	Diode, Fast SMF GP 0.8A 50V	SMD **155-9132●**	0.078	0.052	0.039	0.035
RS1BL	Diode, Fast SMF GP 0.8A 100V	SMD **155-9133●**	0.084	0.056	0.042	0.038
RS1DL	Diode, Fast SMF GP 0.8A 200V	SMD **155-9134●**	0.084	0.056	0.042	0.038
RS1GL	Diode, Fast SMF GP 0.8A 400V	SMD **155-9135●**	0.090	0.060	0.045	0.040
RS1JL	Diode, Fast SMF GP 0.8A 600V	SMD **155-9136●**	0.090	0.060	0.045	0.040
RS1KL	Diode, Fast SMF GP 0.8A 800V	SMD **155-9137●**	0.093	0.062	0.047	0.042
RS1ML	Diode, Fast SMF GP 0.8A 1000V	SMD **155-9139●**	0.093	0.062	0.047	0.042
RSFAL	Diode, Fast SMF GP 0.5A 50V	SMD **155-9141●**	0.078	0.052	0.039	0.035
RSFBL	Diode, Fast SMF GP 0.5A 100V	SMD **155-9142●**	0.083	0.055	0.041	0.037
RSFDL	Diode, Fast SMF GP 0.5A 200V	SMD **155-9143●**	0.083	0.055	0.041	0.037
RSFGL	Diode, Fast SMF GP 0.5A 400V	SMD **155-9144●**	0.089	0.059	0.044	0.040
RSFJL	Diode, Fast SMF GP 0.5A 600V	SMD **155-9145●**	0.089	0.059	0.044	0.040
RSFKL	Diode, Fast SMF GP 0.5A 800V	SMD **155-9146●**	0.092	0.061	0.046	0.041
RSFML	Diode, Fast SMF GP 0.5A 1000V	SMD **155-9147●**	0.092	0.061	0.046	0.041

SMA, SMB, SMC, SOD-106A

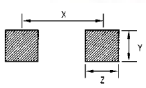
Glass Passivated

SMD



Supplied on 12mm tape.

	H	W	D	X	Y	Z
SMA	2.29	5.28	2.79	4.1	1.7	1.8
SMC	2.62	8.13	6.22	6.5	3.2	1.8
SMA	2.15	5.3	2.6	5.5	2.5	3.1



Footprint

I_F (av.) A	V_{RRM} V	I_{FSM} A	t_{rr} max ns	V_F V	@	I_F A	Package	Mftr.	Mftrs List No.
1	50	30	150	1.3		1	SMA	MC	RS1A
1	50	30	150	1.3		1	SMA	GS	RS1A
1	100	30	150	1.3		1	SMA	MC	RS1B
1	100	30	150	1.3		1	SMA	GS	RS1B
1	200	30	150	1.3		1	SMA	MC	RS1D
1	200	30	150	1.3		1	SMA	GS	RS1D
1	400	30	150	1.3		1	SMA	MC	RS1G
1	400	30	150	1.3		1	SMA	GS	RS1G
1	600	30	250	1.3		1	SMA	MC	RS1J
1	600	30	250	1.3		1	SMA	GS	RS1J
1	800	30	500	1.3		1	SMA	MC	RS1K
1	1000	30	500	1.3		1	SMA	MC	RS1M
1	200	30	50	1		1	SMA	GS	US1D
1	400	30	50	1		1	SMA	GS	US1G.
1.5	1000	300	120	1.5		1.0	SMA	TFK	BYG21M
1.5	100	50	150	1.3		1.5	SMB	GS	RS2B
1.5	200	50	150	1.3		1.5	SMB	GS	RS2D
1.5	400	50	150	1.3		1.5	SMB	GS	RS2G
1.5	600	50	250	1.3		1.5	SMB	GS	RS2J
2	50	50	150	1.3		2	SMB	MC	RS2A
2	100	50	150	1.3		2	SMB	MC	RS2B
2	200	50	150	1.3		2	SMB	MC	RS2D
2	400	50	150	1.3		2	SMB	MC	RS2G
2	600	50	250	1.3		2	SMB	MC	RS2J
2	800	50	500	1.3		2	SMB	MC	RS2K
2	1000	50	500	1.3		2	SMB	MC	RS2M
3	50	100	150	1.3		3	SMC	MC	RS3A
3	100	100	150	1.3		3	SMC	MC	RS3B
3	200	100	150	1.3		3	SMC	MC	RS3D
3	400	100	150	1.3		3	SMC	MC	RS3G
3	600	100	250	1.3		3	SMC	MC	RS3J
3	800	100	500	1.3		3	SMC	MC	RS3K
3	1000	100	500	1.3		3	SMC	MC	RS3M
3	100	100	150	1.3		2.5	SMC	GS	RS3B
3	800	100	500	1.3		2.5	SMC	GS	RS3K

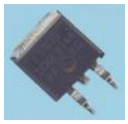
211159

Order Multiple=5

Mftrs. List No.	Mftr.	Order Code	Price Each 5+	100+	1K+	3K+	
BYG21M	TFK	SMD **102-1748●** RL	0.240	0.153	0.109	0.087	
Order Multiple=10			**10+**	**100+**	**200+**	**500+**	**1K+**
RS1A	GS	SMD **955-0100●** RL	0.310	0.240	0.210	0.109	0.089
RS1A	MC	SMD **408-5000●** RL	0.290	0.200	0.185	0.117	0.095
RS1B	GS	SMD **955-0119●** RL	0.320	0.250	0.230	0.109	0.103
RS1B	MC	SMD **408-5019●** RL	0.290	0.200	0.185	0.117	0.095
RS1D	GS	SMD **955-0127●** RL	0.320	0.250	0.210	0.118	0.112
RS1G	GS	SMD **955-0135●** RL	0.390	0.310	0.250	0.131	0.125
RS1G	MC	SMD **408-5035●** RL	0.340	0.280	0.220	0.141	0.132
RS1J	GS	SMD **955-0143●** RL	0.390	0.320	0.250	0.141	0.127
RS1J	MC	SMD **408-5043●** RL	0.340	0.280	0.220	0.141	0.132
RS1D	MC	SMD **408-5027●** RL	0.300	0.220	0.188	0.131	0.122
Order Multiple=5			**5+**	**100+**	**200+**	**500+**	**1K+**
US1D	GS	SMD **955-1816●** RL	0.150	0.121	0.103	0.086	0.080
US1G.	GS	SMD **955-1824●** RL	0.157	0.128	0.108	0.092	0.085
RS2B	GS	SMD **955-0151●** RL	0.240	0.168	0.133	0.113	0.103
RS2D	GS	SMD **955-0160●** RL	0.200	0.161	0.135	0.116	0.102
RS2G	GS	SMD **955-0178●** RL	0.250	0.183	0.144	0.130	0.116
RS2J	GS	SMD **955-0186●** RL	0.240	0.175	0.146	0.116	0.106
RS3B	GS	SMD **955-0194●** RL	0.300	0.250	0.210	0.143	0.131
RS3B	MC	SMD **408-5051●** RL	0.340	0.280	0.260	0.199	0.177
RS3K	GS	SMD **955-0208●** RL	0.450	0.360	0.310	0.210	0.182
RS3K	MC	SMD **408-5060●** RL	0.410	0.310	0.280	0.250	0.199
			5+	**100+**	**250+**	**1K+**	**+**
RS1K	MC	NEW SMD **162-5181●**	0.170	0.113	0.086	0.068	– –
RS1M	MC	NEW SMD **162-5182●**	0.188	0.125	0.094	0.075	– –
RS2A	MC	NEW SMD **162-5183●**	0.220	0.149	0.111	0.090	– –
RS2B	MC	NEW SMD **162-5185●**	0.220	0.149	0.111	0.090	– –
RS2D	MC	NEW SMD **162-5186●**	0.220	0.149	0.111	0.090	– –
RS2G	MC	NEW SMD **162-5187●**	0.240	0.159	0.119	0.096	– –
RS2J	MC	NEW SMD **162-5188●**	0.240	0.159	0.119	0.096	– –
RS2K	MC	NEW SMD **162-5189●**	0.260	0.170	0.128	0.102	– –
RS2M	MC	NEW SMD **162-5190●**	0.260	0.170	0.128	0.102	– –
RS3A	MC	NEW SMD **162-5191●**	0.350	0.230	0.175	0.141	– –
RS3D	MC	NEW SMD **162-5192●**	0.360	0.240	0.179	0.143	– –
RS3G	MC	NEW SMD **162-5193●**	0.380	0.250	0.188	0.150	– –
RS3J	MC	NEW SMD **162-5194●**	0.380	0.250	0.188	0.150	– –
RS3M	MC	NEW SMD **162-5195●**	0.390	0.270	0.196	0.157	– –

4A to 320A, Fast Recovery Diodes

International IOR Rectifier



D_2Pak

Vrrm V	I_F A	V_F V	trr max ns	List No.
200	8	0.975	35	MURB1620CTTRLP
200	15	1.05	35	30CTH02SPBF
600	4	1.8	38	HFA04SD60SPBF
600	4	1.8	17	HFA04TB60SPBF
600	8	1.7	-	HFA08SD60SPBF
600	30	1.7	-	HFA30TA60CSPBF
1200	6	3	-	HFA06TB120SPBF
1200	8	3	-	HFA08TB120SPBF
1200	16	2.5	-	HFA16TB120SPBF

SMD

453196

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
30CTH02SPBF	SMD **129-8415●**	1.79	1.31	1.01	0.79
HFA04SD60SPBF	SMD **129-8427●**	0.68	0.60	0.46	0.35
HFA04TB60SPBF	SMD **129-8417●**	2.09	1.54	1.17	0.91
HFA06TB120SPBF	SMD **129-8418●**	4.35	3.18	2.45	1.91

RL Re-reeling available

Farnell

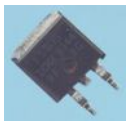
Mftrs. List No.	Order Code	1+	25+	100+	250+
HFA08SD60SPBF	SMD 129-8428●	0.53	0.39	0.31	0.28
HFA08TB120SPBF	SMD 129-8420●	4.90	3.61	2.77	2.16
HFA16TB120SPBF	SMD 129-8424●	10.25	7.53	5.80	4.50
HFA30TA60CSPBF	SMD 129-8426●	5.59	4.12	3.17	2.46
MURB1620CTTRLP	SMD 129-8416● RL	1.19	0.88	0.68	0.52

0.5A to 6A Axial



DO-41 L=5.2, Dia.=2.7
DO-201AD L=9.5, Dia.=5.6
R-1 L=3.5, Dia.=2.6

multicomp ON Semiconductor TAIWAN SEMICONDUCTOR FAIRCHILD SEMICONDUCTOR



D²Pak (TO-263AA)

I_F (av) A	V_{RRM} max A	t_{rr} max ns	I_{FSM} A	V_F V	@	I_F A	Package	Mftr	Mftrs. List No./ Series
0.5	400	150	10	1.3		0.5	DO-213AA	VISH	RGL34G
0.5	600	250	10	1.3		0.5	DO-213AA	VISH	RGL34J
1	1000	30	150	1.3		1	DO-41	MC	BA159
1	1000	500	20	1.5		1	DO-41	GS	BA159GP
1	1000	250	30	1.2		1	DO-41	MC	BA159G
1	600	35	30	1.7		1	DO-41	TS	SF18G
1	400	30	150	1.3		1	DO-41	MC	BA157
1	400	150	30	1.2		1	DO-41	MC	BA157G
1	400	35	30	1.3		1	DO-41	TS	SF16G
1	200	35	30	0.95		1	DO-41	TS	SF14G
1	100	35	30	0.95		1	DO-41	TS	SF12G
1	1000	30	500	1.3		1	DO-41	MC	FR107
1	1000	30	500	1.3		1	DO-41	MC	PS1010R
1	400	150	30	1.2		1	DO-41	MC	1N4936
1	400	30	150	1.3		1	R-1	MC	1F4
1	400	30	150	1.3		1	DO-41	MC	BA157/9
1	200	150	30	1.2		1	DO-41	MC	1N4935
1	100	30	30	1.2		1	DO-41	MC	1N4934
1	50	150	30	1.2		1	DO-41	FCH	1N4933
1	200	15	40	0.95		1	DO-204AL	VISH	UG1D
1	600	200	30	1.2		1	DO-204AL	VISH	1N4937GP
1	600	250	30	1.3		1	DO-204AL	VISH	RGP10J
1	600	250	30	1.3		1	SMA	VISH	RS1J
1	800	500	20	1.3		1	DO-204AL	VISH	BA159
1	1000	500	30	1.3		1	DO-213AB	VISH	BYM11-1000
1	200	150	30	1.3		1	DO-213AB	VISH	BYM11-200
1	200	50	30	1		1	DO-213AB	VISH	BYM12-200
1	200	50	30	1		1	DO-213AB	VISH	EGL41D
1	400	150	30	1.3		1	DO-213AB	VISH	BYM11-400
1	400	50	30	1.25		1	DO-213AB	VISH	EGL41G
1	600	250	30	1.3		1	DO-213AB	VISH	BYM11-600
1	600	50	35	1.05		1	SMB	VISH	MURS160
1	800	500	30	1.3		1	DO-213AB	VISH	BYM11-800
1	50	200	30	1.2		1	DO-41	MC	1N4933
1	50	200	30	1.2		1	DO-41	MC	1N4934
1	50	200	30	1.2		1	DO-41	MC	1N4935
1	200	200	30	1.2		1	DO-41	MC	1N4935G
1	50	200	30	1.2		1	DO-41	MC	1N4936
1	50	200	30	1.2		1	DO-41	MC	1N4937
1	600	200	30	1.2		1	DO-41	MC	1N4937G
1	100	150	30	1.2		1	DO-41	MC	FR102
1	200	150	30	1.2		1	DO-41	MC	FR103
1	200	150	30	1.3		1	DO-41	MC	FR103G
1	600	250	30	1.2		1	DO-41	MC	FR105
1	600	250	30	1.3		1	DO-41	MC	FR105G
1	1000	500	30	1.3		1	DO-41	MC	FR107G
1.5	600	250	50	1.3		1.5	DO-204AL	VISH	RGP15J
2	800	70	250	1.3		3	DO-201AD	MC	BY299
2	200	150	60	1.2		2	DO-15	MC	FR203
2	200	150	55	1.3		2	DO-15	MC	FR203G
2	600	250	60	1.2		2	DO-15	MC	FR205
2	600	250	55	1.3		2	DO-15	MC	FR205G
2	1000	500	60	1.2		2	DO-15	MC	FR207
2	1000	500	55	1.3		2	DO-15	MC	FR207G
3	1000	200	500	1.3		3	DO-201AD	MC	PS3010R
3	1000	150	150	1.3		3	DO-201AD	MC	FR307
3	800	250	150	1.2		3	DO-201AD	MC	BY399
3	600	35	125	1.7		3	DO-201AD	TS	SF38G
3	400	35	125	1.3		3	DO-201AD	TS	SF36G
3	200	250	150	1.2		3	DO-201AD	MC	BY397
3	200	300	100	1.25		3	DO-201AD	ON	MR85..
3	200	35	125	0.95		3	DO-201AD	TS	SF34G
3	100	35	125	0.95		3	DO-201AD	TS	SF32G
3	100	150	150	1.2		3	DO-201AD	MC	FR302
3	100	150	125	1.3		3	DO-201AD	MC	FR302G
3	600	250	150	1.2		3	DO-201AD	MC	FR305
3	600	250	125	1.3		3	DO-201AD	MC	FR305G
3	1000	500	125	1.3		3	DO-201AD	MC	FR307G
3	50	100	150	1.25		3	DO-201AD	MC	MR850
3	100	100	150	1.25		3	DO-201AD	MC	MR851
3	200	100	150	1.25		3	DO-201AD	MC	MR852
3	400	100	150	1.25		3	DO-201AD	MC	MR854
3	600	150	150	1.3		3	DO-201AD	MC	MR856
3	800	150	150	1.3		3	DO-201AD	MC	MR858
6	50	150	250	1.2		6	R-6	MC	FR601
6	50	150	250	1.3		6	R-6	MC	FR601G
6	100	150	250	1.3		6	R-6	MC	FR602G
6	200	150	250	1.2		6	R-6	MC	FR603
6	200	150	250	1.3		6	R-6	MC	FR603G
6	400	150	250	1.3		6	R-6	MC	FR604G
6	600	250	250	1.2		6	R-6	MC	FR605

I_F (av)	V_{RRM} max	t_{rr} max	I_{FSM}	V_F	I_F			Mftrs. List No./
6	600	250	250	1.3	6	R-6	MC	FR605G
6	1000	500	150	1.2	6	R-6	MC	FR607
6	1000	500	250	1.3	6	R-6	MC	FR607G
D²Pak								
10	200	40	100	1.15	10	D2-PAK	FCH	FFB20UP20DN

211247

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+
FFB20UP20DN	FCH	SMD 132-4820●	1.000	0.830	0.650
			1+	**100+**	**250+**
FR601	MC	NEW 162-5065●	0.390	0.270	0.196
FR601G	MC	NEW 162-5066●	0.640	0.430	0.320
FR602G	MC	NEW 162-5067●	0.640	0.430	0.320
FR603	MC	NEW 162-5069●	0.410	0.280	0.200
FR603G	MC	NEW 162-5071●	0.640	0.430	0.320
FR604G	MC	NEW 162-5072●	0.640	0.430	0.320
FR605	MC	NEW 162-5073●	0.420	0.290	0.210
FR605G	MC	NEW 162-5074●	0.670	0.450	0.340
FR607	MC	NEW 162-5075●	0.470	0.320	0.240
FR607G	MC	NEW 162-5076●	0.670	0.450	0.340
Order Multiple=5					
			5+	**25+**	**100+**
BA157	MC	956-5272●	0.200	0.158	0.136
BA157G	MC	408-4586●	0.135	0.070	0.048
BA159	MC	956-5280●	0.310	0.260	0.200
BA159G	MC	408-4594●	0.240	0.126	0.083
BA159GP	GS	954-9161●	0.260	0.220	0.184
BY397	MC	NEW 162-5026●	0.250	0.165	0.124
BY399	MC	NEW 162-5027●	0.270	0.179	0.135
MR850	MC	NEW 162-5166●	0.126	0.093	0.080
MR851	MC	NEW 162-5167●	0.135	0.099	0.085
MR852	MC	NEW 162-5168●	0.135	0.099	0.085
MR854	MC	NEW 162-5169●	0.142	0.104	0.090
MR856	MC	NEW 162-5170●	0.142	0.104	0.090
MR858	MC	NEW 162-5171●	0.154	0.112	0.097
Order Multiple=5			**5+**	**100+**	**1K+**
FR107	MC	956-5264●	0.176	0.126	0.119
FR307	MC	956-5299●	0.600	0.370	0.300
MR852RLG	ON	955-6346●	0.198	0.130	0.103
MR856RLG	ON	955-6354●	0.198	0.130	0.103
Order Multiple=10			**10+**	**100+**	**1K+**
1N4933	FCH	984-3655●	0.083	0.049	0.038
1N4934	MC	101-7584●	0.075	0.047	0.037
1N4935	MC	101-7586●	0.081	0.054	0.045
1N4936	MC	101-7587●	0.104	0.067	0.054
1N4937	FCH	984-3663●	0.104	0.062	0.050
1N4933	MC	NEW 162-4984●	0.045	0.030	0.022
1N4934	MC	NEW 162-4985●	0.048	0.032	0.024
1N4935	MC	NEW 162-4986●	0.048	0.032	0.024
1N4935G	MC	NEW 162-4987●	0.107	0.071	0.053
1N4936	MC	NEW 162-4988●	0.052	0.035	0.026
1N4937	MC	NEW 162-4990●	0.052	0.035	0.026
1N4937G	MC	NEW 162-4991●	0.120	0.081	0.060
Order Multiple=5			**5+**	**100+**	**250+**
SF12G	TS	129-9303●	0.113	0.067	0.050
SF14G	TS	129-9304●	0.106	0.063	0.047
SF16G	TS	129-9305●	0.149	0.089	0.066
SF18G	TS	129-9306●	0.154	0.092	0.069
SF32G	TS	129-9307●	0.240	0.145	0.109
SF34G	TS	129-9308●	0.240	0.145	0.109
SF36G	TS	129-9309●	0.250	0.149	0.112
SF38G	TS	129-9310●	0.260	0.150	0.116
FR102	MC	NEW 162-5047●	0.058	0.039	0.030
FR103	MC	NEW 162-5048●	0.058	0.039	0.030
FR103G	MC	NEW 162-5049●	0.117	0.078	0.058
FR105	MC	NEW 162-5050●	0.063	0.042	0.032
FR105G	MC	NEW 162-5051●	0.124	0.083	0.062
FR107G	MC	NEW 162-5052●	0.138	0.092	0.069
FR203	MC	NEW 162-5053●	0.079	0.052	0.039
FR203G	MC	NEW 162-5054●	0.220	0.149	0.111
FR205	MC	NEW 162-5055●	0.083	0.055	0.041
FR205G	MC	NEW 162-5057●	0.240	0.158	0.118
FR207	MC	NEW 162-5058●	0.094	0.062	0.047
FR207G	MC	NEW 162-5059●	0.270	0.175	0.132
FR302	MC	NEW 162-5060●	0.270	0.177	0.134
FR302G	MC	NEW 162-5061●	0.290	0.192	0.144
FR305	MC	NEW 162-5062●	0.290	0.188	0.141
FR305G	MC	NEW 162-5063●	0.300	0.198	0.148
FR307G	MC	NEW 162-5064●	0.330	0.210	0.161
Order Multiple=5			**5+**	**25+**	**100+**
RGP15J	VISH	133-6511●	0.198	0.166	0.138
UG1D	VISH	133-6512●	0.210	0.173	0.145
1N4937GP	VISH	133-6513●	0.100	0.086	0.071
RGP10J	VISH	133-6515●	0.116	0.100	0.084
RS1J	VISH	SMD 133-6516●	0.102	0.075	0.073
BA159	VISH	133-6517●	0.053	0.045	0.037
BYM11-1000	VISH	SMD 133-6518●	0.182	0.155	0.131
BYM11-200	VISH	SMD 133-6519●	0.182	0.155	0.131
BYM12-200	VISH	SMD 133-6520●	0.260	0.210	0.176
EGL41D	VISH	SMD 133-6521●	0.189	0.158	0.133
BYM11-400	VISH	SMD 133-6522●	0.182	0.155	0.131
EGL41G	VISH	SMD 133-6523●	0.189	0.158	0.133
BYM11-600	VISH	SMD 133-6524●	0.182	0.155	0.131
MURS160	VISH	SMD 133-6525●	0.340	0.250	0.240
BYM11-800	VISH	SMD 133-6527●	0.182	0.155	0.131
RGL34G	VISH	SMD 133-6528●	0.240	0.200	0.168
RGL34J	VISH	SMD 133-6529●	0.240	0.200	0.168

RL Re-reeling available

Farnell

Power Diodes - Fast Recovery - continued

High Efficiency



- Fast reverse recovery time, t_{rr}
- Low forward voltage, V_F
- Low cost axial packages

I_F (av) A	I_{FSM} A	t_{rr} max ns	V_F V	@	I_F A	Package	L	Dia.	Mftrs. List No.
1	30	50	1		1	DO-41	5.2	2.7	HER103
1	30	50	1		1.0	DO-41	5.2	2.7	UF102
1	30	50	1		1	DO-41	5.2	2.7	HER107
1	30	75	1.7		1.0	DO-41	5.2	2.7	UF108
1	30	75	1.7		1	DO-41	5.2	2.7	HER108
1.5	50	50	1		1.5	DO-15	7.6	3.6	HER152
1.5	50	50	1.3		1.5	DO-15	7.6	3.6	HER155
1.5	50	75	1.7		1.5	DO-15	7.6	3.6	HER157
3	150	50	1		3	DO-201AD	9.5	5.6	HER305
3	150	50	1		3	DO-201AD	9.5	5.6	HER307
3	150	50	1.1		3.0	DO-201AD	9.5	5.3	UF304
3	150	75	1.7		3	DO-201AD	9.5	5.6	HER308
6	200	50	1		6	R-6	9.1	7.2	HER601
6	200	50	1		6	R-6	9.1	7.2	HER602
6	200	50	1		6	R-6	9.1	7.2	HER603
6	200	50	1		6	R-6	9.1	7.2	HER604
6	200	50	1.3		6	R-6	9.1	7.2	HER605

211230

Order Multiple=10 V_{RRM} max., V	Mftrs. List No.		Order Code	Price Each 10+	100+	1K+	5K+
200	HER103		956-5256●	0.270	0.134	0.089	0.079
800	HER107		956-5191●	0.200	0.126	0.098	0.077
400	HER305		956-5205●	0.930	0.850	0.830	0.540
800	HER307		956-5213●	0.730	0.370	0.260	0.200
200	UF102		938-0892●	0.188	0.145	0.108	0.072
800	UF108		938-0906●	0.200	0.164	0.141	0.103
Order Multiple=5				**5+**	**100+**	**500+**	**1K+**
400	UF304		938-0914●	0.830	0.820	0.800	0.550
				5+	**100+**	**250+**	**500+**
1000	HER108	NEW	162-5080●	0.165	0.110	0.083	0.066
100	HER152	NEW	162-5083●	0.210	0.141	0.105	0.085
400	HER155	NEW	162-5085●	0.220	0.145	0.109	0.087
800	HER157	NEW	162-5087●	0.230	0.150	0.113	0.090
1000	HER308	NEW	162-5096●	0.440	0.300	0.220	0.177
Order Multiple=1				**1+**	**100+**	**250+**	**500+**
50	HER601	NEW	162-5097●	0.710	0.470	0.360	0.290
100	HER602	NEW	162-5098●	0.710	0.470	0.360	0.290
200	HER603	NEW	162-5099●	0.710	0.470	0.360	0.290
300	HER604	NEW	162-5102●	0.710	0.470	0.360	0.290
400	HER605	NEW	162-5103●	0.710	0.470	0.360	0.290

High Efficiency Glass Passivated



- Low forward voltage, V_F
- High current capability
- High reliability
- Case to **UL 94V-0**

I_F (av) A	I_{FSM} A	t_{rr} max ns	V_F V	@	I_F A	Package	L	Dia.	Mftrs. List No.
3	125	50	1		3	DO-201AD	9.5	5.6	HER301G
3	125	50	1		3	DO-201AD	9.5	5.6	HER302G
3	125	75	1.7		3	DO-201AD	9.5	5.6	HER307G
3	125	75	1.7		3	DO-201AD	9.5	5.6	HER308G
1	30	50	1		1	DO-41	5.2	2.7	HER102G
1	30	50	1		1	DO-41	5.2	2.7	HER104G
1	30	75	1.7		1	DO-41	5.2	2.7	HER106G
1	30	75	1.7		1	DO-41	5.2	2.7	HER108G
1.5	50	50	1		1.5	DO-15	7.6	3.6	HER153G
1.5	50	75	1.7		1.5	DO-15	7.6	3.6	HER156G
1.5	50	75	1.7		1.5	DO-15	7.6	3.6	HER158G
2	60	50	1		2	DO-15	7.6	3.6	HER202G
2	60	50	1		2	DO-15	7.6	3.6	HER204G
2	60	75	1.7		2	DO-15	7.6	3.6	HER207G
2	60	75	1.7		2	DO-15	7.6	3.6	HER208G
3	125	50	1.3		3	DO-201AD	9.5	5.6	HER305G
3	125	75	1.7		3	DO-201AD	9.5	5.6	HER306G
6	150	50	1		6	R-6	9.1	7.2	HER603G
6	150	75	1.7		6	R-6	9.1	7.2	HER606G

342773

Order Multiple=5 V_{RRM} max., V	Mftrs. List No.		Order Code	Price Each 5+	100+	500+	1K+
50	HER301G		408-4934●	0.560	0.280	0.195	0.150
100	HER302G		408-4942●	0.570	0.290	0.195	0.165
800	HER307G		408-4950●	0.910	0.460	0.320	0.270
1000	HER308G		408-4969●	0.950	0.480	0.330	0.280
				5+	**100+**	**250+**	**500+**	**1K+**
100	HER102G	NEW	162-5077●	0.180	0.119	0.090	0.071	0.060
300	HER104G	NEW	162-5078●	0.180	0.119	0.090	0.071	0.060
600	HER106G	NEW	162-5079●	0.188	0.125	0.094	0.075	0.062
1000	HER108G	NEW	162-5082●	0.200	0.135	0.101	0.081	0.067
200	HER153G	NEW	162-5084●	0.240	0.160	0.120	0.096	0.081
600	HER156G	NEW	162-5086●	0.250	0.165	0.124	0.099	0.083
1000	HER158G	NEW	162-5088●	0.270	0.175	0.132	0.105	0.088
100	HER202G	NEW	162-5089●	0.250	0.165	0.124	0.099	0.083
300	HER204G	NEW	162-5090●	0.230	0.150	0.113	0.090	0.075
800	HER207G	NEW	162-5091●	0.280	0.186	0.139	0.111	0.093

				5+	**100+**	**250+**	**500+**	**1K+**
1000	HER208G	NEW	162-5092●	0.300	0.200	0.150	0.120	0.100
400	HER305G	NEW	162-5094●	0.490	0.330	0.240	0.196	0.163
600	HER306G	NEW	162-5095●	0.490	0.330	0.240	0.196	0.163
Order Multiple=1				**1+**	**100+**	**250+**	**500+**	**1K+**
200	HER603G	NEW	162-5101●	0.830	0.550	0.420	0.340	0.280
600	HER606G	NEW	162-5104●	0.870	0.580	0.440	0.350	0.290

Fast Recovery, Sonic-FRD™ Series



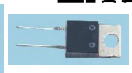
TO-220AB



TO-247AD



SOT-227B



TO-220AC

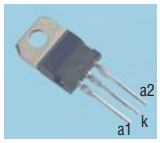
- Small temperature dependence for:
- forward voltage drop
- reverse recovery current:
- Optimized for
- dynamic avalanche ruggedness:
- low loss performance:
- Exceptionally soft recovery
- Low reverse recovery current characteristic
- Soft recovery current without tail
- Optimized for high frequency hard switching

V_{RRM} max. V	I_F av max. A	Ifs max. A	V_F max. V	Package	Mftrs. List No.
600	20	150	2.15	TO-247AD	DHG20I600HA
600	20	150	2.15	TO-247AD	DHG40C600HB
600	30	200	2.2	TO-247AD	DHG30I600HA
1200	20	135	2.35	TO-247AD	DHG20I1200PA
1200	20	135	2.35	TO-247AD	DHG40C1200HB
1200	10	70	2.38	TO-220AC	DHG10I1200PA
1800	20	150	2.94	TO-247AD	DH20-18A
1800	60	650	2.61	SOT-227B	DH2X61-18A
1800	60	650	2.65	TO-247AD	DH60-18A

496699

Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+
DH20-18A	TO-247AD	142-7214●	2.81	2.32	1.90
DH2X61-18A	SOT-227B	142-7215●	21.76	17.95	14.66
DH60-18A	TO-247AD	142-7216●	7.70	6.35	5.20
DHG10I1200PA	TO-220AC	142-7218●	0.98	0.81	0.64
DHG20I1200PA	TO-247AD	142-7219●	2.13	1.76	1.44
DHG20I600HA	TO-247AD	142-7220●	1.92	1.59	1.30
DHG30I600HA	TO-247AD	142-7223●	2.15	1.78	1.46
DHG40C1200HB	TO-247AD	142-7224●	3.29	2.71	2.22
DHG40C600HB	TO-247AD	142-7225●	2.96	2.44	2.00

1A to 60A



TO-220



SOD-93



Isolated (DOP-3I)

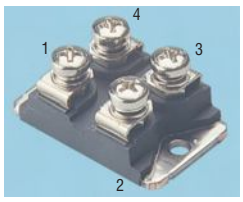
I_f (av) *A	V_{rrm} max. V	t_{rr} (max.) ns	Package	Mftr.	Mftrs List No.
8	400	35	TO-220AC	ST	BYT08P-400
10	1500	600	SOD-113	NXP	BY359-1500
16	400	35	TO-220AB	ST	BYT16P-400
30	400	50	DOP-3I	ST	BYT30PI-400
700	200	25	SOD-123	ROHM	RF071M2STR
1	200	25	SOD-106	ROHM	RF101L2STE25
5	200	30	SC-63	ROHM	RF501B2STL

*Total forward current with both diodes conducting

211411

Mftrs. List No.	Order Code		Price Each 1+	25+	100+	250+	1K+
BY359-1500	109-7284●		0.980	0.620	0.490	0.370	0.280
BYT08P-400	980-1880●		1.330	1.030	0.810	0.580	0.550
BYT16P-400	980-1936●		1.650	1.230	0.940	0.830	0.810
BYT30PI-400	980-2010●		5.610	4.230	3.240	2.760	2.300
RF071M2STR	168-0040●	NEW SMD	0.470	0.270	0.186	0.140	0.116
RF101L2STE25	168-0041●	NEW SMD	0.400	0.270	0.186	0.128	0.105
RF501B2STL	168-0042●	NEW SMD	0.850	0.610	0.480	0.380	0.300

Fast Recovery Power Modules



ISOTOP

V_{RRM} V	I_F* (av) A	t_{rr} max. ns	V_F max. V	Pin out	Mftrs List No.
400	60	100	1.5	a	BYT230PIV-400
400	120	100	1.5	b	BYT261PIV-400

*Total forward current with both diodes conducting

Pin Out	1	2	3	4
a	K1	A2	K2	A1
b	A1	K1	K2	A2

211223

Mftrs. List No.	Order Code	Price Each 1+	5+	10+	25+	50+
BYT230PIV-400	980-1952●	16.80	12.01	8.87	7.59	6.69
BYT261PIV-400	980-1979●	15.31	13.50	13.13	12.80	12.46

Parallel Efficiency Diodes



Glass BY448: L=4.57, Dia=3.81

Parallel efficiency diodes offer high reverse voltage capability and controlled recovery time, for use in horizontal scan circuits of TV monitors and receivers.

V_{RRM} max. V	I_{FWM} max. A	I_{FRM} max. A	Mftrs. List No.
1500	5	8	BY448TAP

Mftrs. List No.	Order Code	Price Each 1+	100+	1K+	3K+
BY448TAP	107-5757●	0.390	0.210	0.149	0.134

425172

Box of 5000 Mftrs. List No.	Order Code	Price Per Box 1+
BY448TAP	NEW 156-2256●	639.08

Fast Diode Modules



H=30mm, W=92mm, D=20mm

Features:
- Heat transfer through ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- SKKD half bridge connection; SKMD common cathode; SKND common anode
- UL recognized, file no. E 63 532

Typical Applications:
- Self commutated inverters
- DC choppers
- AC motor speed control
- Inductive heating
- Uninterruptible power supplies
- Electronic welders
- General power switching applications

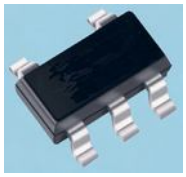
V_{RRM}/ (V)	I_F Avarage (A)	I_{FSM} max (A)	V_{ISO} max (V)	V_F @ 150A max (V)	V_{ISOrms}(@ 1min) max (V)	Mftrs. List No.
1400	42	1200	3600	1.85	3600	SKKD42F14
1500	42	1200	3600	1.85	3600	SKMD42F15

504726

Mftrs. List No.	Order Code	Price Each 1+	3+	8+
SKKD42F14	146-7135●	82.68	64.31	57.87
SKMD42F15	146-7137●	74.85	58.22	52.40

Power Diodes - Ultra-Fast Recovery

Diode, High Frequency / Switching



UMN1NTR



RLS4150TE-11
RLS4448TE-11
RLS-73TE-11



RN739FT106

RLS4150TE-11& RLS4448TE-11 Features:
- Small surface mounting type. (LLDS)
- High speed.
- For surface mounting.
- High reliability.

RLS-73TE-11 Features:
- Ultra small. (LLDS)
- For surface mounting
- High speed (trr=2ns Typ.) & high reliability.

UMN1NTR Features:
- Small mold type. (UMD5)
- High reliability

RN739FT106 Features:
- Small mold type. (UMD3)
- Low high-frequency forward resistance (rF) / low capacitance (CT).

RN731VTE-17 Features:
- Small mold type. (UMD2)
- Low high-frequency forward resistance / low capacitance (CT).

Voltage Vrrm V	Current, If Max mA	Current, Ifs Max A	Voltage, Vf Max mW	Power, Ptot mW	Case Style	Mftrs. List No.
50	600	4	—	500	LL-34	RLS4150TE-11
100	450	2	—	500	LL-34	RLS4448TE-11
90	400	—	1.2	300	LL-34	RLS-73TE-11
50	50	—	1	100	SOD-323	RN731VTE-17
50	50	—	1	100	SOT-323	RN739FT106
80	80	—	0.9	150	SOT-353	UMN1NTR

528125

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
RLS4150TE-11	SMD 168-0045●	0.300	0.151	0.105	0.047	0.035
RLS4448TE-11	SMD 168-0046●	0.290	0.140	0.093	0.047	0.035
RLS-73TE-11	SMD 168-0047●	0.290	0.140	0.093	0.047	0.035
RN731VTE-17	SMD 168-0057●	0.350	0.230	0.164	0.093	0.069
RN739FT106	SMD 168-0058●	0.400	0.270	0.186	0.128	0.105
UMN1NTR	SMD 168-0108●	0.400	0.220	0.151	0.116	0.093

Diode Array



Current, If max mA	Voltage, Vf max V	Current, If Vf mA	Power Dissipation mW	No. of Pins	Case Style	Mftrs. List No.
450	1.25	150	225	3	SOT-23	BAW56T116
200	1	10	200	3	SOT-346	DA204KT146
200	1	10	200	3	SOT-323	DA204UT106
200	1	10	150	3	SOT-416	DA221TL
300	1.2	100	150	4	SOT-343	DA227TL
200	1	10	150	3	SOT-346	DAN202KT146
300	1.2	100	200	3	SOT-323	DAN202UT106
300	1.2	100	200	3	SOT-323	DAN217UT106
300	1.2	100	150	3	SOT-416	DAN222TL
—	1	10	150	3	SOT-323	DAN235UT106
300	1.2	100	200	3	SOT-346	DAP202KT146
300	1.2	100	200	3	SOT-323	DAP202UT106
300	1.2	100	150	3	SOT-416	DAP222TL
80	0.9	5	80	5	SC-74A	FMN1T148
80	0.9	5	80	5	SC-74A	FMP1T148
300	1.2	100	300	6	SOT-457	IMN10T108
300	1.2	100	300	6	SOT-457	IMN11T110
300	1.2	100	300	6	SOT-457	IMP11T110
300	1.2	100	150	6	SOT-363	UMN11NTN
200	1.2	100	200	6	SOT-363	UMR12NTN

527925

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
BAW56T116	SMD 167-9955●	0.360	0.186	0.116	0.058	0.047
DA204KT146	SMD 167-9957●	0.420	0.210	0.140	0.069	0.058
DA204UT106	SMD 167-9959●	0.370	0.186	0.128	0.058	0.047
DA221TL	SMD 167-9961●	0.460	0.220	0.151	0.069	0.058
DA227TL	SMD 167-9962●	0.370	0.210	0.140	0.105	0.082
DAN202KT146	SMD 167-9963●	0.300	0.151	0.105	0.047	0.035
DAN202UT106	SMD 167-9964●	0.370	0.186	0.128	0.058	0.047
DAN217UT106	SMD 167-9965●	0.240	0.164	0.116	0.058	0.047
DAN222TL	SMD 167-9966●	0.420	0.210	0.140	0.069	0.058
DAN235UT106	SMD 167-9967●	0.280	0.186	0.128	0.069	0.058
DAP202KT146	SMD 167-9968●	0.300	0.151	0.105	0.047	0.035
DAP202UT106	SMD 167-9969●	0.350	0.175	0.116	0.058	0.047
DAP222TL	SMD 167-9970●	0.330	0.164	0.105	0.058	0.035
FMN1T148	SMD 167-9984●	0.380	0.210	0.151	0.116	0.093
FMP1T148	SMD 167-9985●	0.420	0.230	0.164	0.128	0.093
IMN10T108	SMD 167-9987●	0.380	0.210	0.140	0.105	0.082
IMN11T110	SMD 167-9988●	0.460	0.260	0.175	0.140	0.105
IMP11T110	SMD 167-9989●	0.350	0.186	0.128	0.105	0.082
UMN11NTN	SMD 168-0107●	0.400	0.220	0.151	0.116	0.093
UMR12NTN	SMD 168-0111●	0.430	0.240	0.175	0.128	0.105

Power Diode Package Outlines



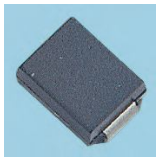
59-04(DO-41)



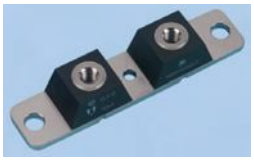
267-03



PowerMite



SMB



POWERTAP



SOT93/TO218



D^2 PAK



SMC



TO-247

RL Re-reeling available

Power Diodes - Ultra-Fast Recovery - continued

Power Diode Package Outlines - continued



PowIRtab



To-220



DO-220

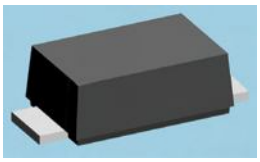
211284

Diode, SMF Ultra-Fast

$I_{(AV)}$ = 1A, I_{FSM} = 30A*, Trr = 35nS

TAIWAN SEMICONDUCTOR

New



V_{RRM} V	V_F V	Mftr.	Mftrs. List No.
50	0.95	TSC	ES1AL
100	0.95	TSC	ES1BL
150	0.95	TSC	ES1CL
200	0.95	TSC	ES1DL
300	1.3	TSC	ES1FL
400	1.3	TSC	ES1GL
500	1.7	TSC	ES1HL
600	1.7	TSC	ES1JL

*Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)

503784

Order Multiple=5

Mftrs. List No.	Description	Order Code	Price Each 5+	100+	250+	1K+
ES1AL	Diode, Ultra-Fast SMF 1A 50V	SMD 155-9123	0.126	0.084	0.063	0.056
ES1BL	Diode, Ultra-Fast SMF 1A 100V	SMD 155-9124	0.126	0.084	0.063	0.056
ES1CL	Diode, Ultra-Fast SMF 1A 150V	SMD 155-9125	0.126	0.084	0.063	0.056
ES1DL	Diode, Ultra-Fast SMF 1A 200V	SMD 155-9127	0.133	0.089	0.066	0.059
ES1FL	Diode, Ultra-Fast SMF 1A 300V	SMD 155-9128	0.133	0.089	0.066	0.059
ES1GL	Diode, Ultra-Fast SMF 1A 400V	SMD 155-9129	0.133	0.089	0.066	0.059
ES1HL	Diode, Ultra-Fast SMF 1A 500V	SMD 155-9130	0.138	0.092	0.068	0.061
ES1JL	Diode, Ultra-Fast SMF 1A 600V	SMD 155-9131	0.138	0.092	0.068	0.061

Ultra-Fast Recovery Diodes

VISHAY

$I_{f(av)}$ A	V_{rrm} V	V_{rsm} V	I_{fsm} A	t_{rr} max ns	V_f V	@ I_f A	Package	Mftrs. List No.
6	200	—	50	35	1.2	6	D-PAK	MURD620CTPBF
8	1200	1300	170	80	1.3	8	D-PAK	8EWF12SPBF
8	300	—	100	35	1	8	TO-220AC	8ETH03PBF
8	200	—	100	35	0.975	8	D2-PAK	MURB1620CTPBF
8	200	—	100	25	0.975	8	TO-220AC	MUR820PBF
10	1200	1300	160	80	1.33	10	TO-220AC	10ETF12PBF
10	600	700	160	80	1.33	10	TO-220AC	10ETF06PBF
10	200	—	100	35	1.15	10	TO-220AB	MUR2020CTPBF
10	200	—	100	35	1.15	10	D2-PAK	MURB2020CTPBF
15	300	—	140	40	1.05	15	TO-220AC	15ETH03PBF
15	200	—	200	35	1.05	15	TO-220AC	MUR1520PBF
16	200	—	100	25	0.75	8	TO-220AB	MUR1620CTPBF
20	1200	1300	300	60	1.3	20	TO-220AC	20ETF12PBF
20	600	700	300	60	1.3	20	TO-220AC	20ETF06PBF
20	600	700	300	95	1.3	20	D2-PAK	20ETF06SPBF
30	1200	1300	350	60	1.41	30	TO-247AC	30EPF12PBF
30	1200	1100	350	60	1.41	30	TO-247AC	30CPF12PBF
30	600	300	350	60	1.41	30	TO-247AC	30EPF06PBF
30	600	700	350	60	1.41	30	TO-247AC	30CPF06PBF
30	400	—	200	60	1.17	15	TO-247AC	30CPU04PBF
40	600	700	475	60	1.25	40	TO-247AC	40EPF06PBF
60	1200	1300	700	70	1.1	30	TO-247AC	60EPF12PBF
60	1200	1300	700	70	1.1	30	TO-247AC	60CPF12PBF
60	200	—	830	70	1.1	—	TO-247AC	60EPF06PBF
80	600	700	1000	70	1.1	40	TO-247AC	80EPF06PBF

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
8ETH03PBF	865-7220	1.16	0.62	0.44	0.37	0.36
8EWF12SPBF	SMD 910-1616	1.96	1.09	0.86	0.63	0.59
10ETF06PBF	910-1462	1.79	1.04	0.77	0.67	0.65
10ETF12PBF	910-1470	2.74	1.59	1.18	0.92	0.90
15ETH03PBF	865-6940	1.50	0.80	0.56	0.46	0.45
20ETF06PBF	910-1500	4.02	2.42	1.79	1.41	1.30
20ETF06SPBF	SMD 910-1519	4.01	2.34	1.72	1.35	1.27
20ETF12PBF	910-1497	3.99	2.30	1.71	1.34	1.26
30CPF06PBF	910-1551	4.18	2.49	1.86	1.44	1.35
30CPF12PBF	910-1543	4.71	2.72	2.03	1.58	1.48
30CPU04PBF	865-7076	2.47	1.35	1.00	0.83	0.80
30EPF06PBF	910-1527	3.68	2.11	1.62	1.16	1.14
30EPF12PBF	910-1535	5.13	2.97	2.21	1.71	1.61

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
40EPF06PBF	910-1560	5.05	3.00	2.23	1.73	1.62
60CPF12PBF	910-1578	6.32	3.63	2.77	2.63	2.56
60EPF06PBF	910-1586	8.88	5.14	3.83	2.97	2.80
60EPF12PBF	910-1594	10.05	5.76	4.42	3.31	3.12
80EPF06PBF	910-1608	15.95	10.06	7.87	6.01	5.60
MUR820PBF	865-1574	1.19	0.63	0.45	0.36	0.33
MUR1520PBF	865-1540	1.62	0.89	0.66	0.55	0.49
MUR1620CTPBF	865-1558	1.63	0.87	0.62	0.50	0.48
MUR2020CTPBF	865-1566	1.66	0.89	0.63	0.51	0.49
MURB1620CTPBF	SMD 910-1691	1.38	0.81	0.60	0.47	0.44
MURB2020CTPBF	SMD 910-1659	1.58	0.96	0.71	0.56	0.52
MURD620CTPBF	SMD 910-1667	1.00	0.58	0.43	0.34	0.31

211351

Mftrs. List No.		Order Code	Price Per Tube 1+	4+	10+
30EPF06PBF	TUBE 25	NEW 156-4023	36.73	26.97	26.73
60EPF12PBF	TUBE 25	NEW 156-4024	89.30	68.33	64.88
8EWF12SPBF	TUBE 75	NEW SMD 156-4025	72.63	54.91	51.58

SFx Series Ultra Fast Diodes

TAIWAN SEMICONDUCTOR multicomp

New



DO-4
H = 5.2mm Dia = 2.7mm

DO-201AD
H = 9.5 mm Dia = 5.6 mm

Features:

- High efficiency, low VF
- High current capability
- High reliability
- High surge current capability
- Low power loss.
- For use in low voltage, high frequency inventor, free wheeling, and polarity protection application

Current If av A	Voltage Vrrm V	Voltage Vf max V	Current Ifsm A	Package	Manf	Mftrs. List No.
1	100	0.95	30	DO-41	MC	SF12
1	150	0.95	30	DO-41	MC	SF13
1	300	1.3	30	DO-41	MC	SF15
1	400	1.3	30	DO-41	MC	SF16
1	600	1.7	30	DO-41	MC	SF18
3	100	0.95	125	DO-201AD	MC	SF32
3	100	0.95	125	DO-201AD	MC	SF32
3	200	0.95	125	DO-201AD	MC	SF34
3	400	1.3	125	DO-201AD	MC	SF36
3	500	1.7	125	DO-201AD	MC	SF37
3	600	1.7	125	DO-201AD	MC	SF38
5	50	0.975	150	DO-201AD	MC	SF51
5	100	0.975	150	DO-201AD	MC	SF52
5	200	0.975	150	DO-201AD	MC	SF54
5	400	1.3	150	DO-201AD	MC	SF56
5	600	1.7	150	DO-201AD	MC	SF58
6	50	0.975	150	DO-201AD	MC	SF61
6	150	0.975	150	DO-201AD	MC	SF63
6	400	1.3	150	DO-201AD	MC	SF66
6	600	1.7	150	DO-201AD	TS	SF68

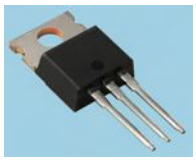
517760

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	500+	1K+
SF32	162-5216	0.500	0.340	0.250	0.200	0.168
SF34	162-5217	0.530	0.360	0.270	0.210	0.177
SF36	162-5218	0.550	0.370	0.280	0.220	0.183
SF37	162-5219	0.560	0.380	0.290	0.230	0.188
SF38	162-5220	0.560	0.380	0.290	0.230	0.188
SF51	162-5221	0.600	0.410	0.310	0.240	0.200
SF52	162-5222	0.600	0.410	0.310	0.240	0.200
SF54	162-5223	0.640	0.430	0.330	0.260	0.210
SF56	162-5224	0.660	0.440	0.330	0.270	0.220
SF58	162-5225	0.680	0.450	0.340	0.280	0.230
SF61	162-5227	0.710	0.480	0.360	0.290	0.240
SF63	162-5228	0.730	0.490	0.370	0.300	0.250
SF66	162-5229	0.830	0.550	0.420	0.330	0.280
SF68	162-5230	0.900	0.600	0.450	0.360	0.300
Order Multiple=5		**5+**	**25+**	**100+**	**500+**	**1K+**
SF12	162-5210	0.200	0.136	0.101	0.082	0.067
SF13	162-5211	0.200	0.136	0.101	0.082	0.067
SF15	162-5212	0.210	0.143	0.107	0.086	0.071
SF16	162-5213	0.220	0.145	0.109	0.087	0.072
SF18	162-5215	0.230	0.155	0.116	0.093	0.078

MURx Series Ultra Fast Diodes

multicomp

New



TO-220AB

Features:

- Ultrafast 35 and 60 Nanosecond Recovery times
- 175°C operating Junction Temperature
- Popular TO-220 Package
- Epoxy meets UL94, V0 @ 1/8"
- High temperature glass passivated junction
- High voltage capability to 600 volts
- Low leakage specified @ 150°C case temperature

RL Re-reeling available

Farnell



TO-220AC

Features:
- High efficiency, Low VF
- High current capability
- High reliability
- High surge current capability
- For use in low voltage, high frequency inventor, free wheeling, and polarity protection application.

Current If av A	Voltage Vrrm V	Voltage Vf max V	Current If Vf A	Time Trr Typ ns	Package	Mftrs. List No.
8	200	0.975	—	25	TO-220AC	MUR820
8	400	1.3	—	50	TO-220AC	MUR840
8	600	1.7	—	50	TO-220AC	MUR860
16	600	1.5	8	60	TO-220AB	MUR1660CT

517755

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
MUR820	**162-5178●**	0.50	0.37	0.32	0.28	0.21
MUR840	**162-5179●**	0.56	0.42	0.36	0.32	0.24
MUR860	**162-5180●**	0.57	0.42	0.36	0.32	0.24
MUR1660CT	**162-5174●**	0.73	0.54	0.46	0.40	0.31

Hyper-Fast Recovery Diodes

VISHAY

$I_{f(av)}$ A	V_{rrm} V	I_{fsm} A	t_{rr} max ns	V_f V	@	I_f A	Package	Mftrs. List No.
8	600	90	18	2.4		8	TO-220FP	8ETH06FPPBF
8	600	90	40	2.4		8	TO-220AC	8ETH06PBF
8	600	110	16	3		8	TO-220FP	8ETX06FPPBF
8	600	110	16	3		8	TO-220AC	8ETX06PBF
8	600	175	150	1.05		8	TO-220AC	8ETL06PBF
15	600	120	51	2.2		15	TO-220FP	15ETH06FPPBF
15	600	120	51	2.2		15	TO-220AC	15ETH06PBF
15	600	170	18	3.2		15	TO-220FP	15ETX06FPPBF
15	600	250	190	1.05		15	TO-220AC	15ETL06PBF
15	600	250	190	1.05		15	TO-220FP	15ETL06FPPBF
15	600	170	18	3.2		15	TO-220AC	15ETX06PBF
20	300	120	35	1.25		10	TO-220AB	20CTH03PBF
30	200	200	30	1.05		15	TO-220AB	30CTH02PBF
30	300	150	36	1.25		15	TO-220AB	30CTH03PBF
30	600	200	40	2.6		30	TO-220AC	30ETH06PBF

386172

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
8ETH06FPPBF	**865-7238●**	1.72	0.91	0.65	0.52	0.49
8ETH06PBF	**101-3332●**	0.93	0.54	0.39	0.37	0.36
8ETL06PBF	**865-7254●**	1.49	0.79	0.56	0.45	0.42
8ETX06FPPBF	**865-7262●**	1.51	0.86	0.73	0.60	0.58
8ETX06PBF	**865-7270●**	1.38	0.81	0.60	0.47	0.44
15ETH06FPPBF	**865-6959●**	1.72	0.94	0.70	0.58	0.56
15ETH06PBF	**101-3330●**	1.57	0.83	0.59	0.48	0.44
15ETL06FPPBF	**865-6967●**	2.05	1.13	0.84	0.70	0.58
15ETL06PBF	**865-6975●**	1.50	0.85	0.65	0.53	0.51
15ETX06FPPBF	**865-6983●**	2.17	1.19	0.89	0.74	0.68
15ETX06PBF	**865-6991●**	2.00	1.09	0.81	0.67	0.59
20CTH03PBF	**865-7017●**	1.33	0.76	0.56	0.53	0.52
30CTH02PBF	**865-7084●**	1.72	0.91	0.65	0.61	0.60
30CTH03PBF	**865-7092●**	1.42	0.81	0.62	0.60	0.59
30ETH06PBF	**865-7130●**	3.31	1.81	1.35	1.12	0.99

TO-220 AB/AC, TO-247, Ultra-Fast Recovery

NXP



TO-220AB



TO-247



TO-220AC

$I_{f(av)}$ A	V_{rrm} V	I_{fsm} A	t_{rr} max ns	V_f V	@	I_f A	Package	Mftrs. List No.
8	200	80	25	1.05		8	TO-220AC	BYW29E-200
8	200	80	25	0.8		8	TO-220F	BYW29EX-200
8	600	80	52	1.43		8	TO-220F	BYC8X-600
9	400	100	60	1.03		8	TO-220AC	BYV29-400
9	500	100	60	1.03		8	TO-220AC	BYV29-500
10	200	50	25	0.8		5	TO-220F	BYQ28X-200
14	500	130	60	1.05		15	TO-220AC	BYT79-500
20	400	120	60	1.05		10	TO-220AB	BYV34-400
30	150	150	28	1.05		15	TO-220AB	BYV42E-150
30	200	150	28	1.05		15	TO-220AB	BYV42E-200
30	200	150	28	1.05		15	TO-247	BYV72EW-200

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
BYC8X-600	**151-0665●**	0.76	0.61	0.53	0.46	0.42
BYQ28X-200	**151-0667●**	0.73	0.58	0.48	0.36	0.32
BYT79-500	**108-1350●**	1.60	1.06	0.91	0.64	0.57
BYV29-400	**108-1351●**	0.65	0.55	0.45	0.35	0.25
BYV29-500	**108-1352●**	1.27	0.73	0.55	0.42	0.37
BYV34-400	**108-1356●**	1.30	0.92	0.70	0.53	– –
BYV42E-150	**108-1357●**	1.22	0.82	0.62	0.47	– –
BYV42E-200	**108-1358●**	1.12	0.76	0.54	0.51	– –
BYV72EW-200	**108-1359●**	1.23	0.84	0.64	0.56	– –
BYW29E-200	**108-1360●**	0.62	0.39	0.28	0.21	– –
BYW29EX-200	**151-0668●**	0.53	0.43	0.37	0.33	0.30

424433

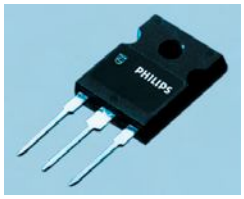
Tubes of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
BYV34-400	NEW **156-4022●**	30.33	27.31	24.98
BYW29E-200	NEW **156-4019●**	11.26		

Ultra Fast Epitaxial Rectifiers

NXP



SOD-59



TO-247



TO-220AB

- I_{RRM} repetitive ruggedness guaranteed
- Wide package range available (including SMD)
- Best $V_f/I_R/T_j$ combination available giving low losses
- Excellent reverse recovery behaviour gives reduced switching losses:
  150V/200V types offer T_{rr}<25ns
  300V/400V/500V types offer T_{rr} <60ns
- All feature low stored charge giving a soft recovery characteristic

$I_{f(av)}$ A	V_{RRM} V	V_F V	SOD-59 (TO-220AC)	PACKAGE LEADED TO-220AB (SOT-78)	TO-247 (SOT-429)
8	200	1.05	BYW29E-200		
9	400	1.03	BYV29-400		
14	500	1.05	BYT79-500		
9	500	1.03	BYV29-500		
2 x 10	200	0.85		BYV32E-200	
2 x 20	400	1.05		BYV34-400	
2 x 30	200	1.05		BYV42E-200	
2 x 10	150	0.85		BYV32E-150	
2 x 30	150	1.05		BYV42E-150	
2 x 30	200	1.05			BYV72EW-200

211215

Order Multiple=1	Order Code	Price Each 1+	25+	100+	250+	1K+
BYT79-500	**108-1350●**	1.60	1.06	0.91	0.64	0.57
BYV29-400	**108-1351●**	0.65	0.55	0.45	0.35	0.25
BYV29-500	**108-1352●**	1.27	0.73	0.55	0.42	0.37
		1+	**25+**	**100+**	**1K+**	
BYV32E-150	**108-1353●**	0.68	0.53	0.43	0.36	
BYV32E-200	**108-1355●**	0.76	0.51	0.44	0.31	
BYV34-400	**108-1356●**	1.30	0.92	0.70	0.53	
BYV42E-150	**108-1357●**	1.22	0.82	0.62	0.47	
BYV42E-200	**108-1358●**	1.12	0.76	0.54	0.51	
BYV72EW-200	**108-1359●**	1.23	0.84	0.64	0.56	
		1+	**25+**	**100+**	**250+**	
BYW29E-200	**108-1360●**	0.62	0.39	0.28	0.21	

Tubes of 50 Mftrs. List No.	Order Code	Price Per Tube 1+
BYV32E-200	NEW **156-4021●**	16.47

SMA, SMB, SMC, SOD-106A

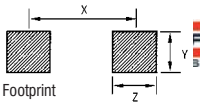
GENERAL SEMICONDUCTOR

FAIRCHILD SEMICONDUCTOR

SMD



Supplied on 12mm tape.



Footprint

	H	W	D	X	Y	Z
SMA	2.92	5.59	2.67	4.57	1.63	1.52
SMB	3.56	5.44	2.13	4.32	2.743	2.159
SMC	5.84	7.94	2.41	7.11	3.81	2.794

V_{RRM} V	$I_{F(AV)}$ A	I_{FSM} A	t_{rr} max ns	V_F V	@	I_F A	Package	Mftr	Mftrs. List No.
50	3	100	20	0.9		3	SMC	GS	ES3A
50	1	30	35	0.95		1	SMA	MC	ES1A
50	2	50	35	0.95		2	SMB	MC	ES2A
50	3	100	35	0.95		3	SMC	MC	ES3A
50	1	30	50	1		1	SMA	MC	US1A

RL Re-reeling available

Power Diodes - Ultra-Fast Recovery - continued

SMA, SMB, SMC, SOD-106A - continued

V_{RRM}	$I_{F\ (AV)}$	I_{FSM}	t_{rr} max	V_F	@	I_F			Mftrs.
100	3	100	35	0.95		3	SMC	TS	ES3B
100	3	100	20	0.9		3	SMC	GS	ES3B
100	2	50	30	0.9		2	SMB	GS	ES2B
100	1	30	15	0.92		1	SMA	GS	ES1B
100	1	30	35	0.95		1	SMA	MC	ES1B
100	1	30	50	1		1	SMA	MC	US1B
100	2	50	35	0.95		2	SMB	MC	ES2B
150	3	100	35	0.95		3	SMC	TS	ES3C
150	3	100	20	0.9		3	SMC	GS	ES3C
150	1	30	35	0.95		1	SMA	TS	ES1C
150	1	30	15	0.92		1	SMA	GS	ES1C
150	2	50	35	0.95		2	SMB	MC	ES2C
200	3	100	35	0.95		3	SMC	TS	ES3D
200	3	100	20	0.9		3	SMC	GS	ES3D
200	2	35	25	1		1	SMA	TFK	BYG22D
200	2	50	30	0.9		2	SMB	GS	ES2D
200	1	30	35	0.95		1	SMA	TS	ES1D
200	1	30	15	0.92		1	SMA	GS	ES1D
200	1	30	50	1		1	SMA	GS	US1D
200	1	30	50	1		1	SMA	MC	US1D
200	2	50	35	0.95		2	SMB	MC	ES2D
300	1	30	35	1.3		1	SMA	FCH	ES1F
300	3	100	35	1.3		3	SMC	MC	ES3F
300	1	30	35	1.3		1	SMA	MC	ES1F
300	2	50	35	1.3		2	SMB	MC	ES2F
400	3	100	35	1.1		3	SMC	GS	ES3G
400	3	100	35	1.3		3	SMC	TS	ES3G
400	2	50	35	1.1		2	SMB	GS	ES2G
400	1	30	35	1.3		1	SMA	FCH	ES1G
400	1	30	50	1		1	SMA	GS	US1G.
400	1	30	50	1		1	SMA	MC	US1G
400	1	30	35	1.3		1	SMA	MC	ES1G
400	2	50	35	1.3		2	SMB	MC	ES2G
500	1	30	35	1.7		1	SMA	FCH	ES1H
500	3	100	35	1.7		3	SMC	MC	ES3H
500	1	30	35	1.7		1	SMA	MC	ES1H
500	2	50	35	1.7		2	SMB	MC	ES2H
600	1.5	30	75	1.3		1	SMA	TFK	BYG20J
600	1	30	35	1.7		1	SMA	FCH	ES1J
600	1	30	75	1.7		1	SMA	GS	US1J
600	3	100	35	1.7		3	SMC	MC	ES3J
600	1	30	75	1.7		1	SMA	MC	US1J
600	1	30	35	1.7		1	SMA	MC	ES1J
600	2	50	35	1.7		2	SMB	MC	ES2J
800	1	30	75	1.7		1	SMA	MC	US1K
1000	1	30	75	1.7		1	SMA	GS	US1M
1000	1	30	75	1.7		1	SMA	MC	US1M

Order Multiple=5

Mftrs. List No.	Mftr.	Order Code	Price Each 5+	100+	250+	1K+	3K+
BYG20J	TFK	SMD 102-1747● RL	0.146	0.118	0.100	0.090	0.086
BYG22D	TFK	SMD 102-1749● RL	0.440	0.400	0.350	0.320	0.290
ES1B	GS	SMD 954-9226● RL	0.450	0.260	0.250	0.154	0.141
ES1B	MC	SMD 408-4608● RL	0.440	0.220	0.145	0.122	0.111
ES1C	GS	SMD 954-9234● RL	0.480	0.280	0.270	0.168	0.144
ES1C	TS	SMD 408-4616● RL	0.450	0.250	0.156	0.134	0.121
ES1D	GS	SMD 954-9242● RL	0.450	0.420	0.360	0.280	0.250
ES1D	TS	SMD 408-4624● RL	0.480	0.260	0.167	0.134	0.122
ES1F	FCH	NEW SMD 149-8948●	0.125	0.098	0.088	0.077	– –
ES1G	FCH	NEW SMD 149-8949●	0.125	0.098	0.088	0.077	– –
ES1H	FCH	NEW SMD 149-8950●	0.125	0.098	0.088	0.077	– –
ES1J	FCH	NEW SMD 149-8951●	0.176	0.139	0.121	0.051	– –
ES2B	GS	SMD 954-9250● RL	0.470	0.270	0.260	0.164	0.145
ES2D	GS	SMD 954-9269● RL	0.480	0.290	0.270	0.167	0.147
ES2G	GS	SMD 121-5107● RL	0.440	0.420	0.360	0.270	0.230
ES3A	GS	SMD 954-9277● RL	0.480	0.360	0.270	0.187	0.174
ES3B	GS	SMD 954-9285● RL	0.680	0.580	0.470	0.360	0.320
ES3B	TS	SMD 408-4632● RL	0.500	0.430	0.340	0.290	0.270
ES3C	GS	SMD 954-9293● RL	0.740	0.460	0.450	0.240	0.210
ES3C	TS	SMD 408-4640● RL	0.510	0.440	0.350	0.300	0.270
ES3D	TS	SMD 408-4659● RL	0.520	0.450	0.360	0.310	0.280
ES3G	GS	SMD 954-9307● RL	0.640	0.440	0.360	0.250	0.210
ES3G	TS	SMD 408-4667● RL	1.130	0.570	0.380	0.330	0.300
SMBYT01-400	ST	SMD 988-6419● RL	0.390	0.280	0.200	0.151	0.119
SMBYT03-400	ST	SMD 988-6427● RL	0.510	0.320	0.220	0.200	0.167
US1D	GS	SMD 955-1816● RL	0.150	0.121	0.103	0.086	0.080
US1G.	GS	SMD 955-1824● RL	0.157	0.128	0.108	0.092	0.085
US1J	GS	SMD 955-1832● RL	0.165	0.133	0.112	0.095	0.089
US1M	GS	SMD 955-1840● RL	0.290	0.200	0.173	0.123	0.111
			5+	100+	250+	500+	1K+
ES1A	MC	NEW SMD 162-5028●	0.079	0.065	0.056	0.049	0.044
ES1F	MC	NEW SMD 162-5029●	0.091	0.075	0.065	0.057	0.050
ES1G	MC	NEW SMD 162-5030●	0.097	0.081	0.069	0.060	0.054
ES1H	MC	NEW SMD 162-5031●	0.097	0.081	0.069	0.060	0.054
ES1J	MC	NEW SMD 162-5033●	0.103	0.086	0.073	0.064	0.057
US1A	MC	NEW SMD 162-5278●	0.188	0.125	0.094	0.075	0.062
US1B	MC	NEW SMD 162-5279●	0.188	0.125	0.094	0.075	0.062
US1D	MC	NEW SMD 162-5280●	0.188	0.125	0.094	0.075	0.062
US1G	MC	NEW SMD 162-5281●	0.200	0.136	0.102	0.082	0.067
US1J	MC	NEW SMD 162-5282●	0.200	0.136	0.102	0.082	0.067
US1K	MC	NEW SMD 162-5283●	0.220	0.147	0.110	0.088	0.073
US1M	MC	NEW SMD 162-5284●	0.240	0.157	0.118	0.095	0.079

			5+	25+	100+	250+	500+
ES2A	MC	NEW SMD 162-5034●	0.340	0.230	0.169	0.136	0.112
ES2B	MC	NEW SMD 162-5035●	0.360	0.240	0.177	0.142	0.118
ES2C	MC	NEW SMD 162-5036●	0.360	0.240	0.177	0.142	0.118
ES2D	MC	NEW SMD 162-5037●	0.370	0.250	0.186	0.149	0.124
ES2F	MC	NEW SMD 162-5038●	0.370	0.250	0.186	0.149	0.124
ES2G	MC	NEW SMD 162-5039●	0.390	0.260	0.195	0.155	0.130
ES2H	MC	NEW SMD 162-5040●	0.390	0.260	0.195	0.155	0.130
ES2J	MC	NEW SMD 162-5041●	0.410	0.280	0.200	0.162	0.136
Order Multiple=1			1+	25+	100+	250+	500+
ES3A	MC	NEW SMD 162-5042●	0.540	0.360	0.280	0.220	0.181
ES3F	MC	NEW SMD 162-5043●	0.590	0.400	0.300	0.240	0.197
ES3H	MC	NEW SMD 162-5045●	0.610	0.410	0.310	0.250	0.210
ES3J	MC	NEW SMD 162-5046●	0.640	0.430	0.320	0.260	0.210

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Mftrs. List No.		Order Code	Price Per Reel 1+	3+
BYG22D-E3/TR	REEL 1800	NEW SMD 156-2246●	359.95	323.95
ES1B-E3/61T	REEL 1800	NEW SMD 156-2247●	128.31	115.48
ES1D-E3/61T	REEL 1800	NEW SMD 156-2248●	128.31	115.48
US1J-E3/61T	REEL 1800	NEW SMD 156-2249●	143.96	– –
US1M-E3/61T	REEL 1800	NEW SMD 156-2250●	173.75	156.37
ES3D-E3/57T	REEL 850	NEW SMD 156-2252●	159.04	143.15
ES3B-E3/57T	REEL 850	NEW SMD 156-2254●	151.48	136.33

0.6A to 6A, Axial

multicomp



Plastic



Glass

ON Semiconductor

GENERAL SEMICONDUCTOR

		L	Dia.			L	Dia.
DO-15	Plastic	7.6	3.6	F-126	Glass	6.35	3.05
DO-204AP	Glass	6.1	3.8	MPG-06	Plastic	3.2	2.54
DO-201AD	Plastic	9.5	5.3	SOD-57	Glass	4.6	3.8
DO-41	Plastic	5.2	2.7	267-03	Plastic	9.39	6.35

Voltage Vrrm V	Voltage VF max V	Current If av A	Current If av A	Case Style	Mftrs. List No.
50	0.95	6	40	TS-1	UG06A
50	1	3	150	DO-201AD	UF5400
50	1	1	30	DO-41	UF4001
50	1	1	30	DO-41	UF4001
50	1	1	30	DO-41	UF1A
100	1	1	30	DO-41	UF1B
100	0.95	0.6	40	MPG06	UG06B
100	0.95	1	50	DO-204AL	UG1B
100	0.95	2	60	DO-204AC	UG2B
100	1	1	30	DO-41	UF4002
100	1	3	150	DO-201AD	UF5401
100	1	1	30	DO-41	UF4002
150	0.95	6	40	TS-1	UG06C
200	1.07	2	50	SOD-57	BYV27-200-TAP
200	1.1	3.5	90	SOD-57	BYV28-200-TAP
200	1	3	150	DO-201AD	UF5402
200	0.975	6	100	TO-220	U12C20A
200	0.975	6	100	TO-220	U12C20C
200	0.975	8	150	TO-220	U16C20A
200	0.975	8	150	TO-220	U16C20C
200	0.975	15	300	TO-247	U30D20A
200	0.975	15	300	TO-247	U30D20C
200	0.89	4	125	DO-201AD	MUR420
200	0.95	2	60	DO-204AC	UG2D
200	1	4	150	DO-201AD	UG4D
200	1	1	30	DO-41	UF4003
200	1	1	30	DO-41	UF1D
200	0.95	6	40	TS-1	UG06D
200	0.95	1	40	DO-41	UG1D
200	0.95	2	80	DO-15	UG2D
200	0.95	4	150	DO-201AD	UG4D
200	1	1	30	DO-41	UF4003
400	1	3	150	DO-201AD	UF5404
400	1.3	15	250	TO-247	U30D40C
400	1.7	3	45	DO-201AD	31DF4
400	1.28	4	70	DO-201AD	MUR440
400	1	1	30	DO-41	UF1G
400	1	1	30	DO-41	UF4004
400	1	1	30	DO-41	UF4004
400	1.5	1	30	DO-15	BYT01-400
400	1.5	3	60	DO-201AD	BYT03-400
500	1	3	150	DO-201AD	UF5405
600	2.5	1	30	SOD-57	BYV26C-TAP
600	1.7	3	45	DO-201AD	31DF6
600	1.25	1	35	DO-15	MUR160
600	1.28	4	70	DO-201AD	MUR460
600	1.7	1	30	DO-41	UF1J
600	1.7	1	30	DO-41	UF4005
600	1.7	1	25	SOD-57	STTH1R06RL
600	1.7	1	30	DO-41	UF4005
600	1.7	3	150	DO-201AD	UF5406
600	1.25	1	35	DO-41	MUR160RLG
800	2.5	1	30	DO-204AP	BYV26D
800	1.7	1	30	DO-41	UF1K
800	1.7	1	30	DO-41	UF4006
800	1.7	1	30	DO-41	UF4006
800	1.7	3	150	DO-201AD	UF5407
1000	1.7	1	30	SOD-57	SF4007-TR
1000	2.5	1	30	SOD-57	BYV26E-TAP

RL Re-reeling available

Farnell

Voltage Vrrm	Voltage VF max	Current If av	Current If av	Case Style	Mftrs. List No.
1000	1.7	1	30	DO-41	UF1M
1000	1.7	1	30	DO-41	UF4007
1000	2.5	1	30	DO-204AP	BYV26E
1000	1.7	1	30	DO-41	UF4007
1000	1.7	3	150	DO-201AD	UF5408
1000	1.75	1	35	DO-41	MUR1100ERLG
1000	1.8	4	70	267-03	MUR4100ERLG

Order Multiple=5

Mftrs. List No.	Mftr.	Order Code	Price Each 5+	100+	250+	1K+
BYT01-400	ST	980-1863●	0.340	0.220	0.147	0.118
BYT03-400	ST	980-1871●	0.430	0.310	0.230	0.200
STTH1R06RL	ST	816-5513●	0.290	0.167	0.138	0.114
			5+	**100+**	**1K+**	**3K+**
BYV26C-TAP	TFK	107-5759●	0.260	0.166	0.117	0.091
BYV26D	GS	102-1752●	0.590	0.450	0.350	0.188
BYV26E-TAP	TFK	107-5760●	0.280	0.171	0.117	0.083
BYV26E	GS	954-9196●	0.840	0.670	0.530	0.270
			5+	**25+**	**100+**	**250+**
BYV27-200-TAP	TFK	107-5761●	0.530	0.290	0.200	0.154
BYV28-200-TAP	TFK	107-5762●	0.670	0.430	0.320	0.290
MUR420	MC	NEW 162-5175●	0.310	0.260	0.230	0.173
MUR440	MC	NEW 162-5176●	0.320	0.280	0.240	0.183
MUR160RLG	ON	955-7008●	0.310	0.184	0.128	0.096
MUR160	MC	NEW 162-5173●	0.158	0.116	0.099	0.087
MUR460	MC	NEW 162-5177●	0.340	0.290	0.250	0.196
MUR1100ERLG	ON	955-7016●	0.380	0.240	0.186	0.147
MUR4100ERLG	ON	955-7024●	0.530	0.340	0.280	0.220
			5+	**25+**	**100+**	**1K+**
SF4007-TR	TFK	107-5754●	0.370	0.193	0.128	0.090
			5+	**100+**	**250+**	**500+**
UF1A	MC	NEW 162-5264●	0.188	0.125	0.094	0.075
UF1B	MC	NEW 162-5265●	0.200	0.136	0.102	0.082
UF1D	MC	NEW 162-5266●	0.200	0.136	0.102	0.082
UF1G	MC	NEW 162-5267●	0.210	0.141	0.106	0.085
UF1J	MC	NEW 162-5268●	0.210	0.141	0.106	0.085
UF1K	MC	NEW 162-5269●	0.220	0.147	0.110	0.088
UF1M	MC	NEW 162-5270●	0.230	0.152	0.114	0.091
UG06A	MC	NEW 162-5271●	0.390	0.270	0.195	0.156
UG06C	MC	NEW 162-5272●	0.390	0.270	0.195	0.156
UG06D	MC	NEW 162-5273●	0.390	0.270	0.195	0.156
UG1D	MC	NEW 162-5274●	0.220	0.144	0.107	0.086
UG2D	MC	NEW 162-5276●	0.430	0.290	0.220	0.172
UG4D	MC	NEW 162-5277●	0.590	0.390	0.300	0.240
Order Multiple=10			**10+**	**100+**	**500+**	**1K+**
UF4001	GS	955-1620●	0.107	0.086	0.082	0.065
UF4001	MC	408-5256●	0.096	0.082	0.071	0.066
UF4002	GS	955-1638●	0.115	0.096	0.091	0.072
UF4002	MC	408-5264●	0.096	0.082	0.071	0.066
UF4003	GS	955-1646●	0.104	0.089	0.082	0.055
UF4003	MC	408-5272●	0.095	0.085	0.071	0.060
UF4004	GS	955-1654●	0.176	0.166	0.157	0.089
UF4004	MC	408-5280●	0.121	0.108	0.091	0.077
UF4005	GS	955-1662●	0.460	0.370	0.320	0.176
UF4005	MC	408-5299●	0.210	0.162	0.131	0.099
UF4006	GS	955-1670●	0.360	0.320	0.290	0.187
UF4006	MC	408-5302●	0.210	0.162	0.131	0.099
UF4007	MC	408-5310●	0.220	0.166	0.134	0.101
UF4007	GS	955-1689●	0.360	0.320	0.310	0.210
Order Multiple=5			**5+**	**50+**	**100+**	**1K+**
UF5400	GS	955-1697●	0.390	0.380	0.370	0.220
UF5401	GS	955-1700●	0.400	0.360	0.350	0.230
UF5402	GS	121-6185●	0.460	0.400	0.390	0.360
UF5404	GS	121-6186●	0.640	0.580	0.550	0.470
UF5405	GS	133-2639●	0.460	0.420	0.400	0.330
UF5406	GS	955-1719●	0.490	0.440	0.370	0.270
UF5407	GS	955-1727●	1.220	0.730	0.720	0.340
UF5408	GS	955-1735●	0.620	0.590	0.530	0.390
			5+	**100+**	**1K+**	**5K5+**
UG06B	GS	955-1743●	0.260	0.144	0.134	0.077
UG1B	GS	955-1751●	0.280	0.164	0.162	0.086
Order Multiple=1			**5+**	**100+**	**1K+**	**4K+**
UG2B	GS	955-1760●	0.460	0.270	0.260	0.143
UG2D	GS	955-1778●	0.520	0.310	0.260	0.159
			1+	**100+**	**1K4+**	**4K2+**
UG4D	GS	955-1786●	0.760	0.470	0.460	0.260
			1+	**25+**	**100+**	**250+**
U12C20A	MC	144-0105●	0.670	0.580	0.500	0.440
U12C20C	MC	144-0106●	0.580	0.500	0.430	0.380
U16C20A	MC	144-0107●	0.770	0.650	0.580	0.510
U16C20C	MC	144-0108●	0.670	0.580	0.500	0.440
U30D20A	MC	144-0109●	1.330	1.150	1.000	0.890
U30D20C	MC	144-0110●	1.240	1.060	0.930	0.820
U30D40C	MC	144-0113●	1.720	1.480	1.290	1.150
31DF4	MC	NEW 162-5008●	0.860	0.570	0.430	0.340
31DF6	MC	NEW 162-5009●	0.860	0.570	0.430	0.340

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Reel of 1250

Mftrs. List No.	Order Code	Price Per Reel 1+	3+
SF62 R0	NEW 156-2257●	137.84	124.06

1A to 200A

ON Semiconductor

$I_{F(av)}$ A	V_{RRM} V	I_{FSM} A	t_{rr} ns	V_F V	@ I_F A	Package	Mftrs. List No.
1	200	35	25	0.875	1	59-04	MUR120RLG
1	200	40	35	0.875	1	SMB	MURS120T3G
1	600	35	75	1.25	1	SMB	MURS160T3G
3	200	75	35	0.875	3	SMC	MURS320T3G
4	200	125	25	0.875	3	267-03	MUR420RLG
4	600	70	50	1.25	3	267	MUR460RLG
8	200	100	35	0.975	8	TO-220AC	MUR820G
8	600	100	50	1.5	8	TO-220AC	MUR860G
8	1000	100	75	1.8	8	TO-220AC	MUR8100EG
15	600	150	60	1.5	15	TO-220AC	MUR1560G
16	200	100	35	0.975	8	TO-220AB	MUR1620CTG
16	600	100	60	1.5	8	TO-220AB	MUR1660CTG
30	200	150	35	1.05	15	TO-247AC	MUR3020WTG
30	600	150	60	1.2	15	TO-218AC	MUR3060PTG

Order Multiple=1

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	500+
MUR120RLG	955-7490●	0.310	0.188	0.131	0.098
MUR420RLG	955-7563●	0.380	0.240	0.186	0.147
MUR460RLG	955-7431●	0.430	0.270	0.210	0.166
MUR820G	955-7539●	0.910	0.620	0.440	0.380
MUR860G	955-7512●	1.040	0.760	0.560	0.470
MUR1560G	955-7440●	1.160	0.930	0.710	0.600
MUR1620CTG	955-7482●	0.930	0.690	0.510	0.430
MUR1660CTG	955-7504●	1.510	1.110	0.820	0.690
MUR3020WTG	955-7466●	4.900	2.760	2.380	1.400
MUR3060PTG	955-7474●	3.880	2.260	1.900	1.430
MUR8100EG	955-7547●	1.160	0.860	0.640	0.530
Order Multiple=5		**5+**	**100+**	**250+**	**500+**
MURS120T3G	SMD 955-7458● RL	0.450	0.250	0.191	0.113
MURS160T3G	SMD 955-7520● RL	0.280	0.178	0.128	0.098
MURS320T3G	SMD 955-7555● RL	0.460	0.330	0.240	0.171

Reels of 2500

Mftrs. List No.	Order Code	Price Per Reel 1+	3+
MURS160T3G	NEW SMD 156-2251●	208.28	187.47
MURS320T3G	NEW SMD 156-2255●	323.67	291.31

222096

Tube of 50

Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
MUR8100EG	NEW 156-4026●	34.19	23.66	21.31

$I_{F(av)}$ A	V_{RRM} V	I_{FSM} A	t_{rr} ns	V_F V	@ I_F A	Package	Mftrs. List No.
267-03							
4	1000	70	75	1.75	4	267-03	MUR4100ERLG
TO-220AC							
15	200	200	35	1.05	15	TO-220AC	MUR1520G
DO-41							
1	600	35	50	1.05	1	DO-41	MUR160RLG
1	1000	35	75	1.75	1	DO-41	MUR1100ERLG

422998

Order Multiple=1

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	500+
MUR1520G	955-6990●	1.160	0.860	0.640	0.530
Order Multiple=5		**5+**	**25+**	**100+**	**250+**
MUR160RLG	955-7008●	0.310	0.184	0.128	0.096
MUR1100ERLG	955-7016●	0.380	0.240	0.186	0.147
MUR4100ERLG	955-7024●	0.530	0.340	0.280	0.220

Turboswitch™ High Voltage


TO-220AC


DOP-31


SOD-93


TO-220AB


ISOTOP


TO-247


F126

$I_{F(av)}$ A	V_{rrm} V	t_{rr} max (*typ) ns	V_f V	@ I_f A	Package	Mftrs. List No.
1	200	15*	1	1	DO-41	STTH1R02
1	200	15*	1	1	SMA	STTH1R02A
1	200	20*	0.97	1	DO-41	STTH102
1	200	20*	0.97	1	SMB	STTH102A
1	600	80*	1.3	1	SMB	STTH1L06U
2	200	15*	1	2	SMA	STTH2R02A
2	200	17*	1	2	SMB	STTH2R02U
2	1200	75*	1.75	2	DO-201AD	STTH212RL
2	1200	75*	1.75	2	SMB	STTH212U
3	200	16*	1	3	DO-201AD	STTH3R02
3	200	35*	0.75	3	DO-201AD	STTH302RL
3	600	60*	1.3	3	D-PAK	STTH3L06B
3	1200	55*	1.15	3	D-PAK	STTH312B
3	200	35*	0.75	3	DO-201AD	STTH302
3	200	35*	0.95	3	SMC	STTH302S

RL Re-reeling available

Power Diodes - Ultra-Fast Recovery - continued

Turboswitch™ High Voltage - continued

3	1000	75*	1.7	3	DO-201AD	STTH310
3	600	30*	1.7	3	DO-201AD	STTH3R06
3	600	60*	1.3	3	DO-201AD	STTH3L06
4	200	16*	1.05	4	D-PAK	STTH4R02B
4	200	16*	1.05	4	SMB	STTH4R02U
4	200	20*	1.1	4	D-PAK	STTH802CB
5	1200	48*	1.25	5	D-PAK	STTH512B
5	1200	48*	1.25	5	TO-220AC	STTH512D
5	1200	48*	1.25	5	TO-220FP	STTH512FP
5	600	95*	1.3	5	TO-220FP	STTH5L06FP
5	600	40*	2.9	5	TO-220AC	STTH5R06D
8	200	17*	1.05	8	D-PAK	STTH802B
8	200	17*	1.05	8	TO-220AC	STTH802D
8	1000	47*	1.3	8	TO-220AC	STTH810D
8	1000	47*	1.3	8	TO-220ins	STTH810DI
8	1000	47*	1.3	8	D2-PAK	STTH810G
8	1200	50*	1.25	8	TO-220AC	STTH812D
8	1200	50*	1.25	8	TO-220ins	STTH812DI
8	1200	50*	1.25	8	TO-220FP	STTH812FP
5	200	20*	1.1	5	D-PAK	STTH1002CB
5	200	20*	1.1	5	TO-220AB	STTH1002CT
8	600	105*	1.3	8	TO-220FP	STTH8L06FP
10	200	22*	1.1	10	TO-220FP	STTH2002CFP
12	1000	48*	1.3	12	TO-220AC	STTH1210D
12	1000	48*	1.3	12	TO-220FP	STTH1210FP
12	1200	50*	1.25	12	TO-220AC	STTH1212D
12	1200	50*	1.25	12	D2-PAK	STTH1212G
15	200	20*	1.1	15	TO-220AC	STTH1502D
15	1200	53*	1.2	15	TO-220AC	STTH1512D
15	1200	53*	1.2	15	TO-220ins	STTH1512PI
15	1200	53*	1.2	15	TO-247	STTH1512W
15	600	50*	1.8	15	TO-220AC	STTH15R06D
15	600	50*	2.9	15	TO-247	STTH30R06CW
15	200	22*	1.1	15	TO-220AB	STTH2002CT
20	200	16*	1.1	20	TO-220AC	STTH2002D
20	200	16*	1.1	20	TO-220ins	STTH2002DI
20	200	16*	1.1	20	D2-PAK	STTH2002G
20	1000	42*	1.3	20	TO-220ins	STTH3010PI
20	1000	42*	1.3	20	TO-247	STTH3010W
20	1200	75*	1.75	20	DO-201AD	STTH212
20	1200	57*	1.3	20	TO-220AC	STTH3012D
20	600	95*	1.3	20	DO-201AD	STTH5L06
30	600	25*	2.9	30	TO-220AC	STTH8R06D
30	1000	42*	1.3	30	TO-220AC	STTH3010D
30	1200	57*	1.3	30	TO-247	STTH3012W
30	600	45*	2.9	30	TO-220AC	STTH12R06D
30	200	22*	1.05	30	TO-247	STTH6002CW
60	400	14*	0.83	60	TO-247	STTH6004W
60	600	60*	1.85	60	TO-247	STTH6006W
60	1000	49*	1.3	60	TO-247	STTH6010W
60	1200	50*	1.3	60	TO-247	STTH6012W
2 x 8	600	13	3.5	8	TO-220AB	STTH806TTI
2 x 30	1200	45*	1.3	30	ISOTOP	STTH6112TV1
2 x 30	1000	42*	1.3	30	ISOTOP	STTH6110TV1
2 x 30	1000	42*	1.3	30	ISOTOP	STTH6110TV2
2 x 30	600	50*	1.85	30	ISOTOP	STTH6006TV1
2 x 30	300	—	1	30	TO-247	STTH6003CW
2 x 30	200	22*	—	30	TO-220ins	STTH6002CPI
2 x 45	1200	50*	1.2	45	ISOTOP	STTH9012TV1
2 x 45	1200	50*	1.2	45	ISOTOP	STTH9012TV2
2 x 50	200	30*	1	50	ISOTOP	STTH10002TV1
2 x 50	200	20*	1	50	ISOTOP	STTH10002TV2
2 x 60	1200	50*	1.3	60	ISOTOP	STTH12012TV1
2 x 60	1000	49*	1.3	60	ISOTOP	STTH12010TV1

211290

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
STTH12R06D	990-7882●	1.960	1.430	1.160	0.970	0.910
STTH15R06D	990-7904●	2.420	1.860	1.550	1.250	1.170
STTH102	990-7866●	0.490	0.360	0.290	0.220	0.210
STTH102A	SMD 990-7874● RL	0.380	0.270	0.177	0.132	0.103
STTH302	990-7955●	0.460	0.330	0.230	0.177	0.161
STTH302S	SMD 990-7963●	0.730	0.550	0.420	0.360	0.330
STTH310	990-7980●	0.550	0.420	0.300	0.280	0.260
STTH802CB	SMD 993-5975●	0.570	0.410	0.290	0.260	0.189
STTH806TTI	980-3831●	2.990	2.310	1.610	1.570	1.530
STTH6003CW	980-3815●	3.040	2.330	1.660	1.590	1.550
STTH1L06U	SMD 990-7939● RL	0.460	0.330	0.230	0.177	0.140
STTH3R06	990-7998●	0.530	0.410	0.330	0.280	0.240
STTH5L06	990-8005●	0.850	0.630	0.500	0.420	0.370
STTH8L06FP	993-5991●	2.110	1.640	1.330	1.110	0.910
STTH8R06D	990-8030●	1.600	1.240	0.990	0.820	0.750
STTH30R06CW	990-7971●	3.760	2.910	2.060	1.800	1.620
STTH1002CB	SMD 993-5827●	0.780	0.660	0.580	0.490	0.360
STTH1002CT	993-5835●	1.260	0.970	0.710	0.590	0.460
STTH2002CFP	993-5886●	1.210	0.960	0.700	0.570	– –
STTH2002CT	993-5894●	1.250	0.940	0.750	0.620	0.550
STTH3L06	993-5924●	0.510	0.370	0.300	0.230	– –
STTH5L06FP	993-5932●	0.940	0.730	0.530	0.460	– –
STTH5R06D	993-5940●	1.350	1.000	0.820	0.670	0.550
STTH6002CW	993-5967●	4.080	3.120	2.380	1.930	1.810
STTH10002TV1	129-5225●	26.220	17.830	14.300	12.970	11.480
STTH10002TV2	129-5227●	27.010	19.620	15.380	12.970	12.170

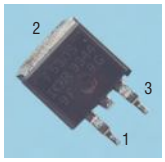
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
STTH12012TV1	129-5229●	43.840	31.810	24.980	21.080	19.740
STTH1210D	129-5231●	1.800	1.510	1.230	– –	– –
STTH1210FP	129-5233●	1.880	1.430	1.090	0.930	0.840
STTH1212D	129-5235●	2.090	1.720	1.420	– –	– –
STTH1212G	SMD 129-5236●	2.620	1.740	1.380	1.260	1.180
STTH1502D	129-5237●	1.180	1.000	0.780	– –	– –
STTH1512D	129-5239●	1.330	1.110	1.020	– –	– –
STTH1512PI	129-5242●	2.770	1.880	1.520	1.360	1.220
STTH1512W	129-5243●	1.200	1.070	0.960	– –	– –
STTH1R02	129-5245●	0.260	0.194	0.136	0.100	0.090
STTH1R02A	SMD 129-5246●	0.260	0.194	0.136	0.100	0.088
STTH2002D	129-5248●	2.360	1.580	1.280	1.060	1.040
STTH2002DI	129-5249●	3.550	2.410	1.930	1.760	1.570
STTH2002G	SMD 129-5250●	3.240	2.220	1.760	1.610	1.430
STTH212	129-5252●	0.580	0.500	0.370	0.300	0.260
STTH212RL	129-5253●	0.580	0.440	0.340	0.300	0.260
STTH212U	SMD 129-5254●	0.600	0.460	0.350	0.310	0.270
STTH2R02A	SMD 129-5255●	0.350	0.270	0.210	– –	– –
STTH2R02U	SMD 129-5256●	0.260	0.210	0.151	0.118	0.104
STTH3010D	129-5258●	3.700	2.530	2.010	1.830	1.620
STTH3010PI	129-5259●	4.330	2.950	2.370	2.150	1.890
STTH3010W	129-5260●	3.440	2.310	1.870	1.670	1.470
STTH3012D	129-5261●	2.510	1.780	1.430	1.100	1.070
STTH3012W	129-5262●	3.820	2.670	2.160	1.920	1.680
STTH302RL	129-5264●	0.290	0.200	0.161	0.137	0.123
STTH312B	SMD 129-5265●	1.090	0.820	0.630	0.530	0.480
STTH3L06B	SMD 129-5266●	0.620	0.470	0.370	– –	– –
STTH3R02	129-5267●	0.290	0.210	0.160	– –	– –
STTH4R02B	SMD 129-5272●	0.460	0.360	0.330	0.290	0.260
STTH4R02U	SMD 129-5277●	0.580	0.460	0.340	0.280	0.250
STTH512B	SMD 129-5279●	1.230	0.920	0.710	0.600	0.530
STTH512D	129-5280●	1.240	0.930	0.760	– –	– –
STTH512FP	129-5281●	1.290	0.940	0.740	0.630	0.560
STTH6002CPI	129-5282●	4.200	3.750	3.270	2.790	2.500
STTH6004W	129-5283●	3.230	2.780	2.150	– –	– –
STTH6006TV1	129-5284●	27.760	18.860	15.150	13.760	12.150
STTH6006W	129-5285●	4.780	3.250	2.610	2.370	2.100
STTH6010W	129-5286●	5.130	3.480	2.810	2.540	2.240
STTH6012W	129-5288●	5.290	3.610	2.880	2.610	2.310
STTH6110TV1	129-5291●	28.680	19.500	15.650	14.200	12.540
STTH6110TV2	129-5292●	28.680	19.500	15.650	14.200	12.540
STTH6112TV1	129-5293●	29.300	19.940	15.990	14.510	12.820
STTH802B	SMD 129-5295●	0.960	0.780	0.580	0.380	0.330
STTH802D	129-5296●	0.950	0.640	0.520	– –	– –
STTH810D	129-5297●	1.320	1.090	0.870	– –	– –
STTH810DI	129-5298●	2.000	1.400	1.130	0.970	0.890
STTH810G	SMD 129-5301●	1.460	1.100	0.850	0.710	0.640
STTH812D	129-5302●	2.010	1.320	1.070	0.960	0.920
STTH812DI	129-5303●	1.900	1.290	1.000	0.920	0.860
STTH812FP	129-5304●	1.610	1.210	0.940	0.800	0.710
STTH9012TV1	129-5307●	32.380	22.010	17.670	16.040	14.160
STTH9012TV2	129-5308●	22.810	15.510	13.140	12.800	12.470

TO-263

GENERAL SEMICONDUCTOR

FAIRCHILD SEMICONDUCTOR

SMD



- Ultra-fast recovery times
- Low forward voltage
- Glass passivated chip junctions
- Soft reverse recovery options
- **UL94V-0 rated**

H=4.83, W-10.67, D=15.88

I_F (av) A	V_{RRM} V	I_{FSM} V	t_{rr} ns	V_F V	@	I_F A	Mftr	Mftrs. List No.
16	200	250	35	0.975		16	GS	FESB16DT
16	600	250	50	1.5		16	GS	FESB16JT
18	200	175	20	1.2		20	GS	UGB18DCT
18	100	150	35	1.15		20	GS	BYVB32-100

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	1K+
BYVB32-100	SMD 954-9200●	1.38	1.00	0.60	0.44
FESB16DT	SMD 954-9315●	1.90	1.03	0.86	0.65
FESB16JT	SMD 954-9323●	3.27	1.65	1.26	0.88
UGB18DCT	SMD 955-1808● RL	2.45	1.72	1.38	0.74

211058

Reel of 800 Mftrs. List No.	Order Code	Price Per Reel 1+	3+
FESB16JT-E3/81	NEW SMD 156-2258●	431.25	388.13

Soft-Recovery, Axial

For Improved EMI Suppression

VISHAY



DO-15 L=7.6, Dia.=3.6

DO-201AD L=9.5, Dia.=5.3

Nitride oxide passivated junction, soft-gold doped. **UL94V-0 rated**.

I_F (av) A	I_{FSM} A	t_{rr} max ns	V_F max V	Package	Series
2	80	15	1.07	DO-15	SBYV27...
3.5	150	20	1.1	DO-201AD	SBYV28...

211237

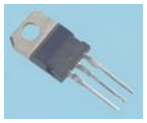
RL Re-reeling available

Farnell

Order Multiple=5						
V_{RRM} max., V	Mftrs. List No.	Order Code	Price Each 5+	25+	100+	1K+
50	SBYV27-50	**955-0429●**	0.880	0.410	0.370	0.220
100	SBYV27-100	**955-0402●**	0.480	0.270	0.240	0.158
200	SBYV27-200	**955-0410●**	0.460	0.260	0.240	0.150
Order Multiple=1			**1+**	**25+**	**100+**	**1K+**
200	SBYV28-200	**955-0437●**	0.620	0.350	0.340	0.220

Epitaxial Diode (FRED)

IXYS


TO-220AB


TO-247AD


SOT-227B


D-PAK (TO-252)


TO-220AC

- Planar passivated chips
- Very short recovery time
- Extremely low switching losses
- Low IRM-values
- Soft recovery behaviour
- Epoxy meets UL 94V-0

V_{RRM} max. V	I_F av max. A	Ifs max. A	V_F max. V	Package	Mftrs. List No.
200	123	1200	0.95	SOT-227B	DSEI2X121-02A
200	69	600	0.88	TO-247	DSEI60-02A
200	10	100	0.98	TO-220FPAC	DPG10I200PM
200	10	100	0.98	TO-220FPAB	DPG20C200PN
200	30	300	1.06	TO-3P	DPG60C200QB
200	10	100	0.98	TO-220AC	DPG10I200PA
200	10	100	0.98	TO-220AB	DPG20C200PB
200	15	150	1	TO-220AB	DPG30C200PB
200	15	150	1	TO-247	DPG30C200HB
300	10	100	0.98	TO-220AB	DPG20C300PB
300	10	100	0.98	TO-220FPAB	DPG20C300PN
300	15	150	1	TO-247AD	DPG30C300HB
300	15	150	1	TO-220AB	DPG30C300PB
300	15	150	1.01	D2-PAK	DPG30C300PC
300	30	300	1.06	D2-PAK	DPG60C300PC
300	30	300	1.06	TO-3P	DPG60C300QB
300	60	550	1.1	D2-PAK	DPG60IM300PC
300	10	100	0.98	TO-220AC	DPG10I300PA
400	10	100	1.04	TO-220ACFP	DPG10I400PM
400	30	300	1.13	TO-3P	DPG60C400QB
400	60	600	1.22	TO-3P	DPG60IM400QB
400	10	100	1.04	TO-220AC	DPG10I400PA
400	15	150	1.08	TO-220	DPG30C400PB
400	60	600	1.22	TO-247	DPG60I400HA
600	30	300	1.4	SOT-227B	DSEI2X31-06C
600	14	100	1.5	TO-220AC	DSEI12-06A
600	37	300	1.4	TO-247AD	DSEI30-06A
600	60	550	1.5	TO-247AD	DSEI60-06A
600	30	300	1.4	TO-247AD	DSEK60-06A
600	96	1200	1.17	SOT-227B	DSEI2X101-06A
600	5	40	2.02	TO-220AB	DHG10C600PB
1000	60	500	1.8	SOT-227B	DSEI2X61-10B
1000	30	200	2	TO-247AD	DSEI30-10A
1000	65	500	1.8	TO-247AD	DSEI60-10A
1000	12	75	2.1	TO-220AC	DSEI12-10A
1200	17	130	1.87	TO-220AC	DSEI20-12A
1200	28	200	2.2	SOT-227B	DSEI2X31-12B
1200	92	1200	1.61	SOT-227B	DSEI2X101-12A
1200	52	450	2.15	SOT-227B	DSEI2X61-12B
1200	109	600	1.16	TO-247	DSEI120-12A
1200	11	75	2.2	TO-220AC	DSEI12-12A

496704

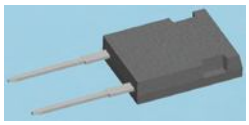
Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+	250+
DSEI120-12A	TO-247	**142-7253●**	5.66	4.66	3.80	3.80
DSEI12-10A	TO-220AC	**142-7254●**	1.39	1.04	0.72	0.72
DSEI20-12A	TO-220AC	**142-7255●**	2.46	1.84	1.18	1.18
DSEI2X101-12A	SOT-227B	**142-7256●**	16.57	13.68	11.18	11.18
DSEI2X31-12B	SOT-227B	**142-7257●**	10.79	8.91	7.27	7.27
DSEI2X61-12B	SOT-227B	**142-7259●**	15.15	12.51	10.21	10.21
DSEI60-02A	TO-247	**142-7261●**	2.38	1.98	1.62	1.62
DSEI2X101-06A	SOT-227B	**935-9427●**	19.13	17.78	15.09	15.09
DSEI2X121-02A	SOT-227B	**935-9419●**	21.75	20.22	14.37	14.37
DSEI2X31-06C	SOT-227B	**935-9400●**	9.31	8.52	7.16	7.16
DSEI2X61-10B	SOT-227B	**935-9435●**	13.53	11.31	9.85	9.85
DSEI12-06A	TO-220AC	**935-9370●**	1.12	0.97	0.70	0.70
DSEI12-12A	TO-220AC	**935-9389●**	1.80	1.27	0.81	0.81
DSEI30-06A	TO-247AD	**935-9338●**	3.06	2.58	1.55	1.55
DSEI30-10A	TO-247AD	**935-9346●**	3.90	2.77	1.99	1.99
DSEI60-06A	TO-247AD	**935-9354●**	6.03	4.29	2.46	2.46
DSEI60-10A	TO-247AD	**935-9362●**	5.72	4.42	2.57	2.57
DSEK60-06A	TO-247AD	**935-9397●**	5.72	4.35	2.57	2.57
DHG10C600PB	TO-220AB	**142-7217●**	1.19	0.99	0.81	0.81
DPG10I200PM	TO-220FPAC	NEW **157-2525●**	0.58	0.48	0.39	0.39
DPG20C200PN	TO-220FPAB	NEW **157-2526●**	0.87	0.73	0.59	0.59
DPG60C200QB	TO-3P	NEW **157-2527●**	2.11	1.74	1.42	1.42
DPG20C300PB	TO-220AB	NEW **157-2528●**	0.87	0.73	0.59	0.59
DPG20C300PN	TO-220FPAB	NEW **157-2529●**	0.87	0.73	0.59	0.59
DPG30C300HB	TO-247AD	NEW **157-2530●**	1.67	1.38	1.12	1.12
DPG30C300PB	TO-220AB	NEW **157-2531●**	1.09	0.89	0.73	0.73
DPG30C300PC	D2-PAK	NEW SMD **157-2533●**	1.16	0.95	0.78	0.78
DPG60C300PC	D2-PAK	NEW SMD **157-2534●**	1.82	1.49	1.22	1.22

Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+	250+
DPG60C300QB	TO-3P	NEW **157-2535●**	2.11	1.74	1.42	1.42
DPG60IM300PC	D2-PAK	NEW SMD **157-2536●**	1.34	1.11	0.90	0.90
DPG10I400PM	TO-220ACFP	NEW **157-2537●**	0.58	0.48	0.39	0.39
DPG60C400QB	TO-3P	NEW **157-2538●**	2.11	1.74	1.42	1.42
DPG60IM400QB	TO-3P	NEW **157-2539●**	1.63	1.35	1.10	1.10
DPG10I200PA	TO-220AC	NEW **157-2540●**	0.56	0.46	0.38	0.38
DPG20C200PB	TO-220AB	NEW **157-2541●**	0.87	0.73	0.59	0.59
DPG30C200PB	TO-220AB	NEW **157-2542●**	1.09	0.89	0.73	0.73
DPG30C200HB	TO-247	NEW **157-2543●**	1.67	1.38	1.12	1.12
DPG10I300PA	TO-220AC	NEW **157-2545●**	0.56	0.46	0.38	0.38
DPG10I400PA	TO-220AC	NEW **157-2546●**	0.56	0.46	0.38	0.38
DPG30C400PB	TO-220	NEW **157-2547●**	1.09	0.89	0.73	0.73
DPG60I400HA	TO-247	NEW **157-2548●**	1.82	1.49	1.22	1.22

Epitaxial Diodes, Electrically Isolated Back Surface

IXYS

Avalanche rated


ISOPLUS-247 (2-pin)

- Silicon chip on Direct-Copper-Bond substrate
- Isolated Mounting Surface
- 2500 V electrical isolation
- Short recovery time
- Extremely low switching losses
- Epoxy meets UL-94V-0
- Isolated and UL registered E153432

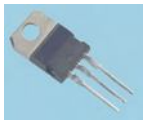
$I_{F(AV)}$ A	V_{rrm} V	I_{fsm} @ 50Hz A	t_{rr} ns	V_f ns	@	I_f A	Mftrs. List No.
Single Diode, ISOPLUS-247 (2-pin)							
9	600	80	15	4		9	DSEP9-06CR
15	1200	110	20	4.04		15	DSEP15-12CR
30	600	250	30	2.51		30	DSEP30-06BR
30	1200	200	40	2.74		30	DSEP30-12AR
30	1200	250	20	5		30	DSEP30-12CR
60	1200	500	40	2.66		60	DSEP60-12AR

451154

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
DSEP15-12CR	**130-0066●**	2.91	2.41	1.97	1.83	– –
DSEP30-06BR	**130-0067●**	2.76	2.28	1.86	1.74	– –
DSEP30-12AR	**130-0069●**	2.22	1.82	1.49	1.39	– –
DSEP30-12CR	**130-0070●**	4.87	4.03	3.28	3.06	– –
DSEP60-12AR	**130-0071●**	3.34	2.76	2.26	2.09	– –
DSEP9-06CR	**130-0072●**	2.37	1.96	1.61	1.49	– –

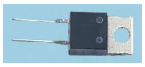
Epitaxial Diode (HiPerFRED™)

IXYS


TO-220AB


TO-247AD


SOT-227B


TO-220AC

- Planar passivated chips
- Very short recovery time
- Extremely low switching losses
- Low I_{RM}-values
- Soft recovery behaviour
- Epoxy meets UL 94V-0

V_{RRM} max. V	I_F av max. A	I_{FS} max. A	V_F max. V	Package	Mftrs. List No.
200	30	325	0.95	TO-247AD	DSEC60-02A
300	30	300	0.93	TO-220AC	DSEP29-03A
300	60	600	1.26	SOT-227B	DSEP2X61-03A
300	90	1000	1.3	SOT-227B	DSEP2X91-03A
600	15	110	1.35	TO-220AC	DSEP15-06A
600	30	250	1.26	TO-220AC	DSEP29-06A
600	30	250	1.3	SOT-227B	DSEP2X31-06A
600	60	600	1.48	SOT-227B	DSEP2X61-06A
600	90	1000	1.52	SOT-227B	DSEP2X91-06A
600	120	2000	1.39	SOT-227B	DSEC240-06A
1200	10	40	1.96	TO-220AB	DSEC16-12A
1200	15	90	1.79	TO-220AC	DSEP12-12A
1200	15	90	1.78	TO-247AD	DSEC30-12A
1200	30	200	1.78	TO-247AD	DSEC60-12A
1200	30	200	1.96	SOT-227B	DSEP2X31-12A
1200	30	200	1.81	TO-220AC	DSEP29-12A
1200	60	800	1.7	SOT-227B	DSEP2X61-12A

496707

Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+
DSEC16-12A	TO-220AB	**142-7239●**	1.98	1.63	1.33
DSEC240-06A	SOT-227B	**142-7241●**	29.26	24.14	19.73
DSEC30-12A	TO-247AD	**142-7243●**	2.56	2.11	1.72
DSEC60-02A	TO-247AD	**142-7244●**	4.54	3.75	3.06
DSEC60-12A	TO-247AD	**142-7248●**	6.57	5.42	4.43
DSEP12-12A	TO-220AC	**142-7262●**	1.07	0.89	0.73
DSEP15-06A	TO-220AC	**142-7263●**	1.03	0.85	0.69
DSEP29-03A	TO-220AC	**142-7264●**	1.61	1.33	1.09
DSEP29-06A	TO-220AC	**142-7265●**	1.61	1.33	1.09
DSEP29-12A	TO-220AC	**142-7266●**	2.00	1.65	1.35
DSEP2X31-06A	SOT-227B	**142-7269●**	9.85	8.13	6.64
DSEP2X31-12A	SOT-227B	**142-7270●**	11.92	9.84	8.04

RL Re-reeling available

Farnell

Power Diodes - Ultra-Fast Recovery - continued

Epitaxial Diode (HiPerFRED™) - continued

Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+
DSEP2X61-03A	SOT-227B	142-7273●	11.92	9.84	8.04
DSEP2X61-06A	SOT-227B	142-7274●	20.25	15.08	12.88
DSEP2X61-12A	SOT-227B	142-7275●	15.64	12.91	10.54
DSEP2X91-03A	SOT-227B	142-7276●	15.13	12.49	10.20
DSEP2X91-06A	SOT-227B	142-7277●	16.96	13.98	11.42

High Performance Fast Recovery Diodes (HiPerFRED™ 2nd Gen)

IXYS



TO-220AB



TO-3



TO-220AC

- Planar passivated chips
- Very low leakage current
- Very short recovery time
- Improved thermal behaviour
- Very low Irm-values
- Very soft recovery behaviour
- Avalanche voltage rated for reliable operation
- Soft reverse recovery for low EMI/RFI

V_{RRM} max. V	I_F av max. A	I_{FS} max. A	V_F max. V	Package	Mftrs. List No.
200	15	150	1	TO-220AC	DPG15I200PA
300	60	550	1.1	TO-3P	DPG120C300QB
300	15	150	1	TO-220AC	DPG15I300PA
300	30	300	1.06	TO-247	DPG60C300HB
400	10	100	1.04	TO-220AB	DPG20C400PB
400	15	150	1.07	TO-247	DPG30C400HB

496712

Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+
DPG120C300QB	TO-3P	142-7228●	3.22	2.66	2.19
DPG15I200PA	TO-220AC	142-7229●	0.66	0.55	0.45
DPG15I300PA	TO-220AC	142-7230●	0.66	0.55	0.45

HiPerDynFRED™ Epitaxial Diodes

IXYS



TO-220AC



SOT-227B



ISOPLUS220

- Silicon chip on Direct-Copper-Bond substrate
- High power dissipation
- Planar passivated chips
- Very short recovery time
- Extremely low switching losses
- Low IRM-values
- Soft recovery behaviour
- Epoxy meets UL 94V-0

V_{RRM} max. V	I_F av max. A	I_{FS} max. A	V_F max. V	Package	Mftrs. List No.
200	15	150	1	TO-220AC	DPG15I200PA
600	35	100	2	SOT-227B	DSEP2X35-06C
1200	10	130	1.12	ISOPLUS220	DSEE15-12CC
1200	25	95	3.3	SOT-227B	DSEP2X25-12C

496715

Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+
DPG15I200PA	TO-220AC	142-7229●	0.66	0.55	0.45
DSEE15-12CC	ISOPLUS220	142-7250●	3.25	2.69	2.20
DSEP2X25-12C	SOT-227B	142-7267●	14.37	11.87	9.68
DSEP2X35-06C	SOT-227B	142-7272●	13.30	10.98	8.97

4A - 120A, 600V and 1200V

FAIRCHILD SEMICONDUCTOR



TO-220



TO-220F



TO-3P



TO-247

V_{RRM} V	I_F (av) A	I_{FRM} A	I_{FSM} A	t_{rr} max. ns	V_F max. V	Package	Mftrs. List No.
600	4	8	50	22	2.4	TO-220	ISL9R460P2
600	8	—	80	30	2.6	TO-220	FFP08S60STU
600	8	—	60	45	2.1	TO-220F	FFPF08H60STU
600	15	30	200	40	2.2	TO-220	ISL9R1560P2
600	15	30	200	40	2.2	TO-247	ISL9R1560G2
600	30	70	325	45	2.4	TO-220	ISL9R3060P2
600	30	70	325	45	2.4	TO-247	ISL9R3060G2
1200	8	16	100	44	3.3	TO-220	ISL9R8120P2
1200	18	36	200	70	3.3	TO-220	ISL9R18120P2

495044

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	1K+
FFP08S60STU	149-5099●	0.77	0.55	0.42	0.32
FFPF08H60STU	149-5109●	0.77	0.57	0.46	0.42
ISL9R1560G2	149-5116●	1.53	1.24	1.04	0.94
ISL9R1560P2	149-5104●	1.13	0.77	0.56	0.52
ISL9R18120P2	149-5105●	1.64	1.32	1.10	1.01
ISL9R3060G2	149-5119●	2.46	1.67	1.24	1.18
ISL9R3060P2	149-5106●	2.19	1.49	1.11	1.05
ISL9R460P2	149-5107●	0.62	0.51	0.42	0.38
ISL9R8120P2	149-5108●	1.10	0.90	0.75	0.68

8A to 80A Soft-Recovery

Single and Double

VISHAY

FAIRCHILD SEMICONDUCTOR

ON Semiconductor

GENERAL SEMICONDUCTOR

Soft recovery diodes offer reduced RFI emission due to the reduced slope of their reverse recovery current characteristic.

V_{RRM} V	I_F (av) A	I_{FRM} A	I_{FSM} A	t_{rr} max. (*t_{rr} min.) ns	V_F max. V	Package	Mftr.	Mftrs. List No.
200	8	—	150	20	1	TO-220AC	GS	UG8DT
200	15	—	200	35	1.05	TO-220AC	ON	MUR1520G
200	30	70	325	45	1	TO-220AC	FCH	◆RURP3020
200	30	30	200	35	1.05	TO-247	ST	◆MUR3020WTPBF
600	4	—	25	42	1.8	TO-220AC	VISH	HFA04TB60PBF
600	8	24	60	55	1.7	TO-220AC	VISH	HFA08TB60PBF
600	8	24	60	55	2.1	D2-PAK	VISH	HFA08TB60SPBF
600	8	16	100	35	2.1	TO-220AC	FCH	RHRP860
600	8	16	100	18	2.4	TO-220AC	FCH	◆ISL9R860P2
600	8	24	60	55	1.7	TO-220AB	VISH	◆HFA16TA60CPBF
600	8	16	100	60	1.5	TO-220	FCH	◆RURP860
600	15	60	150	60	1.7	TO-220AC	VISH	◆HFA15TB60PBF
600	15	60	150	19*	1.7	TO-247AC**	VISH	◆HFA15PB60PBF
600	15	30	200	40	2.1	TO-220AC	FCH	◆RHRP1560
600	25	—	225	23	2	TO-247	ST	◆HFA25PB60PBF
600	25	100	225	75	1.7	TO-220AC	VISH	◆HFA25TB60PBF
600	30	70	325	40	2.1	TO-220AC	FCH	◆RHRP3060
600	80	160	800	85	1.6	TO-247	FCH	◆RURG8060
1200	5	—	—	100	3.5	TO-220F	FCH	FFPF05U120STU
1200	6	24	80	26	3	TO-220AC	VISH	◆HFA06TB120PBF
1200	8	32	130	28*	3.3	TO-220AC	VISH	◆HFA08TB120PBF
1200	16	—	—	30	3	TO-247AC	ST	HFA16PB120PBF
1200	16	32	190	30	3.3	TO-220AC	VISH	◆HFA16TB120PBF
1200	30	60	300	75	3.2	TO-247	FCH	◆RHRG30120
1200	30	90	120	135	3.93	TO-247AC	VISH	HFA30PB120PBF
1200	75	—	500	85	3.2	TO-247	FCH	RHRG75120
Dual Diodes								
200	2 x 30	70	325	50	1	TO-247	FCH	◆RURG3020CC
200	2 x 18	—	175	20	1.2	TO-263AB	GS	◆UGB18DCT
300	2 x 30	—	300	55	1.25	TO-247	ST	◆30EPH03PBF
600	2 x 15	60	150	60	2	TO-247AC	VISH	◆HFA30PA60CPBF

◆Denotes reverse avalanche energy rated

** Denotes 2-pin modified TO-247

211055

Order Multiple=1

Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+	250+
FFPF05U120STU	FCH	105-7673●	0.62	0.47	0.40	– –
HFA04TB60PBF	VISH	865-7289●	1.33	0.75	0.63	0.61
HFA06TB120PBF	VISH	865-7297●	2.70	1.59	1.22	1.01
HFA08TB60PBF	VISH	910-1446●	2.47	1.35	1.01	0.88
HFA08TB60SPBF	VISH	SMD 910-1454●	2.34	1.48	1.19	1.00
HFA08TB120PBF	VISH	864-7933●	5.21	2.96	2.27	1.98
HFA15PB60PBF	VISH	910-1390●	3.16	1.91	1.54	1.50
HFA15TB60PBF	VISH	910-1381●	3.11	1.77	1.35	1.18
HFA16PB120PBF	ST	101-3356●	6.98	4.40	3.41	3.23
HFA16TA60CPBF	VISH	864-7941●	3.30	1.96	1.51	1.47
HFA16TB120PBF	VISH	864-7950●	8.40	5.49	4.25	3.74
HFA25PB60PBF	ST	101-3362●	4.63	2.85	2.64	2.57
HFA25TB60PBF	VISH	865-7300●	4.81	2.73	2.09	1.83
HFA30PA60CPBF	VISH	910-1411●	5.93	3.74	2.90	2.61
HFA30PB120PBF	VISH	910-1438●	12.29	8.48	6.71	6.11
MUR1520G	ON	955-6990●	1.16	0.86	0.64	0.53
MUR3020WTPBF	ST	101-3359●	2.68	1.59	1.21	1.01
RHRG30120	FCH	984-3914●	1.27	0.90	0.81	0.79
RHRG75120	FCH	984-3736●	3.22	2.28	1.59	– –
RHRP1560	FCH	984-3892●	1.22	0.90	0.69	0.52
RHRP3060	FCH	984-3922●	5.28	3.39	2.51	1.86
RURG3020CC	FCH	984-3906●	5.97	3.83	2.84	2.08
RURG3060	FCH	107-6353●	1.97	1.34	0.96	0.90
RURG8060	FCH	984-3930●	4.08	2.61	1.95	1.85
RURP3020	FCH	101-7799●	5.54	3.16	2.66	1.76
RURP3060	FCH	101-7800●	4.42	2.52	2.11	0.68
RURP860	FCH	101-7801●	0.77	0.55	0.42	0.32
RHRP860	FCH	984-3949●	1.23	0.87	0.67	0.50
RHRP3060	FCH	984-3922●	5.28	3.39	2.51	1.86

RL Re-reeling available

Order Multiple=1			Price Each			
Mftrs. List No.	Mftr.	Order Code	1+	25+	100+	250+
RHRP860	FCH	984-3949●	1.23	0.87	0.67	0.50
UG8DT	GS	955-1794●	1.89	1.30	1.02	0.53
UGB18DCT	GS	SMD 955-1808● RL	2.45	1.72	1.38	0.74
30EPH03PBF	ST	101-3360●	2.13	1.17	0.87	0.74
ISL9R860P2	FCH	109-5128●	0.66	0.50	0.41	0.30

Tube of 50		Price Per Tube		
Mftrs. List No.	Order Code	1+	4+	10+
HFA15TB60PBF	NEW 156-4016●	77.48	60.62	59.17

Power Diodes - Controlled Avalanche

Controlled Avalanche



SOD-57

Controlled avalanche diodes snub repetitive reverse voltage spikes between specified voltage limits – a common problem in switch mode power supplies, telephony, TV and monitor deflection circuits and other inductive switching circuits.

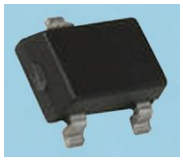
I_F av	V_{RRM} max.	I_R	V_F max.	@ I_F	Package	Mftr.	Mftrs. List No.
A	V	mA	V	A			
2	1000	0.1	1	2	SOD-57	TFK	BYW56-TAP

211213

Order Multiple=5			Price Each			
Mftrs.List no.	Mftr.	Order code	5+	100+	1K+	3K+
BYW56-TAP	TFK	107-5758●	0.360	0.210	0.137	0.101

Power Diodes - Schottky

Diode Schottky



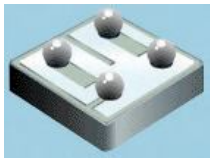
Voltage, Vrrm	Voltage, Vf max	Current, If AV	Current Ifsm	Case Style	Mftrs. List No.
V	mV	mA	A		
90	490	200	5	TUMD2	RB021VA90TR
40	550	3 A	70	SOD-106	RB050L-40TE25
30	450	3 A	70	PMDT	RB050LA-30TR
40	550	3 A	70	PMDT	RB050LA-40TR
40	450	3 A	70	SOD-106	RB051L-40TE25
40	500	2 A	70	SOD-106	RB060L-40TE25
30	490	2 A	55	SOD-123	RB060M-30TR
30	490	1.5 A	30	SOD-123	RB070M-30TR
40	550	1 A	70	SOD-106	RB160L-40TE25
40	510	1 A	30	SOD-123	RB160M-40TR
40	400	1 A	70	SOD-106	RB161L-40TE25
40	550	500	3	SOT-346	RB400DT146
50	550	500	3	TUMD2	RB400VA-50TR
40	450	100	1	SOT-346	RB420DT146
40	550	100	1	SOT-346	RB425DT146
40	500	400	2	SOT-346	RB495DT146
30	450	100	500 mA	VMD2	RB520G-30T2R
30	470	500	2	SOD-323	RB551V-30TE-17
40	370	30	200 mA	SOT-346	RB705DT146
45	370	30	200 mA	SOT-346	RB706D-40T146
40	370	30	200 mA	SOT-323	RB717FT106
40	370	30	200 mA	SOT-457	RB731UT108
40	370	30	200 mA	SOT-363	RB731XNTR
3	460	—	—	SC-75A	RB851YT2R
30	390	500	5	TUMD2	RSX051VA-30TR
30	390	1 A	45	SOD-123	RSX101M-30TR
30	470	1 A	5	TUMD2	RSX101VA-30TR
30	440	2 A	60	SOD-106	RSX201L-30TE25
30	420	3 A	70	SOD-106	RSX301L-30TE25
30	420	3 A	70	PMDT	RSX301LA-30TR
25	390	5 A	70	SOD-106	RSX501L-20TE25

528143

		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	500+
RB021VA90TR	SMD 168-0012●	0.460	0.300	0.210	0.140	0.116
RB050L-40TE25	SMD 168-0013●	0.790	0.610	0.430	0.300	0.230
RB050LA-30TR	SMD 168-0014●	0.790	0.610	0.430	0.300	0.230
RB050LA-40TR	SMD 168-0015●	0.790	0.610	0.430	0.300	0.230
RB051L-40TE25	SMD 168-0016●	0.550	0.370	0.260	0.175	0.151
RB060L-40TE25	SMD 168-0017●	0.730	0.560	0.400	0.280	0.210
RB060M-30TR	SMD 168-0019●	0.500	0.340	0.230	0.164	0.128
RB070M-30TR	SMD 168-0021●	0.460	0.300	0.210	0.140	0.116
RB160L-40TE25	SMD 168-0022●	0.360	0.230	0.164	0.093	0.069
RB160M-40TR	SMD 168-0023●	0.360	0.210	0.140	0.105	0.082
RB161L-40TE25	SMD 168-0024●	0.360	0.210	0.140	0.105	0.082
RB400DT146	SMD 168-0025●	0.520	0.350	0.240	0.164	0.140
RB400VA-50TR	SMD 168-0026●	0.520	0.350	0.240	0.164	0.140
RB420DT146	SMD 168-0027●	0.400	0.260	0.175	0.093	0.082
RB425DT146	SMD 168-0028●	0.370	0.210	0.151	0.116	0.093
RB495DT146	SMD 168-0029●	0.440	0.290	0.210	0.140	0.116
RB520G-30T2R	SMD 168-0032●	0.400	0.220	0.151	0.116	0.093
RB551V-30TE-17	SMD 168-0033●	0.430	0.240	0.175	0.128	0.105

		Price Each				
Mftrs. List No.	Order Code	1+	25+	100+	250+	500+
RB705DT146	SMD 168-0034●	0.400	0.220	0.151	0.116	0.093
RB706D-40T146	SMD 168-0035●	0.420	0.230	0.164	0.128	0.093
RB717FT106	SMD 168-0036●	0.400	0.220	0.151	0.116	0.093
RB731UT108	SMD 168-0037●	0.410	0.230	0.164	0.116	0.093
RB731XNTR	SMD 168-0038●	0.480	0.330	0.220	0.151	0.128
RB851YT2R	SMD 168-0039●	0.370	0.198	0.140	0.105	0.082
RSX051VA-30TR	SMD 168-0064●	0.400	0.220	0.151	0.116	0.093
RSX101M-30TR	SMD 168-0065●	0.400	0.220	0.151	0.116	0.093
RSX101VA-30TR	SMD 168-0066●	0.370	0.210	0.140	0.105	0.082
RSX201L-30TE25	SMD 168-0068●	0.610	0.430	0.300	0.230	0.175
RSX301L-30TE25	SMD 168-0069●	0.680	0.490	0.350	0.240	0.186
RSX301LA-30TR	SMD 168-0070●	0.680	0.490	0.350	0.240	0.186
RSX501L-20TE25	SMD 168-0071●	0.680	0.490	0.350	0.240	0.186

Flipky ™ - 4 pin



H=1.524, W=1.524, D=0.537

- Ultra low V_F per footprint area
- Super low profile (less than 0.8 mm)
- One-fifth footprint of SMA
- Low thermal resistance

The IR140CPS surface-mount Schottky rectifier has been designed for applications requiring low forward drop and very small foot prints on PC boards.
Typical applications are in disk drives, switching power supplies, converters, free-wheeling diodes, battery charging, and reverse battery protection.

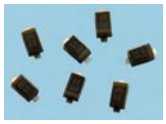
V_{RRM}	$I_{F(AV)}$	I_{FSM} t_p = 5 µs	V_F 1 A_{pk} T_J = 125 °C	Device Marking	Mftrs List No.
V	A ×	A	V		
40	1	250	0.38	IR140CXXXXZZZZ	IR140CSPTRPBF

**** = Lot Number, ZZZZ = Date code, × = Measured using a rectangular waveform

419385

Mftrs. List No.	Order Code	Price Each 1+	25+	100+
IR140CSPTRPBF	SMD 107-8404● RL	0.49	0.29	0.23

Low V_F SOD-523



- For applications where low voltage drops are needed
- Good power density, PD = 285mW

498177

Mftrs. List No.	I_F (mA)	I_{FS} max (A)	V_{rrm} (V)	V_F (V)	Order Code	Price Each 5+	25+
ZHCS350TA	510	4.2	40	0.405	SMD 147-1157●	0.28	0.20

0.15A to 10A, SMA, SMB, SMC, SOD-123

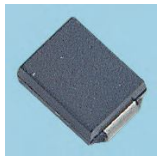
ON Semiconductor



MELF
L = 5.2, Dia = 2.7



PowerMite



SMA: H=2.67, W=5.59, D=2.92
SMB: H=2.41, W=5.59, D=3.8
SMC: H=2.41, W=8.13, D=6.10

I_F (AV) A	V_{RRM} V	V_{FM} max. V	I_{RM} max. mA	Package	Mftr.	Mftrs. List No.
0.15	100	1	—	MicroMELF	SLX	MCL4148
0.5	80	1	0.2	MELF	ST	TMBAT49FILM
1	50	0.75	0.4	SMA	MC	SS15
1	90	0.8	0.1	SMA	MC	SS19
1	15	0.44	0.5	SMB	VISH	10BQ015PBF
1	20	0.45	0.2	SMA	VISH	MBRA120TRPBF
1	20	0.45	0.4	POWERMITE	ON	MBRM120LT1G
1	20	0.45	0.1	MELF	TS	LL5817
1	20	0.5	0.4	SMA	MC	SS12
1	30	0.45	0.1	MELF	TS	LL5818
1	30	0.42	0.2	SMB	VISH	STPS1L30UPBF
1	30	0.41	25	SMA	ON	MBRA130LT3G
1	30	0.44	0.5	SMB	VISH	10BQ030PBF
1	30	0.395	—	SMB	ON	MBRS130LT3G
1	30	0.5	0.4	SMA	MC	SS13
1	40	0.45	0.1	MELF	TS	LL5819
1	40	0.55	0.5	MELF	ST	TMBYV10-40
1	40	0.55	25	SMA	ON	MBRA140T3G
1	40	0.75	0.5	SMA	MC	SS14
1	40	0.5	0.2	SMA	GS	SS14

RL Re-reeling available

Power Diodes - Schottky - continued

0.15A to 10A, SMA, SMB, SMC, SOD-123 - continued

I_F (AV) A	V_{RRM} V	V_{FM} max. V	I_{RM} max. mA	Package	Mftr.	Mftrs. List No.
1	40	0.44	0.1	SMB	VISH	10BQ040PBF
1	40	0.6	1	SMB	ON	MBRS140T3G
1	40	0.49	0.5	SMA	VISH	MBRA140PBF
1	40	0.6	0.1	SMB	VISH	MBRS140PBF
1	40	—	—	DO-213AB	VISH	BYM13-40
1	60	0.7	0.5	MELF	ST	TMBYV10-60
1	60	0.44	0.1	SMB	VISH	10BQ060PBF
1	60	0.75	0.5	SMA	MC	SS16
1	60	0.75	0.2	SMA	GS	SS16
1	100	0.86	0.5	SMA	GS	SS1H10
1	100	0.8	0.05	SMA	MC	SS110
1	100	0.75	0.5	SMB	ON	MBRS1100T3G
1	100	0.62	0.5	SMB	VISH	10BQ100PBF
1	100	0.62	0.5	SMB	VISH	MBRS1100TRPBF
1	150	0.95	0.1	SMA	MC	SS115
1.5	20	0.445	0.2	SMA	GS	SL12
1.5	30	0.445	0.2	SMA	GS	SL13
1.5	40	0.62	1	SMA	VISH	10MQ040NPBF
1.5	45	0.5	0.5	SMB	TFK	BYS10/45
1.5	60	0.62	1	SMA	VISH	10MQ060NPBF
1.5	90	0.62	1	SMA	VISH	10MQ100NPBF
1.5	100	0.78	0.1	SMA	VISH	10MQ100NTRPBF
2	20	0.5	0.4	SMB	MC	SS22
2	30	0.44	0.4	SMB	GS	SL23
2	30	0.5	0.5	SMB	FCH	SS23
2	30	0.5	0.4	SMB	MC	SS23
2	40	0.34	0.22	SMB	ST	STPS2L40U
2	40	0.5	0.5	SMB	FCH	SS24
2	30	0.55	0.5	SMB	VISH	20BQ030PBF
2	50	0.7	0.4	SMB	MC	SS25
2	60	0.7	0.7	SMB	FCH	SS26
2	90	0.85	0.1	SMB	MC	SS29
3	20	0.5	0.5	SMC	MC	SS32
3	30	0.5	0.5	SMC	MC	SS33
3	40	0.75	0.5	SMC	MC	SS34
3	40	0.5	2	SMC	ON	MBRS340T3G
3	40	0.49	0.5	SMA	VISH	15MQ040NPBF
3	40	0.35	0.5	SMC	VISH	30BQ040PBF
3	40	0.7	—	D-PAK	ON	MBRD640CTT4G
3	50	0.75	0.5	SMC	MC	SS35
3	60	0.35	0.5	SMC	VISH	30BQ060PBF
3	60	0.6	—	D-PAK	ON	MBRD360T4G
3	60	0.72	0.5	SMC	VISH	MBRS360TR.PBF
3	60	0.74	—	SMC	ON	MBRS360T3G
3	60	0.75	0.5	SMC	MC	SS36
3	60	0.75	0.5	SMC	GS	SS36
3	90	0.85	0.1	SMC	MC	SS39
3	100	0.8	4	SMC	GS	SS3H10
3.3	40	0.53	3	D-PAK	VISH	6CWQ04FNPBF
3.3	60	0.61	3	D-PAK	VISH	6CWQ06FNPBF
5	35	0.47	—	D-PAK	ON	MBRD1035CTLG

Order Multiple=1

Mftrs. List No.	Mftr.	Case Style	Order Code	Price Each 1+	25+	100+	250+
BYM13-40	VISH	DO-213AB	SMD 133-6582●	0.320	0.270	0.210	0.184
BYS10/45	TFK	SMB	SMD 954-9188●	0.520	0.460	0.420	0.380
MBRA120TRPBF	VISH	SMA	SMD 866-0409● RL	0.184	0.112	0.084	0.065
MBRA130LT3G	ON	SMA	SMD 955-5978● RL	0.270	0.159	0.110	0.083
MBRA140T3G	ON	SMA	SMD 955-5986● RL	0.280	0.166	0.116	0.087
MBRA140PBF	VISH	SMA	SMD 866-0417● RL	0.270	0.160	0.118	0.094
MBRD360T4G	ON	D-PAK	SMD 955-6958● RL	0.530	0.340	0.280	0.220
MBRD640CTT4G	ON	D-PAK	SMD 955-6966● RL	0.650	0.410	0.340	0.270
MBRD1035CTLG	ON	D-PAK	SMD 955-6974●	1.370	1.200	0.960	0.690
MBRM120LT1G	ON	POWERMITE	SMD 955-5994● RL	0.310	0.188	0.135	0.105
MBRS130LT3G	ON	SMB	SMD 955-6931● RL	0.280	0.166	0.116	0.087
MBRS140PBF	VISH	SMB	SMD 910-0695● RL	0.200	0.122	0.091	0.072
MBRS1100T3G	ON	SMB	SMD 955-5862● RL	0.400	0.220	0.176	0.143
MBRS140T3G	ON	SMB	SMD 955-7237● RL	0.320	0.190	0.132	0.099
MBRS340T3G	ON	SMC	SMD 955-7377● RL	0.350	0.210	0.153	0.119
MBRS360T3G	ON	SMC	SMD 955-6940● RL	0.400	0.240	0.174	0.136
MBRS360TR.PBF	VISH	SMC	SMD 910-1276● RL	0.370	0.240	0.174	0.170
MBRS140T3G	ON	SMB	SMD 955-7237● RL	0.320	0.190	0.132	0.099
MBRS340T3G	ON	SMC	SMD 955-7377● RL	0.350	0.210	0.153	0.119
SL12	GS	SMA	SMD 955-0763● RL	0.185	0.141	0.115	0.095
SL13	GS	SMA	SMD 955-0771● RL	0.200	0.155	0.130	0.106
SL22.	GS	SMB	SMD 955-0780● RL	0.270	0.220	0.180	0.153
SL23	GS	SMB	SMD 955-0798● RL	0.290	0.230	0.188	0.154
SS14	GS	SMA	SMD 955-1280● RL	0.210	0.145	0.117	0.074
SS16	GS	SMA	SMD 955-1298● RL	0.260	0.180	0.145	0.095
SS1H10	GS	SMA	SMD 955-1301● RL	0.290	0.210	0.182	0.149
SS23	FCH	SMB	SMD 984-3795●	0.600	0.400	0.260	0.153
SS24	FCH	SMB	SMD 101-7872● RL	0.420	0.290	0.191	0.143
SS26	FCH	SMB	SMD 101-7873● RL	0.370	0.250	0.179	0.083
SS36	GS	SMC	SMD 955-1336● RL	0.380	0.260	0.240	0.194
STPS1L30UPBF	VISH	SMB	SMD 101-3335● RL	0.730	0.440	0.280	0.220
STPS2L40U	ST	SMB	SMD 137-3662● NEW	0.550	0.340	0.260	0.230
TMBAT49FILM	ST	MELF	SMD 137-3664● NEW	0.320	0.260	0.182	0.149
TMBYV10-40	ST	MELF	SMD 980-4200●	1.830	1.170	0.930	0.330
TMBYV10-60	ST	MELF	SMD 980-4218●	1.120	0.690	0.570	0.300
6CWQ04FNPBF	VISH	D-PAK	SMD 910-1055●	1.370	0.840	0.830	0.410
6CWQ06FNPBF	VISH	D-PAK	SMD 910-1063●	1.450	1.300	0.800	0.520
10BQ015PBF	VISH	SMB	SMD 864-7763● RL	0.470	0.280	0.220	0.164
10BQ030PBF	VISH	SMB	SMD 910-0687● RL	0.260	0.153	0.113	0.090
10BQ040PBF	VISH	SMB	SMD 864-7771● RL	0.410	0.250	0.159	0.122
10BQ060PBF	VISH	SMB	SMD 864-7780● RL	0.340	0.200	0.150	0.117
10BQ100PBF	VISH	SMB	SMD 864-7798● RL	0.480	0.290	0.210	0.142
10BQ015PBF	VISH	SMB	SMD 864-7763● RL	0.470	0.280	0.220	0.164
10BQ040PBF	VISH	SMB	SMD 864-7771● RL	0.410	0.250	0.159	0.122

Order Multiple=1

Mftrs. List No.	Mftr.	Case Style	Order Code	Price Each 1+	25+	100+	250+
10BQ060PBF	VISH	SMB	SMD 864-7780● RL	0.340	0.200	0.150	0.117
10BQ100PBF	VISH	SMB	SMD 864-7798● RL	0.480	0.290	0.210	0.142
10MQ040NPBF	VISH	SMA	SMD 864-7801● RL	0.330	0.184	0.149	0.111
10MQ060NPBF	VISH	SMA	SMD 910-0598● RL	0.380	0.290	0.200	0.135
10MQ100NTRPBF	VISH	SMA	SMD 865-6916●	0.730	0.370	0.230	0.187
10MQ100NPBF	VISH	SMA	SMD 910-0580● RL	0.380	0.240	0.200	0.135
15MQ040NPBF	VISH	SMA	SMD 910-1268● RL	0.560	0.350	0.290	0.169
20BQ030PBF	VISH	SMB	SMD 864-7836● RL	0.240	0.164	0.122	0.098
30BQ015PBF	VISH	SMC	SMD 910-1250● RL	1.090	0.630	0.460	0.360
30BQ040PBF	VISH	SMC	SMD 864-7879● RL	0.800	0.690	0.600	0.530
30BQ060PBF	VISH	SMC	SMD 864-7887● RL	0.860	0.520	0.390	0.310
30BQ100PBF	VISH	SMC	SMD 910-1241● RL	1.120	0.660	0.470	0.330
15MQ040NPBF	VISH	SMA	SMD 910-1268● RL	0.560	0.350	0.290	0.169
SS32	MC	SMC	NEW SMD 162-5259●	0.510	0.340	0.260	0.200
SS33	MC	SMC	NEW SMD 162-5260●	0.510	0.340	0.260	0.200
SS35	MC	SMC	NEW SMD 162-5261●	0.540	0.360	0.270	0.220
SS39	MC	SMC	NEW SMD 162-5262●	0.700	0.470	0.350	0.290

Order Multiple=5

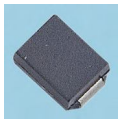
Mftrs. List No.	Mftr.	Case Style	Order Code	Price Each 5+	25+	100+	250+
LL5817	TS	MELF	NEW SMD 162-5108●	0.440	0.220	0.173	0.145
LL5818	TS	MELF	NEW SMD 162-5109●	0.440	0.220	0.173	0.145
LL5819	TS	MELF	NEW SMD 162-5110●	0.440	0.220	0.173	0.145
SS115	MC	SMA	NEW SMD 162-5249●	0.290	0.188	0.141	0.112
SS12	MC	SMA	NEW SMD 162-5250●	0.188	0.125	0.094	0.075
SS13	MC	SMA	NEW SMD 162-5252●	0.188	0.125	0.094	0.075
SS15	MC	SMA	NEW SMD 162-5253●	0.195	0.131	0.098	0.079
SS19	MC	SMA	NEW SMD 162-5254●	0.250	0.169	0.128	0.102
SS22	MC	SMB	NEW SMD 162-5255●	0.390	0.260	0.192	0.153
SS23	MC	SMB	NEW SMD 162-5256●	0.390	0.260	0.192	0.153
SS25	MC	SMB	NEW SMD 162-5257●	0.400	0.270	0.199	0.159
SS29	MC	SMB	NEW SMD 162-5258●	0.510	0.340	0.250	0.200

211157

Mftrs. List No.		Order Code	Price Per Reel 1+	3+
10MQ100NTRPBF	REEL 7500	NEW SMD 156-2281●	1,075.46	– –
10MQ060NTRPBF	REEL 7500	NEW SMD 156-2282●	1,075.46	– –
15MQ040NTRPBF	REEL 7500	NEW SMD 156-2283●	1,377.34	– –
SL12-E3/61T	REEL 1800	NEW SMD 156-2284●	143.96	– –
SS14-E3/61T	REEL 1800	NEW SMD 156-2285●	112.27	101.04
SS24	REEL 3000	NEW SMD 156-2288●	281.66	253.49
SS26	REEL 3000	NEW SMD 156-2291●	323.62	291.27
MBRA130LT3G	REEL 5000	NEW SMD 156-2286●	324.28	291.86
MBRA140T3G	REEL 5000	NEW SMD 156-2287●	324.28	291.86
MBRS130LT3G	REEL 2500	NEW SMD 156-2296●	167.24	150.51
MBRS140T3G	REEL 2500	NEW SMD 156-2297●	170.16	153.15
MBRS360T3G	REEL 2500	NEW SMD 156-2301●	233.28	– –
MBRS340T3G	REEL 2500	NEW SMD 156-2302●	230.54	– –
10BQ040TRPBF	REEL 3000	NEW SMD 161-3961●	329.25	– –
10BQ100TRPBF	REEL 3000	NEW SMD 161-3962●	1,076.92	– –
30BQ040TRPBF	REEL 3000	NEW SMD 161-3963●	674.56	– –
30BQ060TRPBF	REEL 3000	NEW SMD 161-3964●	827.14	– –
30BQ100TRPBF	REEL 3000	NEW SMD 161-3965●	686.60	– –
10BQ060TRPBF	REEL 3000	NEW SMD 161-4348●	367.03	– –
20BQ030TRPBF	REEL 3000	NEW SMD 161-4349●	260.66	– –

Minature, Surface Mount, Schottky

TOSHIBA VISHAY SMD TAIWAN SEMICONDUCTOR multicomp



- Low Forward Drop
- Easy Pick and Place
- High surge current capability

Taiwan Semi range also has the following features:

SMA: H=2.3, W=5.33, D=1.58
SMB: H=2.61, W=3.73, D=2.08
SMC: H=2.62, W=7.11, D=3.27
3-2A1A: H=0.98, W=3.5, D=1.6

- Laboratory classification to 94V-0 (for Taiwan Semis Diodes)
- High Temperature Soldering (260 °C for 10 sec)
- Case molded plastic
- Polarity indicated by Cathode band
- Supplied on 16mm tape

CR* Series by Toshiba has low forward voltage and super flat compact design, ideal in ultra miniture applications.

$I_{(AV)}$ A	V_{RRM} V	I_{FSM} A	V_F V	Case style	Mftr.	Mftrs. List No.
1	100	30	0.85	SMA	TS	SK110B
1	90	50	0.86	SMA	VISH	SS1H9
1	60	30	0.75	SMB	TS	SK16B
1	40	30	0.5	SMB	TS	SK14B
1	40	20	0.51	3-2A1A	TOSH	CRS04
1	40	50	0.48	SMP	VISH	SS1P4L
1	30	20	0.4	3-2A1A	TOSH	CRS02
1	30	30	0.45	3-2A1A	TOSH	CRS05
1	30	50	0.45	SMP	VISH	SS1P3L
1	20	20	0.36	3-2A1A	TOSH	CRS06
1.5	30	30	0.36	3-2A1A	TOSH	CRS08
1.5	30	30	0.46	3-2A1A	TOSH	CRS09
2	100	50	0.85	SMB	MC	SS210
2	90	75	0.79	SMB	VISH	SS2H9
2	60	50	0.7	SMB	MC	SS26
2	60	50	0.7	SMA	TS	SK26A
2	40	50	0.5	SMA	TS	SK24A
2	40	50	0.5	SMB	MC	SS24
2	40	50	0.55	SMP	VISH	SS2P4
2	40	60	0.49	SMA	VISH	SSA24
2	30	50	0.55	SMP	VISH	SS2P3
2	30	50	0.5	SMP	VISH	SS2P3L
2	30	60	0.45	SMA	VISH	SSA23L
2	20	50	0.55	SMP	VISH	SS2P2
2	20	50	0.55	SMP	VISH	SS2P2
2	20	50	0.45	SMP	VISH	SS2P2L

RL Re-reeling available

Farnell

$I_{(AV)}$ A	V_{RRM} V	I_{FSM} A	V_F V	Case style	Mftr.	Mftrs. List No.
3	100	150	0.85	SMB	TS	SK310B
3	100	150	0.85	SMA	TS	SK310A
3	100	100	0.85	SMC	MC	SS310
3	90	100	0.8	SMP	VISH	SS3H9
3	60	100	0.75	SMB	TS	SK36B
3	60	70	0.75	SMA	TS	SK36A
3	40	100	0.5	SMB	TS	SK34B
3	40	70	0.55	SMA	TS	SK34A
3	30	50	0.58	SMP	VISH	SS3P3
4	40	100	0.49	SMB	VISH	SSB44
4	30	100	0.45	SMB	VISH	SSB43L
5	60	100	0.75	SMC	TS	SK56C
5	40	100	0.55	SMC	TS	SK54C
5	40	175	0.49	SMC	VISH	SSC54
5	30	175	0.45	SMP	VISH	SSC53L
3	30	75	0.45	SMA	VISH	SSA33L

450685

Mftrs. List No.	Hersteller	Order Code	Price Each 5+	100+	250+	1K+
SS24	MC	SMD 129-9284●	0.270	0.156	0.118	0.101
SS26	MC	SMD 129-9285●	0.290	0.167	0.128	0.107
SS210	MC	SMD 129-9286●	0.370	0.210	0.164	0.139
SK14B	TS	SMD 129-9280●	0.119	0.071	0.053	0.046
SK34B	TS	SMD 129-9287●	0.390	0.240	0.173	0.147
SK36B	TS	SMD 129-9288●	0.440	0.260	0.191	0.161
SK310B	TS	SMD 129-9289●	0.470	0.280	0.200	0.176
SK24A	TS	SMD 129-9275●	0.270	0.162	0.122	0.102
SK26A	TS	SMD 129-9276●	0.310	0.185	0.140	0.117
SK34A	TS	SMD 129-9277●	0.350	0.200	0.157	0.132
SK36A	TS	SMD 129-9278●	0.390	0.240	0.173	0.147
SK310A	TS	SMD 129-9279●	0.440	0.260	0.191	0.161
SK16B	TS	SMD 129-9282●	0.129	0.077	0.057	0.049
SK110B	TS	SMD 129-9283●	0.140	0.084	0.062	0.053
SS310	MC	SMD 129-9290●	0.450	0.280	0.200	0.168
SK54C	TS	SMD 129-9291●	0.620	0.380	0.290	0.240
SK56C	TS	SMD 129-9292●	0.670	0.420	0.310	0.260
CRS02	TOSH	SMD 130-0792●	0.260	0.210	0.124	0.110
CRS04	TOSH	SMD 130-0793●	0.260	0.210	0.154	0.138
CRS05	TOSH	SMD 130-0794●	0.187	0.152	0.096	0.085
CRS06	TOSH	SMD 130-0795●	0.220	0.180	0.112	0.100
CRS08	TOSH	SMD 130-0796●	0.220	0.180	0.124	0.110
CRS09	TOSH	SMD 130-0797●	0.220	0.180	0.121	0.108
SS1H9	VISH	SMD 133-6541●	0.340	0.290	0.250	0.200
SS1P3L	VISH	SMD 133-6532●	0.153	0.132	0.109	0.087
SS1P4L	VISH	SMD 133-6535●	0.153	0.132	0.109	0.087
SS2H9	VISH	SMD 133-6549●	0.380	0.320	0.280	0.240
SS3H9	VISH	SMD 133-6555●	0.550	0.460	0.390	0.350
SS2P2	VISH	SMD 133-6542●	0.220	0.182	0.151	0.130
SS2P2L	VISH	SMD 133-6543●	0.220	0.182	0.151	0.130
SS2P3	VISH	SMD 133-6544●	0.300	0.250	0.200	0.172
SS2P3L	VISH	SMD 133-6545●	0.220	0.182	0.151	0.130
SS2P4	VISH	SMD 133-6547●	0.300	0.250	0.200	0.172
SS3P3	VISH	SMD 133-6550●	0.370	0.310	0.270	0.220
SSA23L	VISH	SMD 133-6546●	0.310	0.260	0.200	0.177
SSA24	VISH	SMD 133-6548●	0.310	0.260	0.200	0.177
SSA33L	VISH	SMD 133-6552●	0.410	0.350	0.300	0.260
SSB43L	VISH	SMD 133-6556●	0.530	0.440	0.380	0.330
SSB44	VISH	SMD 133-6557●	0.530	0.440	0.380	0.330
SSC53L	VISH	SMD 133-6558●	0.590	0.480	0.420	0.370
SSC54	VISH	SMD 133-6559●	0.590	0.480	0.420	0.370

Schottky Diodes 5 A to 160 A

IXYS



TO-220AB



TO-247AD



SOT-227B



TO-220AC

	$I_{F\ (av)}$ max. A	V_{RRM} max. V	V_F @ $I_{F\ (AV)}$ max. V	Package	Mftrs. List No.
Single diode					
	10	45	0.53	TO-220FPAB	DSB10I45PM
	10	100	0.72	TO-220FP	DSA10I100PM
	15	45	0.55	TO-262	DSB15IM45IB
	15	45	0.63	TO-220AC	DSA15I45PA
	15	45	0.63	TO-262	DSA15IM45IB
	16	100	0.64	TO-220AC	DSS 16-01A
	17	600	3.32	ISOPLUS247	DSS17-06CR
	20	15	0.39	TO-220	DSB20I15PA
	25	25	0.44	TO-220AC	DSS 25-0025B
	25	45	0.59	TO-220AC	DSS 25-0045A
	60	45	0.57	TO-247AD	DSS 60-0045B
Dual diode					
	5	180	0.62	TO-220AB	DSSK 10-018A
	10	150	0.62	TO-220AB	DSSK 20-015A
	10	60	0.68	TO-220FPAB	DSA20C60PN
	10	60	0.63	TO-220FPAB	DSB20C60PN
	10	45	0.62	TO-220	DSA20C45PB
	10	100	0.72	TO-220	DSA20C100PB

	$I_{F\ (av)}$ max. A	V_{RRM} max. V	V_F @ $I_{F\ (AV)}$ max. V	Package	Mftrs. List No.
Dual diode					
	10	100	0.72	TO-220FP	DSA20C100PN
	10	150	0.74	TO-220AB	DSA20C150PB
	10	150	0.74	TO-220FPAB	DSA20C150PN
	15	30	0.44	TO-220	DSB30C30PB
	15	45	0.62	TO-247	DSA30C45HB
	15	45	0.63	TO-220	DSA30C45PB
	15	100	0.63	TO-220AB	DSSK 28-01A
	15	180	0.62	TO-247AD	DSSK 30-018A
	15	45	0.54	TO-247AD	DSB30C45HB
	15	45	0.55	TO-220AB	DSB30C45PB
	15	100	0.73	TO-220AB	DSA30C100PB
	15	100	0.73	TO-220FPAB	DSA30C100PN
	15	100	0.72	TO-3P	DSA30C100QB
	15	60	0.68	TO-220AB	DSA30C60PB
	15	60	0.69	TO-220AB	DSB30C60PB
	15	150	0.74	TO-247	DSA30C150HB
	15	150	0.75	TO-220AB	DSA30C150PB
	20	25	0.4	TO-220AC	DSSK 38-0025B
	20	80	0.57	TO-247AD	DSSK 40-008B
	20	15	0.39	TO-220	DSB40C15PB
	25	150	0.68	TO-247AD	DSSK 50-015A
	25	150	0.74	TO-247	DSA50C150HB
	25	100	0.72	TO-247	DSA50C100HB
	25	100	0.72	TO-3P	DSA50C100QB
	30	45	0.6	TO-247AD	DSSK 60-0045B
	30	150	0.69	TO-247AD	DSSK 60-015A
	30	45	0.66	TO-247	DSA60C45HB
	30	60	0.67	TO-247AD	DSB60C60HB
	30	100	0.78	TO-220AB	DSA60C100PB
	30	30	0.47	TO-247AD	DSB60C30HB
	30	45	0.67	TO-220AB	DSA60C45PB
	30	45	0.60	TO-220AB	DSB60C45PB
	30	45	0.58	TO-247AD	DSB60C45HB
	30	60	0.68	TO-220AB	DSA60C60PB
	30	60	0.69	TO-220AB	DSB60C60PB
	30	60	0.65	TO-247	DSA60C60HB
	35	80	0.66	TO-247AD	DSSK 70-008A
	35	100	0.74	TO-247	DSA70C100HB
	35	150	0.74	TO-247	DSA70C150HB
	40	8	0.23	TO-247AD	DSSK 80-0008D
	40	45	0.45	TO-247AD	DSSK 80-0045B
	40	60	0.51	TO-247AD	DSSK 80-006B
	40	100	0.7	SOT-227B	DSS 2 X 41-01A
	40	45	0.67	TO-247	DSA80C45HB
	40	45	0.58	TO-247AD	DSB80C45HB
	40	100	0.73	TO-220AB	DSA80C100PB
	45	200	0.86	TO-247AD	DSA90C200HB
	60	45	0.66	SOT-227B	DSS 2 X 61-0045A
	60	100	0.73	SOT-227B	DSS 2 X 61-01A
	60	150	0.80	TO-3P	DSA120C150QB
	80	100	0.8	SOT-227B	DSS 2 X 160-01A
	100	150	0.78	SOT-227B	DSS 2 X 101-015A
	120	45	0.59	SOT-227B	DSS 2 X 121-0045B

419536

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
Single diode					
DSA15IM45IB	NEW 157-2472●	0.72	0.61	0.54	0.51
DSB10I45PM	NEW 157-2473●	0.57	0.48	0.43	0.40
DSB15IM45IB	NEW 157-2474●	0.72	0.61	0.54	0.51
DSA10I100PM	NEW 157-2488●	0.59	0.52	0.44	0.41
DSB20I15PA	NEW 157-2509●	0.64	0.57	0.48	0.46
DSA15I45PA	NEW 157-2511●	0.59	0.52	0.44	0.41
		1+	25+	100+	
DSS 16-01A	108-0080●	1.07	1.01	0.90	
DSS17-06CR	130-0073●	3.61	3.52	3.43	
DSS 25-0025B	108-0065●	0.87	0.81	0.70	
DSS 25-0045A	108-0068●	1.20	1.12	0.98	
DSS 60-0045B	108-0069●	2.41	2.25	1.96	
		1+	25+	100+	250+
Double diode					
DSB40C15PB	NEW 157-2470●	1.04	0.89	0.77	0.74
DSB30C30PB	NEW 157-2471●	0.95	0.82	0.70	0.67
DSA20C45PB	NEW 157-2475●	0.77	0.66	0.57	0.54
DSA30C45HB	NEW 157-2476●	1.56	1.36	1.16	1.11
DSA30C45PB	NEW 157-2478●	0.91	0.80	0.68	0.64
DSA60C45HB	NEW 157-2479●	1.99	1.72	1.47	1.40
DSA80C45HB	NEW 157-2480●	2.29	1.98	1.69	1.61
DSB30C45HB	NEW 157-2481●	1.56	1.36	1.16	1.11
DSB30C45PB	NEW 157-2482●	0.91	0.80	0.68	0.64
DSB80C45HB	NEW 157-2483●	2.29	1.98	1.69	1.61
DSA20C60PN	NEW 157-2484●	0.80	0.69	0.59	0.56
DSB20C60PN	NEW 157-2485●	0.80	0.69	0.59	0.56
DSB30C60PB	NEW 157-2486●	0.91	0.80	0.68	0.64
DSB60C60HB	NEW 157-2487●	1.99	1.72	1.47	1.40
DSA20C100PB	NEW 157-2492●	0.80	0.69	0.59	0.56
DSA20C100PN	NEW 157-2493●	0.84	0.73	0.61	0.58
DSA30C100PB	NEW 157-2494●	0.95	0.82	0.70	0.67
DSA30C100PN	NEW 157-2495●	0.98	0.85	0.73	0.69
DSA30C100QB	NEW 157-2496●	1.46	1.25	1.07	1.02
DSA50C100HB	NEW 157-2497●	2.11	1.82	1.55	1.47
DSA50C100QB	NEW 157-2498●	1.86	1.62	1.39	1.32
DSA60C100PB	NEW 157-2499●	1.40	1.20	1.03	0.97
DSA70C100HB	NEW 157-2500●	2.43	2.09	1.79	1.71
DSA80C100PB	NEW 157-2501●	1.72	1.48	1.26	1.20
DSA120C150QB	NEW 157-2503●	3.86	3.34	2.85	2.70
DSA20C150PB	NEW 157-2504●	0.84	0.73	0.61	0.58
DSA20C150PN	NEW 157-2505●	0.86	0.75	0.63	0.60
DSA30C150HB	NEW 157-2506●	1.75	1.51	1.30	1.22
DSA90C200HB	NEW 157-2508●	3.45	2.98	2.55	2.42
DSB60C30HB	NEW 157-2510●	2.07	1.79	1.53	1.45

RL Re-reeling available

Farnell

RoHS ● Compliant ▲ Non-compliant

Power Diodes - Schottky - continued

Schottky Diodes 5 A to 160 A - continued

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
Double diode					
DSA60C45PB	NEW 157-2513●	1.31	1.14	0.96	0.91
DSB60C45PB	NEW 157-2514●	1.31	1.14	0.96	0.91
DSB60C45HB	NEW 157-2515●	1.99	1.72	1.47	1.40
DSA30C60PB	NEW 157-2516●	0.89	0.77	0.66	0.63
DSA60C60PB	NEW 157-2517●	1.31	1.14	0.96	0.91
DSB60C60PB	NEW 157-2518●	1.31	1.14	0.96	0.91
DSA60C60HB	NEW 157-2521●	1.99	1.72	1.47	1.40
DSA30C150PB	NEW 157-2522●	1.02	0.87	0.75	0.72
DSA50C150HB	NEW 157-2523●	2.17	1.86	1.61	1.53
DSA70C150HB	NEW 157-2524●	2.50	2.15	1.84	1.75
		1+	25+	100+	
DSSK 10-018A	108-0092●	0.83	0.78	0.61	
DSSK 20-015A	108-0086●	1.74	1.62	1.41	
DSSK 28-01A	108-0081●	1.63	1.53	1.44	
DSSK 30-018A	108-0093●	2.52	2.32	1.78	
DSSK 38-0025B	108-0066●	1.11	1.04	0.90	
DSSK 40-008B	108-0078●	2.46	2.01	1.79	
DSSK 50-015A	108-0087●	3.12	2.77	2.20	
DSSK 60-015A	108-0089●	3.49	2.91	2.50	
DSSK 60-0045B	108-0071●	2.54	2.35	2.05	
DSSK 70-008A	108-0079●	3.67	3.14	2.61	
DSSK 80-006B	108-0077●	5.12	4.26	3.67	
DSSK 80-0008D	108-0063●	3.62	2.80	2.56	
DSSK 80-0045B	108-0072●	3.77	3.01	2.83	
DSS 2 X 41-01A	108-0083●	14.19	13.20	11.70	
DSS 2 X 61-0045A	108-0073●	12.18	11.71	11.61	
DSS 2 X 61-01A	108-0084●	16.19	15.05	12.30	
DSS 2 X 101-015A	108-0091●	14.20	11.48	9.72	
DSS 2 X 121-0045B	108-0074●	14.20	13.36	12.17	
DSS 2 X 160-01A	108-0085●	17.16	14.54	11.91	

2A to 60A



TO-247



TO-220AC



D-PAK (TO-252)



TO-220

$I_{f(av)}$ A	V_{rrm} V	V_f V	@	I_f A	I_{fsm} A	Package	Mftrs. List No.
Single Diode Configuration							
3	20	0.49		—	490	D-PAK	MBRD320PBF
3	40	0.49		—	490	D-PAK	MBRD340PBF
3.5	30	0.35		3	535	D-PAK	30WQ03FNPBF
3.5	30	0.35		7	535	D-PAK	6CWQ03FNPBF
3.5	30	0.35		3	535	D-PAK	30WQ03FNTRPBF
3.5	60	0.53		3	490	D-PAK	30WQ06FNPBF
3.5	100	0.63		3	440	D-PAK	30WQ10FNPBF
3.5	40	0.49		3	500	D-PAK	30WQ04FNTRPBF
5.5	30	0.35		5	320	D-PAK	50WQ03FNPBF
5.5	30	0.35		5	320	D-PAK	50WQ03FNTRPBF
5.5	40	0.44		5	340	D-PAK	50WQ04FNTRPBF
5.5	60	0.54		5	320	D-PAK	50WQ06FNTRPBF
5.5	100	0.63		5	330	D-PAK	50WQ10FNTRPBF
6	45	0.53		6	690	TO-220AC	6TQ045PBF
6	50	0.65		3	490	D-PAK	MBRD650CTPBF
6	60	0.65		3	490	D-PAK	MBRD660CTPBF
7	30	0.35		3	535	D-PAK	6CWQ03FNTRPBF
7	40	0.49		3	500	D-PAK	6CWQ04FNTRPBF
7	60	0.61		3	490	D-PAK	6CWQ06FNTRPBF
7	100	0.63		3	440	D-PAK	6CWQ10FNPBF
7.5	35	0.57		7.5	690	TO-220AC	MBR735PBF
7.5	45	0.57		7.5	690	TO-220AC	MBR745PBF
8	100	0.58		8	850	D2-PAK	8TQ100SPBF
10	35	0.57		10	1060	TO-220AC	MBR1035PBF
10	45	0.53		10	400	D-PAK	10WQ045FNPBF
10	45	0.63		10	390	D-PAK	STPS1045BPBF
12	30	0.37		6	320	D-PAK	12CWQ03FNTRPBF
12	40	0.48		6	550	D-PAK	12CWQ04FNTRPBF
12	60	0.57		6	320	D-PAK	12CWQ06FNTRPBF
12	100	0.65		6	330	D-PAK	12CWQ10FNTRPBF
15	45	0.56		15	990	TO-220AC	12TQ045PBF
15	60	0.7		15	810	TO-220AC	15TQ060PBF
15	30	0.57		30	1450	TO-220AB	30L30CTPBF
15	45	0.82		30	1060	TO-220AB	MBR2545CTPBF
15	45	0.72		20	1020	TO-247AC	MBR3045WTPBF
16	45	0.63		16	1800	TO-220AC	MBR1645PBF

$I_{f(av)}$ A	V_{rrm} V	V_f V	@	I_f A	I_{fsm} A	Package	Mftrs. List No.
Single Diode Configuration							
18	45	0.53		18	1800	D2-PAK	18TQ045S.PBF
19	15	0.32		19	700	D2-PAK	19TQ015SPBF
20	15	0.25		19	700	TO-220AC	20L15TPBF
20	45	0.57		10	1060	D2-PAK	20CTQ045SPBF
20	15	0.41		19	700	D2-PAK	20L15TSPBF
20	15	0.41		15	700	TO-220AC	STPS20L15DPBF
20	45	0.51		20	1800	TO-220AC	20TQ045PBF
20	60	0.49		20	3200	TO-247AC	MBR4060WTPBF
20	100	0.80		10	850	TO-220	MBR20100CTKPBF
30	35	0.50		15	990	D2-PAK	25CTQ035SPBF
40	45	0.56		20	1020	TO-247AC	MBR4045WTPBF
Dual-Diode							
6	30	0.37		6	320	D-PAK	12CWQ03FNPBF
20	45	0.42		20	1240	TO-247AC	40L45CWPBF
20	15	0.25		19	700	TO-220AB	40L15CTPBF
20	15	0.25		19	700	TO-247AC	40L15CWPBF
30	45	0.55		30	2900	TO-247AC	MBR6045WTPBF
6	45	0.64		6	690	TO-220AB	12CTQ045PBF
6	60	0.37		6	320	D-PAK	12CWQ06FNPBF
6	100	0.37		6	320	D-PAK	12CWQ10FNPBF
7.5	45	0.51		7.5	810	D2-PAK	15CTQ045S.PBF
10	150	1		20	1030	TO-220AB	20CTQ150PBF
10	45	0.57		10	1800	TO-220AB	20CTQ045PBF
15	30	0.4		30	900	TO-220AB	32CTQ030PBF
15	45	0.56		15	1000	TO-220AB	30CTQ045PBF
15	60	0.56		20	1000	TO-220AB	30CTQ060PBF
15	100	0.76		30	1060	TO-220AB	30CTQ100PBF
15	150	0.5		15	1020	TO-247AC	30CPQ150PBF
20	20	0.34		20	1000	D2-PAK	47CTQ020SPBF
20	30	0.38		20	1100	TO-220AB	42CTQ030PBF
20	45	0.48		20	1240	TO-220AB	40CTQ045PBF
20	60	0.58		20	1000	TO-220AB	48CTQ060PBF
20	60	0.58		20	1000	D2-PAK	48CTQ060SPBF
20	100	0.67		20	850	TO-220AB	43CTQ100PBF
20	150	1.16		40	1500	TO-220AB	40CTQ150PBF
30	30	0.56		60	1500	TO-220AB	62CTQ030PBF
30	45	0.68		60	1500	TO-220AB	60CTQ045PBF
30	100	1		60	1500	TO-220AB	63CTQ100PBF
30	150	0.98		60	710	TO-220AB	60CTQ150PBF
30	100	0.67		15	920	TO-247AC	30CPQ100GPBF
40	100	0.61		20	2950	TO-247AC	40CPQ100GPBF
Dual diode							
6	45	0.64		6	690	TO-220AB	12CTQ045PBF
7.5	45	0.57		7.5	690	TO-220AB	MBR1545CTPBF
8	80	0.58		16	850	TO-220AB	16CTQ080PBF
10	45	0.57		10	1800	TO-220AB	20CTQ045PBF
15	45	0.56		15	1000	TO-220AB	30CTQ045PBF
15	30	0.4		30	900	TO-220AB	32CTQ030PBF
20	15	0.25		19	700	TO-220AC	20L15TPBF
20	45	0.51		20	1800	TO-220AC	20TQ045PBF

Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+	250+
6CWQ03FNPBF	D-PAK	SMC 910-1071●	0.93	0.57	0.43	0.34
6TQ045PBF	TO-220AC	910-1322●	2.78	1.52	1.13	0.94
8TQ100SPBF	D2-PAK	SMC 910-1349●	2.31	1.70	1.54	1.48
12CTQ045PBF	TO-220AB	864-7810●	1.53	1.07	0.79	0.66
12CWQ10FNPBF	D-PAK	SMC 910-1152●	0.96	0.58	0.44	0.35
12CWQ03FNPBF	D-PAK	SMC 910-1160●	0.93	0.57	0.43	0.34
12CWQ06FNPBF	D-PAK	SMC 910-1187●	1.04	0.62	0.47	0.37
12TQ045PBF	TO-220AC	865-6924●	2.69	1.47	1.09	0.91
15CTQ045S.PBF	D2-PAK	SMC 910-1195●	2.06	1.27	0.93	0.75
15TQ060PBF	TO-220AC	865-7009●	2.30	1.26	0.94	0.78
18TQ045S.PBF	D2-PAK	SMC 910-0652●	2.36	1.47	1.09	0.87
19TQ015SPBF	D2-PAK	SMC 910-0679●	2.98	1.89	1.46	1.12
20CTQ045PBF	TO-220AB	864-7844●	2.03	1.11	0.83	0.70
20CTQ150PBF	TO-220AB	865-7033●	1.62	0.89	0.66	0.63
20TQ045PBF	TO-220AC	864-7860●	2.35	1.28	0.95	0.79
20L15TPBF	TO-220AC	864-7852●	1.63	0.89	0.66	0.55
20L15TSPBF	D2-PAK	SMC 910-0709●	1.01	0.75	0.55	0.44
30CPQ150PBF	TO-247AC	910-0750●	3.82	2.50	2.35	2.28
30CTQ045PBF	TO-220AB	864-7895●	2.71	1.49	1.11	0.92
30CTQ060PBF	TO-220AB	910-0822●	2.48	1.36	1.06	1.03
30CTQ100PBF	TO-220AB	865-7122●	1.97	1.08	0.80	0.66
30WQ03FNPBF	D-PAK	SMC 910-1225●	0.84	0.51	0.38	0.30
32CTQ030PBF	TO-220AB	864-7909●	2.54	1.39	1.03	0.86
40CTQ045PBF	TO-220AB	910-0989●	2.67	1.47	1.09	0.90
40CTQ150PBF	TO-220AB	865-7157●	2.21	1.21	0.90	0.75
40L15CTPBF	TO-220AB	910-0911●	2.81	1.59	1.22	1.07
40L15CWPBF	TO-247AC	910-0920●	3.19	1.81	1.38	1.21
40L45CWPBF	TO-247AC	910-0997●	3.00	1.64	1.22	1.01
42CTQ030PBF	TO-220AB	910-0954●	3.01	1.71	1.31	1.14
43CTQ100PBF	TO-220AB	910-0890●	1.80	1.02	0.79	0.77
47CTQ020SPBF	D2-PAK	SMC 910-0946●	3.08	1.83	1.42	0.96
48CTQ060PBF	TO-220AB	864-7925●	2.52	1.38	1.03	0.91
48CTQ060SPBF	D2-PAK	SMC 910-1039●	3.41	2.06	1.57	1.07
50WQ03FNPBF	D-PAK	SMC 910-1292●	0.91	0.56	0.42	0.33
60CTQ045PBF	TO-220AB	865-7165●	4.66	2.64	2.02	1.77
60CTQ150PBF	TO-220AB	865-7173●	3.74	2.13	1.63	1.42
62CTQ030PBF	TO-220AB	865-7190●	2.07	1.22	0.99	0.97
63CTQ100PBF	TO-220AB	865-7203●	4.04	2.39	1.83	1.69
MBR735PBF	TO-220AC	866-0387●	0.68	0.38	0.31	0.21
MBR745PBF	TO-220AC	865-1531●	0.96	0.51	0.36	0.29
MBR1035PBF	TO-220AC	865-1442●	1.39	0.74	0.52	0.43
MBR1545CTPBF	TO-220AB	865-1469●	0.84	0.74	0.58	0.47
MBR1645PBF	TO-220AC	865-1485●	1.57	0.85	0.64	0.53
MBR2545CTPBF	TO-220AB	865-1507●	1.30	0.75	0.55	0.47

RL Re-reeling available

Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+	250+
MBR3045WTPBF	TO-247AC	910-0806●	1.90	1.04	0.78	0.64
MBR4045WTPBF	TO-247AC	865-1523●	1.93	1.06	0.79	0.65
MBR4060WTPBF	TO-247AC	910-1047●	2.70	1.63	1.22	1.01
MBR6045WTPBF	TO-247AC	910-1080●	2.61	1.42	1.06	0.88
STPS20L15DPBF	TO-220AC	101-3333●	1.51	0.80	0.57	0.46
			1+	25+	100+	250+
20CTQ045SPBF	D2-PAK	SMD 129-8436●	1.48	1.28	1.02	0.99
25CTQ035SPBF	D2-PAK	SMD 129-8437●	2.97	1.93	1.44	1.13
MBR20100CTKPBF	TO-220	SMD 129-8439●	0.98	0.72	0.56	0.44
10WQ045FNPBF	D-PAK	SMD 129-8440●	2.48	1.83	1.40	1.10
12CWQ03FNTRPBF	D-PAK	SMD 129-8441● RL	0.93	0.68	0.52	0.42
12CWQ04FNTRPBF	D-PAK	SMD 129-8442● RL	0.69	0.51	0.39	0.34
12CWQ06FNTRPBF	D-PAK	SMD 129-8443● RL	0.92	0.66	0.51	0.42
12CWQ10FNTRPBF	D-PAK	SMD 129-8444● RL	0.93	0.68	0.52	0.42
30WQ03FNTRPBF	D-PAK	SMD 129-8445● RL	0.70	0.51	0.39	0.31
30WQ06FNPBF	D-PAK	SMD 129-8447●	1.07	0.79	0.62	0.48
30WQ10FNPBF	D-PAK	SMD 129-8448●	0.76	0.64	0.50	0.41
50WQ03FNTRPBF	D-PAK	SMD 129-8449● RL	0.73	0.55	0.42	0.33
50WQ04FNTRPBF	D-PAK	SMD 129-8450● RL	0.85	0.62	0.47	0.37
50WQ06FNTRPBF	D-PAK	SMD 129-8451● RL	1.08	0.80	0.61	0.48
50WQ10FNTRPBF	D-PAK	SMD 129-8452● RL	1.14	0.85	0.64	0.51
6CWQ03FNTRPBF	D-PAK	SMD 129-8453● RL	0.76	0.56	0.43	0.34
6CWQ04FNTRPBF	D-PAK	SMD 129-8454● RL	0.90	0.65	0.50	0.41
6CWQ06FNTRPBF	D-PAK	SMD 129-8455● RL	0.81	0.59	0.47	0.46
6CWQ10FNPBF	D-PAK	SMD 129-8456●	1.38	1.01	0.78	0.62
MBRD320PBF	D-PAK	SMD 129-8457●	0.58	0.42	0.33	0.26
30WQ04FNTRPBF	D-PAK	SMD 129-8464● RL	0.66	0.48	0.37	0.29
30CPQ100GPBF	TO-247AC	129-8465●	1.54	1.13	0.86	0.68
MBRD340PBF	D-PAK	SMD 129-8461●	0.64	0.47	0.36	0.28
MBRD650CTPBF	D-PAK	SMD 129-8462●	0.70	0.52	0.41	0.31
MBRD660CTPBF	D-PAK	SMD 129-8463●	0.80	0.58	0.46	0.34
MBR20100CTKPBF	TO-220	SMD 129-8439●	0.98	0.72	0.56	0.44
40CPQ100GPBF	TO-247AC	129-8466●	2.26	1.66	1.29	1.02
STPS1045BPBF	D-PAK	SMD 129-8479●	1.08	0.80	0.60	0.48

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Mftrs. List No.		Order Code	Price Per Tube 1+	4+	10+
20L15TSPBF	TUBE 50	NEW SMD 156-3997●	26.16	21.07	20.25
12CWQ06FNPBF	TUBE 75	NEW SMD 156-4007●	31.70	25.43	25.20
50WQ03FNPBF	TUBE 75	NEW SMD 156-4008●	27.92	23.96	23.34

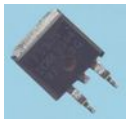
10 to 250V, Power Schottky

ON Semiconductor


SMA


I²PAK (TO-262)


TO-247


D²PAK


TO-220


SOT-93


TO-220-2


SOD-323
SOD-123

V_{RRM} max. V	I_F av max. A	Ifs max. A	V_F max. V	Package	Mftrs. List No.
10	2	150	0.5	SMA	MBRA210ET3G
15	25	150	0.45	TO-220AC	MBR2515LG
15	40	150	0.54	TO-220	MBR4015CTLG
15	25	150	0.45	D2-PAK	MBRB2515LG
20	1	5	0.44	SOD-323	NSR1020MW2T1G
20	1	25	0.45	Case 59	1N5817RLG
20	1	40	0.53	SOD-123FL	MBR120ESFT1G
20	1	50	0.45	SOD-123FL	MBR120LSFT1G
20	1	45	0.34	SOD-123FL	MBR120VLSFT1G
20	1	40	0.53	SMA	MBRA120ET3G
30	10	—	0.6	TO-92	MBD301G
30	200	1	1.3	SOD-123	MMSD301T1G
30	1	25	0.55	Case 59	1N5818RLG
30	1	5.5	0.45	SOD-123	MBR130T1G
30	3	80	0.5	DO-201AD	1N5821RLG
30	20	150	0.58	TO-220	MBR2030CTLG
30	30	200	0.67	D2-PAK	MBRB3030CTG
30	40	300	0.55	D2-PAK	MBRB4030G
35	10	150	0.84	TO-220AC	MBR1035G
40	1	30	0.55	SOD-123FL	MBR140SFT1G
40	3	100	0.45	SMA	MBRA340T3G
40	3	75	0.6	D-PAK	MBRD340G
45	10	150	0.84	D2-PAK	MBRB1045G
45	15	150	0.84	D2-PAK	MBRB1545CTG
45	8	140	0.55	DO-201AD	80SQ045NG
45	15	150	0.84	TO-220	MBR1545CTG
45	30	150	0.76	TO-220	MBR3045STG
45	30	150	0.82	D2-PAK	MBRB2545CTG
45	40	400	0.8	TO-247	MBR4045WTG
45	60	500	0.75	SOT-93	MBR6045PTG
50	1	25	0.75	DO-41	MBR150RLG
50	3	80	0.74	DO-201AD	MBR350RLG
50	6	75	0.9	D-PAK	MBRD650CTG
60	1	30	0.51	SMA	MBRA160T3G
60	3	80	0.74	DO-201AD	MBR360RLG
60	3	75	0.6	D-PAK	MBRD360G
60	6	75	0.9	D-PAK	MBRD660CTG
60	20	150	0.95	D2-PAK	MBRB2060CTG
60	30	260	0.78	TO-220	MBR30H60CTG
70	0.5	—	0.5	SOD-123	MMSD701T1G
80	10	150	0.8	TO-220AC	MBR1080G
80	20	150	0.95	TO-220	MBR2080CTG
90	10	150	0.8	TO-220AC	MBR1090G
100	3	150	0.79	DO-201AD	MBR3100RLG
100	10	180	0.85	TO-220	MBR10H100CTG
100	16	150	0.84	TO-220	MBR16100CTG
100	20	250	0.88	TO-220	MBR20H100CTG
100	30	250	0.93	TO-220	MBR30H100CTG
100	40	350	0.9	D2-PAK	MBRB41H100CTT4G
100	40	200	0.9	TO-247	MBR40H100WTG
100	40	350	0.9	TO-220	MBR41H100CTG
100	60	350	0.98	TO-220	MBR60H100CTG
200	20	150	1	D2-PAK	MBRB20200CTG
250	40	150	0.97	TO-220	MBR40250TG

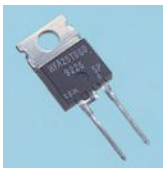
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Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+
MBR30H60CTG	TO-220	143-1025●	1.540	1.130	0.870
MBRB41H100CTT4G	D2-PAK	SMD 143-1026●	2.110	1.530	1.180
NSR1020MW2T1G	SOD-323	SMD 143-1027●	0.119	0.085	0.066
1N5817RLG	Case 59	143-1028●	0.290	0.170	0.118
1N5818RLG	Case 59	143-1029●	0.290	0.170	0.118
1N5821RLG	DO-201AD	143-1032●	0.330	0.210	0.161
80SQ045NG	DO-201AD	143-1033●	0.640	0.460	0.350
MBD301G	TO-92	143-1034●	0.210	0.147	0.120
MBR1035G	TO-220AC	143-1037●	0.910	0.620	0.440
MBR1080G	TO-220AC	143-1038●	1.120	0.810	0.630
MBR1090G	TO-220AC	143-1039●	1.120	0.820	0.610
MBR10H100CTG	TO-220	143-1040●	1.090	0.780	0.620
MBR120ESFT1G	SOD-123FL	SMD 143-1041●	0.191	0.139	0.107
MBR120LSFT1G	SOD-123FL	SMD 143-1042●	0.198	0.143	0.112
MBR120VLSFT1G	SOD-123FL	SMD 143-1044●	0.280	0.165	0.115
MBR130T1G	SOD-123	SMD 143-1045●	0.210	0.151	0.110
MBR140SFT1G	SOD-123FL	SMD 143-1046●	0.210	0.151	0.117
MBR150RLG	DO-41	143-1047●	0.240	0.173	0.135
MBR1545CTG	TO-220	143-1049●	0.850	0.570	0.410
MBR16100CTG	TO-220	143-1050●	1.490	1.060	0.850
MBR2030CTLG	TO-220	143-1052●	1.720	1.210	0.980
MBR2080CTG	TO-220	143-1053●	1.620	1.180	0.920
MBR20H100CTG	TO-220	143-1056●	1.370	0.970	0.760
MBR3045STG	TO-220	143-1058●	1.540	1.120	0.870
MBR30H100CTG	TO-220	143-1060●	1.560	1.140	0.880
MBR3100RLG	DO-201AD	143-1061●	0.510	0.330	0.250
MBR350RLG	DO-201AD	143-1062●	0.370	0.230	0.163
MBR360RLG	DO-201AD	143-1063●	0.370	0.230	0.163
MBR4015CTLG	TO-220	143-1064●	2.130	1.530	1.200
MBR40250TG	TO-220	143-1066●	2.320	1.680	1.300
MBR4045WTG	TO-247	143-1068●	4.210	3.030	2.350
MBR40H100WTG	TO-247	143-1069●	4.150	2.990	2.330
MBR41H100CTG	TO-220	143-1070●	2.360	1.700	1.310
MBR6045PTG	SOT-93	143-1071●	4.300	3.090	2.410
MBR60H100CTG	TO-220	143-1072●	2.910	2.090	1.620
MBRA120ET3G	SMA	SMD 143-1075●	0.172	0.124	0.096
MBRA160T3G	SMA	SMD 143-1076●	0.310	0.230	0.176
MBRA210ET3G	SMA	SMD 143-1077●	0.310	0.220	0.177
MBRA340T3G	SMA	SMD 143-1078●	0.390	0.240	0.171
MBRB1045G	D2-PAK	SMD 143-1081●	1.120	0.790	0.630
MBRB1545CTG	D2-PAK	SMD 143-1082●	1.120	0.790	0.630
MBRB20200CTG	D2-PAK	SMD 143-1083●	2.290	1.630	1.350
MBRB2060CTG	D2-PAK	SMD 143-1084●	2.160	1.560	1.200
MBRB2515LG	D2-PAK	SMD 143-1085●	2.560	1.860	1.440
MBRB2545CTG	D2-PAK	SMD 143-1086●	2.170	1.560	1.220
MBRB3030CTG	D2-PAK	SMD 143-1087●	3.170	2.270	1.770
MBRB4030G	D2-PAK	SMD 143-1091●	3.360	2.420	1.880
MBRD340G	D-PAK	SMD 143-1096●	0.590	0.430	0.330
MBRD360G	D-PAK	SMD 143-1098●	0.590	0.430	0.330
MBRD650CTG	D-PAK	SMD 143-1099●	0.670	0.490	0.380
MBRD660CTG	D-PAK	SMD 143-1100●	0.670	0.490	0.380
MMSD301T1G	SOD-123	SMD 143-1101●	0.112	0.079	0.063
MMSD701T1G	SOD-123	SMD 143-1102●	0.112	0.079	0.063

1A to 300A

ON Semiconductor


SOT93


TO220

$I_{F(av)}$ A	V_{RRM} A	V_F V	@	I_F A	I_{FSM} A	Package	Mftrs. List No.
1	40	0.6		1	25	DO-41	1N5819RLG
1	100	0.69		1	50	DO-41	MBR1100RLG
7.5	45	0.57		15	150	TO-220AC	MBR745G
8	35	0.41		8	75	D-PAK	MBRD835LG
10	45	0.57		20	150	TO-220AC	MBR1045G
10	60	0.7		10	150	TO-220AC	MBR1060G
10	100	0.7		10	150	TO-220AC	MBR10100G
16	45	0.57		16	150	TO-220AC	MBR1645G

RL Re-reeling available

Power Diodes - Schottky - continued

1A to 300A - continued

$I_{F(av)}$ A	V_{RRM} A	V_F V	@	I_F A	I_{FSM} A	Package	Mftrs. List No.
10	45	0.75		20	150	TO-220AB	MBR2045CTG
10	60	0.75		10	150	TO-220AB	MBR2060CTG
10	100	0.95		20	150	D2-PAK	MBRB20100CTG
10	100	0.75		10	150	TO-220AB	MBR20100CTG
10	200	0.75		10	150	TO-220AB	MBR20200CTG
10	100	0.75		10	150	TO-220	MBRF20100CTG
12.5	35	0.47		25	150	TO-220AB	MBR2535CTLG
15	40	0.73		30	150	TO-220AB	MBR2545CTG
15	45	0.72		30	200	SOT-93	MBR3045PTG
30	45	0.55		30	500	TO-247AC	MBR6045WTG

Order Multiple=1 Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+
MBR1045G	**955-7342**	0.910	0.620	0.440	0.380
MBR1060G	**955-7385**	0.910	0.620	0.440	0.380
MBR10100G	**955-7407**	1.080	0.800	0.590	0.490
MBR1100RLG	**955-5846**	0.330	0.199	0.143	0.111
MBR1645G	**955-7253**	0.920	0.680	0.500	0.420
MBR2045CTG	**955-7261**	0.810	0.540	0.380	0.320
MBR2060CTG	**955-5854**	1.400	1.030	0.760	0.640
MBR20100CTG	**955-7172**	1.080	0.800	0.590	0.490
MBR20200CTG	**955-6222**	1.720	1.210	0.980	0.810
MBR2535CTLG	**955-7423**	1.360	0.970	0.780	0.650
MBR2545CTG	**955-7245**	1.280	0.950	0.700	0.590
MBR3045PTG	**955-7326**	2.540	1.610	1.310	1.090
MBR6045WTG	**955-7210**	2.480	1.790	1.540	1.500
MBR745G	**955-7296**	0.810	0.550	0.400	0.340
MBRB20100CTG	SMD **955-6230**	2.220	1.320	1.020	0.830
MBRD835LG	SMD **955-6249**	0.620	0.430	0.310	0.260
MBRF20100CTG	SMD **955-6257**	1.230	0.880	0.650	0.540
Order Multiple=5		**5+**	**100+**	**250+**	**1K+**
1N5819RLG	**955-7350**	0.290	0.170	0.118	0.089
1N5822RLG	**955-7369**	0.270	0.170	0.139	0.104

222097

Mftrs. List No.		Order Code	Price Per Tube 1+	+	+
MBRD835LG	TUBE 75	NEW SMD **156-4011**	26.95	18.64	17.93
MBR10100G	TUBE 50	NEW **156-4012**	27.24	23.66	18.53

General Purpose

ON Semiconductor



D^2PAK (TO-263)



SMA/SMB Style



SOD-123



DO-41, DO-201 Style

Latest Schottky Diodes from On Semiconductor

$I_{F(av)}$ A	V_{RRM} A	V_F V	V_F V	I_{FSM} A	Package	Mftrs. List No.
0.1	30	0.385	0.385	1	SOD-923	NSR0130P2T5G
0.35	30	0.35	0.35	0.03	SOD-923	NSR0140P2T5G
0.5	70	0.5	0.5	—	SOD-123	MMSD701T1G
1	10	0.365	0.365	50	PowerMite	MBRM110LT3G
1	20	0.45	0.45	25	59-04	1N5817G
1	20	0.45	0.45	50	Case 457	MBRM120LT3G
1	20	0.53	0.53	50	Case 457	MBRM120ET3G
1	20	0.6	0.6	40	SMB	MBRS120T3G
1	30	0.38	0.38	50	Case 77	MBRM130LT3G
1	30	0.6	0.6	40	SMB	MBRS130T3G
1	40	0.55	0.55	50	PowerMite	MBRM140T1G
1	40	0.55	0.55	50	Case 457	MBRM140T3G
1	40	0.6	0.6	25	59-04	1N5819G
1	90	0.75	0.75	50	SMB	MBRS190T3G
2	10	0.35	0.35	230	SMA	MBRA210LT3G
3	40	0.525	0.525	80	267-03	1N5822G
3	40	0.6	0.6	80	DO-201AD	MBR340G
3	100	0.79	0.79	150	267-03	MBR3100G
30	45	0.82	0.82	150	D2-PAK	MBRB2545CTT4G

497713

Mftrs. List No.	Case style	Order Code	Price Each 1+	25+	100+
MMSD701T1G	SOD-123	SMD **143-1102**	0.112	0.079	0.063
NSR0130P2T5G	SOD-923	SMD **145-3608**	0.143	0.104	0.081
NSR0140P2T5G	SOD-923	SMD **145-3611**	0.143	0.104	0.081
1N5817G	59-04	**145-8990**	0.147	0.122	0.113
1N5819G	59-04	**145-8992**	0.143	0.122	0.113
1N5822G	267-03	**145-8993**	0.240	0.210	0.196
MBR3100G	267-03	**145-9058**	0.290	0.260	0.250
MBR340G	DO-201AD	**145-9059**	0.250	0.220	0.210
MBRA210LT3G	SMA	SMD **145-9060**	0.300	0.220	0.166
MBRB2545CTT4G	D2-PAK	SMD **145-9061**	1.450	1.040	0.830
MBRM110LT3G	PowerMite	SMD **145-9062**	0.156	0.139	0.129
MBRM120ET3G	Case 457	SMD **145-9063**	0.188	0.167	0.135
MBRM120LT3G	Case 457	SMD **145-9064**	0.194	0.171	0.159
MBRM130LT3G	Case 77	SMD **145-9066**	0.156	0.139	0.129
MBRM140T1G	PowerMite	SMD **145-9067**	0.240	0.178	0.128
MBRM140T3G	Case 457	SMD **145-9068**	0.210	0.171	0.128
MBRS120T3G	SMB	SMD **145-9069**	0.174	0.154	0.128
MBRS130T3G	SMB	SMD **145-9070**	0.174	0.154	0.116
MBRS190T3G	SMB	SMD **145-9071**	0.200	0.180	0.147

0.5A to 160A

FAIRCHILD SEMICONDUCTOR



SOD-6



ISOWATT-220AB



TO-220AC



TO-220AB



SOT-223



TO-247



ISOTOP

$I_{f(av)}$ A	V_{rrm} V	V_f V	@	I_f A	I_{fsm} A	Package	Mftrs. List No.
0.5	40	0.5		0.5	5.5	SOD-123	STPS0540Z
1	20	0.45		1	25	DO-41	1N5817
1	30	0.3		1	2 x 75	SMA	STPS1L30A
1	30	0.55		1	25	DO-41	1N5818
1	40	0.6		1	25	DO-41	1N5819
1	60	0.57		1	2 x 40	DO-41	STPS1L60
1	60	0.67		1	2 x 75	SMB	STPS160U
8	100	0.77		1	2 x 50	SMB	STPS1H100U
1	40	0.5		1	2 x 60	SMB	STPS1L40U
1	40	0.55		1	2 x 60	SMA	STPS140A
2	100	0.79		2	2 x 75	SMB	STPS2H100U
2	60	0.6		2	2 x 75	DO-41	STPS2L60
3	150	0.82		3	2 x 100	SMB	STPS3150U
3	20	0.475		3	80	DO-201AD	1N5820
3	30	0.5		3	80	DO-201AD	1N5821
3	40	0.52		3	75	SMB	STPS340U
3	40	0.525		3	80	DO-201AD	1N5822
3	60	0.62		3	2 x 100	DO-15	STPS3L60Q
3	60	0.62		3	2 x 100	SMB	STPS3L60U
2 x 5	150	0.75		5	2 x 120	TO-220AB	STPS10150CT
2 x 5	100	0.61		5	2 x 180	TO-220AB	STPS10H100CT
5	60	0.61		5	180	TO-220FP	STPS10L60CFP
5	100	0.61		5	180	TO-220FP	STPS10H100CFP
5	25	0.47		5	75	D-PAK	STPS5L25B
2 x 7.5	45	0.5		10	150	TO-220AB	STPS1545CT
7.5	45	0.5		7.5	150	TO-220AC	STPS745D
7.5	100	0.8		7.5	2 x 75	D-PAK	STPS15H100CB
7.5	30	0.48		7.5	2 x 75	D-PAK	STPS15L30CB
7.5	60	0.62		7.5	2 x 75	D-PAK	STPS15L60CB
2 x 8	150	0.92		8	2 x 150	TO-220AB	STPS16150CT
8	100	0.56		8	250	TO-220AC	STPS8H100D
2 x 10	25	0.3		10	2 x 220	TO-220AB	STPS20L25CT
2 x 10	60	0.48		10	2 x 220	TO-220AB	STPS20L60CT
2 x 10	100	0.29		10	2 x 250	TO-220AB	STPS20H100CT
2 x 10	150	0.92		10	2 x 180	TO-220AB	STPS20150CT
10	25	0.35		10	200	TO-220AC	STPS10L25D
10	45	0.6		10	180	TO-220AC	STPS1045D
10	100	0.77		10	2 x 250	TO-220FP	STPS20H100CFP
10	45	0.57		10	75	D-PAK	STPS1045B
2 x 15	40	0.42		15	2 x 220	TO-247	STPS30L40CW
2 x 15	60	0.58		15	2 x 200	TO-247	STPS3060CW
2 x 15	60	0.5		15	2 x 230	TO-247	STPS30L60CW
15	25	0.3		15	250	TO-220AC	STPS15L25D
2 x 10	100	0.29		10	2 x 250	D2-PAK	STPS20H100CG
2 x 15	30	0.49		15	2 x 250	TO-220AB	STPS3030CT
2 x 15	30	0.46		15	2 x 220	TO-220AB	STPS30L30CT
2 x 15	45	0.55		15	2 x 220	TO-220AB	STPS30L45CT
2 x 15	60	0.6		15	2 x 230	TO-220AB	STPS30L60CT
2 x 15	100	0.8		15	2 x 250	TO-220AB	STPS30H100CT
2 x 15	100	0.8		15	2 x 250	TO-247	STPS30H100CW
2 x 15	170	0.92		15	2 x 220	D2-PAK	STPS30170CG
2 x 15	170	0.92		15	2 x 220	TO-247	STPS30170CW
15	45	0.55		15	2 x 220	TO-220FP	STPS30L45CFP
2 x 20	45	0.53		20	2 x 230	TO-220AB	STPS40L45CT
2 x 20	100	0.8		20	2 x 220	TO-220AB	STPS41H100CT
2 x 20	170	0.92		20	2 x 250	D2-PAK	STPS40170CG
2 x 20	170	0.92		20	2 x 250	TO-220	STPS40170CT
2 x 30	170	0.94		30	2 x 270	TO-220	STPS60170CT
2 x 30	40	0.44		30	600	TO-247	STPS60L40CW
2 x 10	170	0.9		10	2 x 180	TO-220FP	STPS20170CFP
2 x 10	170	0.9		10	2 x 180	D2-PAK	STPS20170CG
2 x 40	170	0.84		40	2 x 500	TO-247	STPS80170CW
2 x 80	100	0.63		80	2 x 1000	ISOTOP	STPS160H100TV
2 x 100	170	0.85		100	2 x 700	ISOTOP	STPS200170TV1

211289

Order Multiple=5 Mftrs. List No.	Mftr.	Order Code	Price Each 5+	25+	100+
1N5817	ST	**980-1197**	0.480	0.310	0.220
1N5818	ST	**980-1200**	0.380	0.260	0.162
1N5819	ST	**980-1219**	0.270	0.174	0.111
1N5820	ST	**980-1227**	0.580	0.330	0.260
1N5821	ST	**980-1235**	0.440	0.260	0.210
1N5822	ST	**980-1243**	0.380	0.290	0.198
STPS0540Z	ST	SMD **117-5677**	1.000	0.730	0.560
Order Multiple=1			**1+**	**25+**	**100+**
STPS60L40CW	ST	**980-3572**	3.460	3.140	2.850
STPS10150CT	ST	**990-7289**	1.210	0.890	0.710
STPS1H100U	ST	SMD **990-7483** RL	0.580	0.260	0.189

RL Re-reeling available

Order Multiple=1			Price Each 1+	25+	100+
STPS1L30A	ST	SMD 990-7491● RL	0.370	0.270	0.210
STPS1L40U	ST	SMD 990-7505● RL	0.310	0.230	0.183
STPS1L60	ST	990-7513●	0.340	0.260	0.193
STPS2H100U	ST	SMD 990-7629● RL	0.620	0.470	0.370
STPS2L60	ST	990-7637●	0.290	0.200	0.159
STPS3L60Q	ST	990-7750●	0.380	0.300	0.230
STPS3L60U	ST	SMD 990-7769● RL	0.440	0.320	0.260
STPS5L25B	ST	SMD 990-7858●	1.090	0.790	0.640
STPS8H100D	ST	980-3599●	1.040	0.810	0.600
STPS10H100CFP	ST	990-7300●	1.670	1.300	1.060
STPS10H100CT	ST	990-7319●	1.570	1.160	0.940
STPS10L60CFP	ST	990-7343●	0.960	0.730	0.590
STPS10L25D	ST	980-3360●	1.280	0.970	0.750
STPS140A	ST	SMD 990-7378● RL	0.380	0.270	0.177
STPS15H100CB	ST	SMD 990-7386● RL	1.280	0.970	0.810
STPS15L25D	ST	980-3408●	1.330	0.960	0.860
STPS15L30CB	ST	SMD 990-7394● RL	1.750	1.250	1.020
STPS15L60CB	ST	SMD 990-7416● RL	1.360	0.980	0.860
STPS160U	ST	SMD 990-7424● RL	0.370	0.280	0.220
STPS16150CT	ST	990-7432●	1.840	1.420	1.140
STPS20H100CFP	ST	990-7556●	2.290	1.740	1.400
STPS20H100CG	ST	SMD 994-6314●	1.370	1.010	0.820
STPS20H100CT	ST	980-3440●	1.460	1.090	0.870
STPS20L25CT	ST	980-3459●	1.580	1.370	1.130
STPS20L60CT	ST	980-3467●	1.470	1.140	0.930
STPS30H100CT	ST	990-7688●	2.630	2.000	1.620
STPS30H100CW	ST	990-7696●	2.550	1.960	1.610
STPS30L30CT	ST	990-7700●	1.500	1.110	1.010
STPS30L45CFP	ST	990-7718●	1.350	1.000	0.820
STPS30L45CT	ST	990-7726●	1.070	0.810	0.650
STPS30L60CT	ST	990-7734●	2.540	1.810	1.490
STPS30L40CW	ST	980-3521●	1.670	1.330	1.110
STPS30L60CW	ST	980-3530●	2.900	2.090	1.730
STPS40L45CT	ST	990-7807●	3.560	2.690	2.170
STPS41H100CT	ST	990-7815●	4.080	3.100	2.510
STPS160H100TV	ST	980-3424●	24.400	18.490	15.670
STPS340U	ST	SMD 980-3548●	0.430	0.410	0.310
STPS1045B	ST	SMD 990-7297●	0.750	0.560	0.450
STPS20150CT	ST	990-7521●	1.950	1.460	1.170
STPS3030CT	ST	990-7661●	1.040	0.800	0.660
STPS3060CW	ST	980-3513●	2.190	1.600	1.460
STPS3150U	ST	SMD 990-7742● RL	0.540	0.410	0.310
STPS200170TV1	ST	129-5321●	25.290	20.180	19.170
STPS20170CFP	ST	129-5322●	1.130	0.810	0.660
STPS20170CG	ST	SMD 129-5323●	1.140	0.970	0.740
STPS30170CG	ST	SMD 129-5326●	2.440	1.750	1.450
STPS30170CW	ST	SMD 129-5328●	2.190	1.460	1.400
STPS40170CG	ST	SMD 129-5331●	2.830	2.070	1.670
STPS40170CT	ST	129-5332●	2.900	2.210	1.580
STPS60170CT	ST	129-5334●	3.380	2.340	1.900
STPS80170CW	ST	129-5336●	3.930	3.610	2.660
STPS1545CT	ST	980-3386●	0.660	0.510	0.380
STPS1045D	ST	980-3351●	0.800	0.600	0.490
STPS745D	ST	980-3580●	0.970	0.700	0.500

1A to 5A, Axial



Package	L	Dia
DO-201AD	9.5	5.6
DO-204AR	9.52	6.35

$I_{F(av)}$ max. A	V_{RRM} max. V	V_F V	@ I_F A	I_{FSM} A	Package	Mftr.	Mftrs. List No.
1	30	0.55	1	30	DO-41	MC	SR103
1	40	0.55	1	30	DO-41	MC	SR104
1	60	0.70	1	30	DO-41	MC	SR106
3	90	0.85	3	80	DO-201AD	MC	SR309
3	100	0.85	3	80	DO-201AD	MC	SR310
3.3	30	0.57	3	450	DO-201AD	VISH	31DQ03
3.3	40	0.57	3	450	DO-201AD	VISH	31DQ04
3.3	50	0.62	3	340	DO-201AD	VISH	31DQ05
3.3	60	0.62	3	340	DO-201AD	VISH	31DQ06
3.3	90	0.85	3	210	DO-201AD	VISH	31DQ09
3.3	100	0.85	3	210	DO-201AD	VISH	31DQ10
5	30	0.55	5	150	DO-201AD	TS	SR503
5	40	0.55	5	150	DO-201AD	TS	SR504
5	60	0.7	5	150	DO-201AD	TS	SR506
5	90	0.85	5	120	DO-201AD	MC	SR509
5	100	0.85	5	120	DO-201AD	MC	SR510

429583

Mftrs. List No.	Mftr.	Order Code	Price Each 5+	100+	500+	1K+
SR503	TS	727-8438●	1.060	0.540	0.350	0.300
SR504	TS	727-8446●	1.060	0.540	0.350	0.300
SR506	TS	727-8454●	1.180	0.590	0.400	0.330
31DQ03	VISH	364-605●	0.820	0.410	0.260	0.210
31DQ04	VISH	364-617●	0.920	0.670	0.440	0.300
31DQ05	VISH	438-315●	0.800	0.390	0.250	0.200
31DQ06	VISH	273-650●	0.950	0.500	0.320	0.260
31DQ09	VISH	393-9972●	0.540	0.300	0.210	0.196
31DQ10	VISH	364-629●	0.950	0.470	0.300	0.240
SR309	MC	NEW 162-5245●	0.620	0.420	0.320	0.250

Mftrs. List No.	Mftr.	Order Code	Price Each 5+	100+	500+	1K+
SR310	MC	NEW 162-5246●	0.650	0.440	0.330	0.270
SR509	MC	NEW 162-5247●	0.840	0.560	0.420	0.340
SR510	MC	NEW 162-5248●	0.870	0.570	0.430	0.350
Order Multiple=5			**5+**	**25+**	**100+**	**500+**
SR103	MC	NEW 162-5233●	0.147	0.098	0.073	0.059
SR104	MC	NEW 162-5234●	0.147	0.098	0.073	0.059
SR106	MC	NEW 162-5235●	0.154	0.103	0.077	0.061

5A to 9A, Axial - High Surge



DO-204-AR, L=9.52, DIA=6.35

$I_{F(av)}$ max. A	V_{RRM} max. V	V_F V	@ I_F A	I_{FSM} A	Mftrs. List No.
5	60	0.52	5	1900	50SQ060
5	80	0.52	5	1900	50SQ080.
5	100	0.52	5	1900	50SQ100
8	35	0.44	8	2400	80SQ035
8	40	0.44	8	2400	80SQ040
8	45	0.44	8	2400	80SQ045
9	15	0.25	9	2900	95SQ015
9	40	0.42	9	2150	90SQ040
9	45	0.42	9	2150	90SQ045

429585

Order Multiple=1		Price Each			
Mftrs. List No.	Order Code	1+	25+	100+	500+
50SQ060	394-1528●	1.78	0.97	0.72	0.60
50SQ080.	260-083●	1.88	1.03	0.76	0.63
50SQ100	364-666●	2.50	1.37	1.02	0.93
80SQ035	273-661●	1.34	0.91	0.62	0.61
80SQ040	438-327●	1.63	1.12	0.76	0.75
80SQ045	364-708●	1.81	0.99	0.74	0.67
95SQ015	506-795●	3.09	1.81	1.38	1.29
90SQ040	506-771●	1.69	1.20	0.85	0.70
90SQ045	506-783●	1.82	1.00	0.74	0.61

1A to 5A, Axial



Package	L	Dia
DO-41	5.2	2.7
DO-201AD	9.5	5.6
DO-204AR	9.52	6.35
59-04	6.6	3.05
267-03	9.65	5.33

$I_{F(av)}$ max. A	V_{RRM} max. V	V_F V	@ I_F A	I_{FSM} A	Package	Mftr.	Mftrs. List No.
1	20	0.45	1	25	DO-41	FCH/MC	1N5817
1	20	0.5	1	35	DO-204AL	VISH	SB120A
1	30	0.55	1	60	DO-41	TS	SR103
1	30	0.5	1	40	DO-41	GS	SB130
1	30	0.48	1	50	DO-204AL	VISH	SB130
1	40	0.87	1	25	DO-41	FCH/FCH	1N5819
1	40	0.55	1	60	DO-41	TS	SR104
1	40	0.5	1	30	DO-41	MC / GS	SB140
1	40	0.9	1	25	DO-204AL	VISH	1N5819
1	40	0.5	1	35	DO-204AL	VISH	SB140A
1	50	0.7	1	35	DO-204AL	VISH	SB150A
1	60	0.75	1	25	59-04	ON	MBR160RLG
1	60	0.7	1	30	DO-41	MC	SB160
1	60	0.7	1	60	DO-41	TS	SR106
1	60	0.65	1	150	DO-41	IR	MBR160TR
1	60	0.7	1	35	DO-204AL	VISH	SB160A
1	100	0.8	1	30	DO-41	TS	SR110
1	100	0.77	1	50	DO-41	VSH	SB1H100
1	100	0.68	1	200	DO-41	VSH	MBR1100TR
1.1	30	0.55	1	225	DO-41	VISH	11DQ03
1.1	40	0.55	1	225	DO-41	VISH	11DQ04
1.1	50	0.56	1	150	DO-41	VISH	11DQ05
1.1	60	0.56	1	150	DO-41	IR	11DQ06
1.1	90	0.85	1.1	90	DO-41	VSH	11DQ09
1.1	100	0.85	1	90	DO-41	VISH	11DQ10
3	20	0.47	3	80	DO-201AD	FCH/MC	1N5820
3	30	0.55	3	80	DO-201AD	TS /	SR303
3	30	0.5	3	80	DO-41	FCH/MC	1N5821
3	40	0.55	3	80	DO-201AD	TS	SR304
3	40	0.52	3	80	DO-201AD	FCH/MC	1N5822
3	40	0.5	3	80	DO-201AD	GS	SB340
3	40	0.95	3	80	DO-201AD	VISH	1N5822
3	50	0.75	3	80	DO-201AD	MC	SB350
3	50	0.7	3	80	DO-201AD	TS	SR305
3	60	0.74	3	100	DO-201AD	VSH	SB360
3	60	0.73	3	460	DO-41	IR	MBR360
3	60	0.7	3	80	DO-201AD	TS	SR306
3	90	0.8	3	100	DO-201AD	VISH	SB3H90
3	100	0.8	3	100	DO-201AD	VSH	SB3H100
5	30	0.55	5	150	DO-201AD	TS	SR503
5	40	0.55	5	150	DO-201AD	TS	SR504
5	60	0.7	5	150	DO-201AD	TS	SR506

RL Re-reeling available

Power Diodes - Schottky - continued

1A to 5A, Axial - continued

211228

Mftrs. List No.	Mftr.	Order Code	Price Each 5+	100+	1K+	3K+
1N5817	FCH	984-3787●	0.210	0.128	0.114	0.074
1N5819	FCH	101-7589●	0.320	0.210	0.138	0.059
1N5820	FCH	101-7590●	0.780	0.490	0.370	0.195
1N5821	FCH	101-7591●	0.860	0.500	0.420	0.220
1N5822	FCH	984-3809●	0.490	0.320	0.210	0.118
11DQ04	VISH	364-459●	0.350	0.168	0.103	0.080
11DQ05	VISH	438-297●	0.240	0.167	0.116	0.106
11DQ09	VSH	369-4069●	0.370	0.250	0.152	0.118
11DQ10	VISH	364-472●	0.410	0.200	0.123	0.095
MBR160RLG	ON	955-6761●	0.330	0.181	0.138	0.103
MBR160TR	VSH	489-7444●	0.130	0.079	0.059	0.058
MBR340RLG	ON	955-6770●	0.550	0.300	0.250	0.158
MBR360	VSH	489-7456●	0.370	0.230	0.182	0.145
MBR1100TR	VSH	489-7432●	0.134	0.082	0.060	0.049
SR103	TS	727-8365●	0.135	0.070	0.048	0.038
SR104	TS	727-8373●	0.106	0.055	0.038	0.030
SR106	TS	727-8381●	0.290	0.150	0.095	0.085
SR110	TS	408-5132●	0.270	0.137	0.088	0.080
SB130	GS	955-0330●	0.650	0.580	0.390	0.220
SB140	MC	938-1350●	0.560	0.380	0.370	0.280
SB140	GS	955-0348●	0.470	0.260	0.240	0.144
SB160	MC	938-1368●	0.780	0.550	0.510	0.380
SB160	GS	955-0356●	0.193	0.137	0.119	0.078
SB340	GS	955-0372●	0.950	0.560	0.500	0.290
SB350	MC	938-1376●	0.730	0.510	0.420	0.290
SB360	FCH	938-1384●	1.160	0.800	0.630	0.440
SB360	VSH	955-0380●	0.350	0.240	0.210	0.140
SB3H100	VSH	102-1750●	0.470	0.350	0.290	0.250
SR303	TS	727-8390●	0.173	0.153	0.133	0.113
SR304	TS	727-8403●	0.109	0.100	0.098	0.087
SR305	TS	727-8411●	0.800	0.410	0.270	0.220
SR306	TS	727-8420●	0.830	0.430	0.280	0.240
SB360	VSH	955-0380●	0.350	0.240	0.210	0.140
SB120A	VISH	133-6530●	0.158	0.137	0.113	0.097
SB130	VISH	133-6531●	0.171	0.145	0.120	0.104
1N5819	VISH	133-6533●	0.220	0.120	0.104	0.100
SB140A	VISH	133-6534●	0.158	0.137	0.113	0.097
SB150A	VISH	133-6537●	0.250	0.200	0.172	0.147
SB160A	VISH	133-6539●	0.196	0.163	0.137	0.117
1N5822	VISH	133-6553●	0.400	0.290	0.187	0.183
SB3H90	VISH	133-6554●	0.590	0.430	0.420	0.360

7.5A to 240A

GENERAL SEMICONDUCTOR ON Semiconductor VISHAY multicomp



DO-220



TO-220



ISOTOP



¼"28 UNF 2A



TO-3P



SOT-93

$I_{F(av)}$ A	V_{RRM} V	V_F V	@ I_F A	I_{FSM} A	Package	Mftr.	Mftrs. List No.
2 x 5	150	0.73	5	620	TO-220AB	VISH	10CTQ150PBF
2 x 6	45	0.64	6	690	TO-220AB	VISH	12CTQ045PBF
7.5	45	0.84	15	150	TO-220AC	GS	MBR745
7.5	45	0.5	7.5	150	TO-220AC	ST	STPS745D
7.5	60	0.75	10	150	TO-220AC	GS	MBR760
7.5	100	0.92	7.5	150	TO-220AC	MC	MBR7100
7.5	150	0.95	7.5	150	TO-220AC	MC	MBR7150
7.5	35	0.84	7.5	150	TO-220AC	MC	MBR735
7.5	45	0.84	7.5	150	TO-220AC	MC	MBR745
7.5	50	0.75	7.5	150	TO-220AC	MC	MBR750
7.5	60	0.75	7.5	150	TO-220AC	MC	MBR760
7.5	90	0.92	7.5	150	TO-220AC	MC	MBR790
7.5	45	0.57	7.5	690	TO-220AB	VISH	MBR1545CTPBF
2 x 7.5	45	0.5	10	150	TO-220AB	ST	STPS1545CT
8	80	0.58	8	850	TO-220AC	VISH	8TQ080PBF
8	100	0.58	8	850	TO-220AC	VISH	8TQ100PBF
2 x 8	60	0.58	8	850	TO-220	VISH	16CTQ060PBF
2 x 8	80	0.58	16	850	TO-220AB	VISH	16CTQ080PBF
2 x 8	100	0.58	8	850	TO-220AB	VISH	16CTQ100PBF
10	35	0.49	10	1050	TO-220AC	VISH	10TQ035PBF
10	45	0.49	10	1050	TO-220AC	VISH	10TQ045PBF
10	100	0.85	10	150	TO-220AC	MC	MBR10100
10	100	0.95	10	120	TO-220AB	MC	MBR10100CT
10	150	1.05	10	150	TO-220AC	MC	MBR10150
10	150	0.98	10	120	TO-220AB	MC	MBR10150CT
10	200	0.98	10	120	TO-220AB	MC	MBR10200CT
10	45	0.7	10	150	TO-220AC	MC	MBR1045
10	45	0.8	10	120	TO-220AB	MC	MBR1045CT
10	60	0.8	10	150	TO-220AC	MC	MBR1060
10	60	0.9	10	120	TO-220AB	MC	MBR1060CT
10	100	0.85	10	120	TO-220AB	MC	SR10100
10	150	0.95	10	120	TO-220AB	MC	SR10150
10	60	0.7	10	120	TO-220AB	MC	SR1060
2 x 10	45	0.57	10	1800	TO-220AB	VISH	20CTQ045PBF
2 x 10	45	0.5	10	180	TO-220AB	ST	STPS2045CT
15	45	0.5	15	220	TO-220AC	ST	STPS1545D
15	100	0.92	15	150	TO-220AB	MC	MBR15100CT
15	45	0.72	15	150	TO-220AB	MC	MBR1545CT
15	60	0.75	15	150	TO-220AB	MC	MBR1560CT
2 x 15	45	0.5	15	220	TO-220AB	ST	STPS3045CT
2 x 15	45	0.5	15	1020	TO-247AC	VISH	30CPQ045PBF
2 x 15	60	0.5	15	1020	TO-247AC	VISH	30CPQ060PBF
2 x 15	100	0.5	15	1020	TO-247AC	VISH	30CPQ100PBF
2 x 15	30	0.4	15	900	TO-220AB	VISH	32CTQ030PBF
2 x 15	45	0.56	15	1000	TO-220AB	VISH	30CTQ045PBF
16	100	0.85	16	150	TO-220AC	MC	MBR16100
16	150	0.95	16	150	TO-220AC	MC	MBR16150
16	45	0.63	16	150	TO-220AC	MC	MBR1645
16	60	0.75	16	150	TO-220AC	MC	MBR1660
16	100	0.9	16	170	TO-220AB	MC	SR16100
16	10	1.05	16	170	TO-220AB	MC	SR16150
16	20	0.55	16	170	TO-220AB	MC	SR1620
16	30	0.55	16	170	TO-220AB	MC	SR1630
16	40	0.55	16	170	TO-220AB	MC	SR1640
16	60	0.7	16	170	TO-220AB	MC	SR1660
18	45	0.53	18	1800	TO-220AC	VISH	18TQ045PBF
19	15	0.32	19	700	TO-220AC	VISH	19TQ015PBF
20	100	0.95	20	150	TO-220AB	MC	MBR20100CT
20	150	0.92	20	150	TO-220AB	MC	MBR20150CT
20	200	1.23	20	150	TO-220AB	MC	MBR20200CT
20	45	0.84	20	150	TO-220AB	MC	MBR2045CT
20	60	0.95	20	150	TO-220AB	MC	MBR2060CT
2 x 20	40	0.43	40	3500	TO-247AC	VISH	40CPQ040PBF
2 x 20	45	0.43	20	3500	TO-247AC	VISH	40CPQ045PBF
2 x 20	45	0.6	40	400	SOT-93	ON	MBR4045PTG
2 x 20	60	0.43	20	3500	TO-247AC	VISH	40CPQ060PBF
2 x 20	100	0.43	20	3500	TO-247AC	VISH	40CPQ100PBF
30	100	0.92	30	200	TO-220AB	MC	MBR25100CT
30	45	0.82	30	200	TO-220AB	MC	MBR2545CT
30	60	0.75	30	200	TO-220AB	MC	MBR2560CT
30	100	0.94	30	200	TO-220AB	MC	MBR30100CT
30	100	0.85	30	200	TO-247AD	MC	MBR30100PT
30	35	0.82	30	200	TO-220AB	MC	MBR3035CT
30	45	0.82	30	200	TO-220AB	MC	MBR3045CT
30	45	0.82	30	200	TO-247AD	MC	MBR3045PT
30	50	0.77	30	200	TO-220AB	MC	MBR3050CT
30	60	0.77	30	200	TO-220AB	MC	MBR3060CT
30	60	0.75	30	200	TO-247AD	MC	MBR3060PT
30	90	0.94	30	200	TO-220AB	MC	MBR3090CT
2 x 30	45	0.75	30	150	TO-220AB	GS	MBR2545CT
40	35	0.8	40	330	TO-247AD	MC	MBR4035PT
40	45	0.8	40	330	TO-247AD	MC	MBR4045PT
40	60	0.77	40	330	TO-247AD	MC	MBR4060PT
60	100	0.98	60	420	TO-247AD	MC	MBR60100PT
60	35	0.82	60	420	TO-247AD	MC	MBR6035PT
60	60	0.93	60	420	TO-247AD	MC	MBR6060PT
2 x 60	45	0.52	60	900	ISOTOP	ST	STPS12045TV
2 x 80	45	0.62	80	900	ISOTOP	ST	STPS16045TV
2 x 120	45	0.52	120	1500	ISOTOP	ST	STPS24045TV

Mftrs. List No.	Mfr.	Order Code	Price Each 1+	25+	100+	250+	1K+
8TQ080PBF	VISH	910-1365●	2.900	1.650	1.260	1.100	1.010
8TQ100PBF	VISH	910-1357●	1.630	0.900	0.820	0.800	0.780
10CTQ150PBF	VISH	910-1136●	2.130	1.170	1.030	1.000	0.980
10TQ035PBF	VISH	910-0601●	1.400	0.800	0.610	0.600	0.580
10TQ045PBF	VISH	910-0628●	1.430	0.810	0.680	0.660	0.640
12CTQ045PBF	VISH	864-7810●	1.530	1.070	0.790	0.660	0.650
16CTQ060PBF	VISH	910-1217●	2.240	1.270	0.940	0.780	0.660
16CTQ080PBF	VISH	864-7828●	2.190	1.300	1.120	1.090	1.060
16CTQ100PBF	VISH	910-1209●	2.470	1.360	1.010	0.840	0.790
18TQ045PBF	VISH	910-0644●	1.650	0.930	0.690	0.660	0.640
19TQ015PBF	VISH	910-0660●	2.660	1.450	1.080	0.900	0.880
20CTQ045PBF	VISH	864-7844●	2.030	1.110	0.830	0.700	0.680
30CPQ035PBF	VISH	101-3354●	3.050	1.820	1.510	1.320	1.290
30CPQ045PBF	VISH	910-0776●	3.260	1.930	1.670	1.630	1.590
30CPQ060PBF	VISH	910-0814●	3.550	2.100	2.020	1.970	1.920
30CPQ100PBF	VISH	910-0741●	4.870	2.760	2.140	2.080	2.030
30CTQ045PBF	VISH	864-7895●	2.710	1.490	1.110	0.920	0.900
32CTQ030PBF	VISH	864-7909●	2.540	1.390	1.030	0.860	0.840
40CPQ040PBF	VISH	910-0962●	6.060	3.440	2.630	2.310	2.250
40CPQ045PBF	VISH	910-0970●	5.890	3.340	2.560	2.240	2.190
40CPQ060PBF	VISH	910-1020●	3.810	2.600	2.530	2.460	2.400
40CPQ100PBF	VISH	910-0881●	5.180	3.070	2.990	2.910	2.840
MBR745	GS	955-0046●	2.310	1.890	1.580	0.740	0.680
MBR760	GS	955-0054●	1.370	1.050	0.830	0.520	0.500
MBR1545CTPBF	VISH	865-1469●	0.840	0.740	0.580	0.470	0.400
MBR2545CT	GS	955-0038●	4.220	3.120	2.480	1.140	1.100
MBR4045PTG	ON	955-6982●	4.880	2.790	2.310	1.620	1.480
MBR745	GS	955-0046●	2.310	1.890	1.580	0.740	0.680
STPS745D	ST	980-3580●	0.970	0.700	0.500	0.430	0.330
STPS1045D	ST	980-3351●	0.800	0.600	0.490	0.380	0.330
STPS1545CT	ST	980-3386●	0.660	0.510	0.380	0.310	0.270
STPS1545D	ST	980-3394●	0.860	0.670	0.490	0.420	0.360
STPS2045CT	ST	980-3432●	0.990	0.940	0.840	0.520	0.510
STPS3045CT	ST	980-3505●	1.310	1.000	0.850	0.630	0.620
STPS12045TV	ST	980-3378●	15.180	11.510	10.680	10.390	10.130

RL Re-reeling available

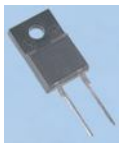
Farnell

Mftrs. List No.	Mfr.	Order Code	Price Each 1+	25+	100+	250+	1K+
STPS16045TV	ST	980-3416●	18.410	14.040	11.900	11.400	10.680
STPS24045TV	ST	980-3475●	30.040	22.740	19.330	18.540	17.560
SR10100	MC	NEW 162-5231●	1.340	0.900	0.670	0.540	0.450
SR10150	MC	NEW 162-5232●	1.530	1.020	0.770	0.610	0.510
SR1060	MC	NEW 162-5236●	1.320	0.880	0.650	0.530	0.440
SR16100	MC	NEW 162-5237●	1.640	1.090	0.820	0.650	0.550
SR16150	MC	NEW 162-5239●	1.850	1.230	0.930	0.750	0.610
SR1620	MC	NEW 162-5241●	1.470	0.980	0.730	0.590	0.490
SR1630	MC	NEW 162-5242●	1.470	0.980	0.730	0.590	0.490
SR1640	MC	NEW 162-5243●	1.470	0.980	0.730	0.590	0.490
SR1660	MC	NEW 162-5244●	1.540	1.030	0.780	0.610	0.510
			1+	25+	100+	250+	500+
MBR15100CT	MC	NEW 162-5121●	0.510	0.380	0.300	0.280	0.270
MBR1545CT	MC	NEW 162-5122●	0.430	0.320	0.250	0.230	0.220
MBR1560CT	MC	NEW 162-5124●	0.450	0.340	0.260	0.240	0.230
MBR16100	MC	NEW 162-5125●	0.550	0.420	0.320	0.310	0.290
MBR16150	MC	NEW 162-5126●	0.510	0.390	0.300	0.280	0.270
MBR1645	MC	NEW 162-5127●	0.430	0.320	0.250	0.230	0.220
MBR1660	MC	NEW 162-5128●	0.430	0.320	0.250	0.230	0.220
MBR20100CT	MC	NEW 162-5129●	0.580	0.440	0.340	0.320	0.300
MBR20150CT	MC	NEW 162-5130●	0.660	0.500	0.380	0.360	0.350
MBR20200CT	MC	NEW 162-5131●	0.750	0.560	0.430	0.410	0.390
MBR2045CT	MC	NEW 162-5132●	0.500	0.380	0.290	0.280	0.260
MBR2060CT	MC	NEW 162-5133●	0.500	0.380	0.290	0.280	0.260
MBR25100CT	MC	NEW 162-5134●	0.860	0.710	0.610	0.540	0.420
MBR2545CT	MC	NEW 162-5136●	0.750	0.610	0.530	0.460	0.360
MBR2560CT	MC	NEW 162-5137●	0.750	0.610	0.530	0.460	0.360
MBR30100CT	MC	NEW 162-5138●	1.020	0.850	0.720	0.640	0.490
MBR30100PT	MC	NEW 162-5139●	1.100	0.920	0.790	0.680	0.530
MBR3035CT	MC	NEW 162-5140●	0.750	0.610	0.530	0.460	0.360
MBR3045CT	MC	NEW 162-5141●	0.750	0.610	0.530	0.460	0.360
MBR3045PT	MC	NEW 162-5142●	1.050	0.870	0.750	0.650	0.500
MBR3050CT	MC	NEW 162-5143●	0.750	0.620	0.530	0.470	0.360
MBR3060CT	MC	NEW 162-5144●	0.750	0.620	0.530	0.470	0.360
MBR3060PT	MC	NEW 162-5145●	1.070	0.900	0.770	0.670	0.520
MBR3090CT	MC	NEW 162-5146●	1.020	0.850	0.720	0.640	0.490
MBR4035PT	MC	NEW 162-5148●	1.350	1.120	0.960	0.850	0.650
MBR4045PT	MC	NEW 162-5149●	1.380	1.150	0.990	0.870	0.660
MBR4060PT	MC	NEW 162-5150●	1.440	1.200	1.030	0.900	0.690
MBR60100PT	MC	NEW 162-5151●	2.040	1.700	1.460	1.280	0.980
MBR6035PT	MC	NEW 162-5152●	1.920	1.590	1.370	1.190	0.920
MBR6060PT	MC	NEW 162-5153●	1.940	1.610	1.390	1.210	0.930
MBR7100	MC	NEW 162-5154●	0.640	0.470	0.400	0.360	0.280
MBR7150	MC	NEW 162-5155●	0.500	0.370	0.320	0.280	0.210
MBR735	MC	NEW 162-5156●	0.470	0.340	0.300	0.260	0.197
MBR745	MC	NEW 162-5157●	0.470	0.340	0.300	0.260	0.197
MBR750	MC	NEW 162-5158●	0.490	0.360	0.310	0.280	0.210
MBR760	MC	NEW 162-5161●	0.520	0.380	0.330	0.290	0.220
MBR790	MC	NEW 162-5162●	0.590	0.440	0.370	0.330	0.250
Order Multiple=5			5+	25+	100+	250+	500+
MBR10100	MC	NEW 162-5112●	0.390	0.330	0.250	0.230	0.220
MBR10100CT	MC	NEW 162-5113●	0.390	0.330	0.250	0.230	0.220
MBR10150	MC	NEW 162-5114●	0.410	0.340	0.270	0.250	0.240
MBR10150CT	MC	NEW 162-5115●	0.430	0.350	0.270	0.260	0.240
MBR10200CT	MC	NEW 162-5116●	0.460	0.390	0.300	0.280	0.270
MBR1045	MC	NEW 162-5117●	0.390	0.290	0.220	0.210	0.198
MBR1045CT	MC	NEW 162-5118●	0.410	0.310	0.230	0.220	0.210
MBR1060	MC	NEW 162-5119●	0.390	0.290	0.220	0.210	0.198
MBR1060CT	MC	NEW 162-5120●	0.410	0.310	0.230	0.220	0.210

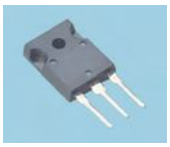
211393

Mftrs. List No.		Order Code	Price Per Reel 1+	4+	10+
40CPQ040PBF	TUBE 25	NEW 156-4005●	69.49	62.61	61.64
			1+	3+	8+
STPS12045TV	TUBE 10	NEW 156-4013●	119.98	113.98	100.71
STPS16045TV	TUBE 10	NEW 156-4014●	137.56	130.69	115.48
STPS24045TV	TUBE 10	NEW 156-4015●	204.36	194.14	– –

Isolated TO-220, TO-247



(a) ISOWATT220AC



(b) TOP3I

$I_{F(av)}$ A	V_{RRM} V	V_F V	I_F A	I_{FSM} A	Package	Mftrs. List No.
15	45	0.5	15	220	(a)	STPS1545FP
10	45	0.70	10	150	(a)	MBRF1045CT
10	60	0.80	10	150	(a)	MBRF1060CT
10	35	0.5	10	150	(a)	MBRF1035CT
2 x 15	45	0.5	15	220	(b)	STPS3045CPI

211164

Mftrs. List No.		Order Code	Price Each 1+	25+	100+	250+	1K+
STPS1545FP		995-6344●	1.76	1.02	0.79	0.53	0.52
STPS3045CPI		980-3491●	3.46	2.42	2.00	1.68	1.58
			1+	25+	100+	250+	500+
MBRF1035CT	NEW	162-5163●	0.58	0.43	0.37	0.32	0.25
MBRF1045CT	NEW	162-5164●	0.58	0.43	0.37	0.32	0.25
MBRF1060CT	NEW	162-5165●	0.58	0.43	0.37	0.32	0.25

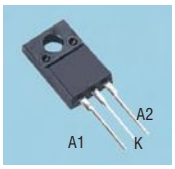
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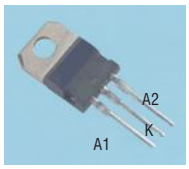
High Temperature Schottky

TAIWAN SEMICONDUCTOR

Dual Diode, Common Cathode.



ITO-220(TO-220FP)



TO-220AB

- Operating Junction Temp: 65°C to +175°C
- Plastic material used carries Underwriters Laboratory
- Classifications 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 260oC/10 seconds,0.25"(6.35mm)from case

V_{RRM} max. V	$I_{F\,av}$ max. A	Ifs max. A	V_F max.(@10A) V	Package	Mftrs. List No.
100	10	120	0.85	TO-220AB	MBR10H100CT
100	10	120	0.85	TO-220FP	MBRF10H100CT
100	10	120	0.95	D2-PAK	MBRS10H100CT
100	20	150	0.85	TO-220FP	MBRF20H100CT
100	20	150	0.85	TO-220AB	MBR20H100CT
150	10	120	0.88	TO-220AB	MBR10H150CT
150	10	120	0.97	D2-PAK	MBRS10H150CT
150	20	150	0.88	TO-220AB	MBR20H150CT
150	20	150	0.88	TO-220FP	MBRF20H150CT
150	20	150	0.88	D2-PAK	MBRS20H150CT
200	10	120	0.88	TO-220AB	MBR10H200CT
200	10	120	0.88	TO-220FP	MBRF10H200CT
200	10	120	0.97	D2-PAK	MBRS10H200CT
200	20	150	0.88	TO-220AB	MBR20H200CT
200	20	150	0.88	TO-220FP	MBRF20H200CT
200	20	150	0.88	D2-PAK	MBRS20H200CT

dV/dT = 10,000 V

496347

Mftrs. List No.	Package	Order Code	Price Each 1+	25+	100+
MBR10H150CT	TO-220AB	145-3399●	0.87	0.63	0.52
MBR10H200CT	TO-220AB	145-3400●	0.95	0.69	0.57
MBR10H100CT	TO-220AB	145-3401●	0.79	0.57	0.47
MBR20H150CT	TO-220AB	145-3402●	0.93	0.79	0.66
MBR20H200CT	TO-220AB	145-3404●	1.37	0.99	0.81
MBR20H100CT	TO-220AB	145-3405●	0.92	0.78	0.65
MBRF10H200CT	TO-220FP	145-3407●	0.98	0.71	0.59
MBRF10H100CT	TO-220FP	145-3408●	0.87	0.63	0.52
MBRF20H150CT	TO-220FP	145-3409●	1.28	0.93	0.76
MBRF20H200CT	TO-220FP	145-3410●	1.40	1.01	0.83
MBRF20H100CT	TO-220FP	145-3411●	1.10	0.81	0.66
MBRS10H100CT	D2-PAK	SMD 145-3412●	0.87	0.63	0.52
MBRS10H150CT	D2-PAK	SMD 145-3413●	0.92	0.67	0.55
MBRS10H200CT	D2-PAK	SMD 145-3414●	0.98	0.71	0.59
MBRS20H150CT	D2-PAK	SMD 145-3417●	1.24	0.90	0.73
MBRS20H200CT	D2-PAK	SMD 145-3418●	1.37	0.99	0.81

Power Modules

VISHAY



D61-8



TO-244AB

$I_{f\,(av)}$ A	V_{rrm} V	I_{fsm} A	V_f V	E_{as} mJ	Package	Mftrs. List No.
40	100	7000	0.81	15	D-61-8	83CNQ100APBF
40	45	5800	0.52	54	D-61-8	80CNQ045APBF
400	150	—	0.85	190	TO-244	409CNQ150PBF

211119

Mftrs. List No.	Order Code	Price Each 1+	25+	100+
80CNQ045APBF	910-1110●	10.40	7.15	5.67
83CNQ100APBF	910-1098●	10.46	6.93	5.49
409CNQ150PBF	NEW 129-8477●	37.56	30.31	26.64

£ € **40,000 PRICES REDUCED**

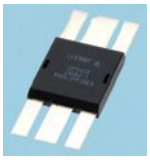
RL Re-reeling available

Power Diodes - Schottky - continued

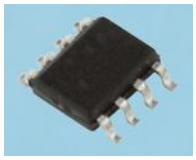
GaAs High Speed

V_{RRM}=250V

IXYS



DE-150



SOIC-8

- Extremely Fast Reverse Recovery Times, Typically <15nS
- Much lower forward Voltage than Silicon Carbide
- Isolated, low inductance, surface mount, high power package

This new line of High Speed GaAs Schottky Diodes provide extremely fast recovery times, outperforming both Ultrafast and Silicon Carbide technologies.
The recovery times and low junction capacitances combined with their inherently low forward voltages make this new product family ideal for High Frequency Converters, Resonant Converters and Switch Mode Power Supplies operating from the KHz-MHz range. The GaAs devices are packaged in the low inductance, low profile, electrically isolated, surface mount DE-150 package. The matched thermal coefficient of expansion between the aluminum nitride substrate and the GaAs Diode result in improved reliability and power cycling performance. The GaAs Schottky products have an added advantage when used in conjunction with the DE Series Switch Mode & RF Mosfets. Both products utilize the same package profiles resulting in a convenient single plane to heat sink.

I_F max. A	Configuration	V_F @ I_F = 2 A V	C_j max. A	Package	Mftrs. List No.
4	Dual	1.3	9	SOIC	GS08DI25104
10	Triple, Common Cathode	1.5	18	DE150	GS150TC_25110
10	Triple	1.5	18	DE150	GS150TI_25110

464762

Mftrs. List No.	Order Code	Price Each 1+	10+	25+
GS150TC_25110	SMD 134-7724●	15.83	14.39	13.02
GS150TI_25110	SMD 134-7725●	14.24	12.95	11.72
GS08DI25104	SMD 134-7726●	5.18	4.71	4.26

2A to 12A, Silicon Carbide

Infineon



TO-252



TO-220-2-2

Silicon Carbide (SiC) is a new material for power electronics. Its physical properties outperform Si and GaAs by far. These new Schottky diodes combine ultra-low power losses and high reliability

- Worlds first 600V Schottky diode
- Revolutionary semiconductor material - Silicon Carbide
- Switching behavior benchmark
- Negligible forward/reverse recovery times
- Negligible temperature influence on the switching behavior
- Ideal diode for Power Factor Correction up to 800W
- -55 °C to 175 °C working temperature range

V_{RRM} (V)	$I_{F(AV)}$ A	V_F @ I_F A	I_{FSM}, tp=10ms A	Package	Mftrs List No.
600	2	1.75	4.1	TO-220	SDT06S60
600	4	1.4	12.5	D-PAK	SDD04S60
600	4	1.7	12.5	TO-220	SDT04S60
600	4	1.9	32	TO-220	IDT04S60C
600	5	1.7	42	TO-220	IDT05S60C
600	6	1.7	49	TO-220	IDT06S60C
600	8	1.7	59	TO-220	IDT08S60C
600	10	1.7	84	TO-220	IDT10S60C
600	12	1.7	98	TO-220	IDT12S60C
600	12	1.5	36	TO-220	SDT12S60
600	16	1.7	118	TO-220	IDT16S60C

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
SDD04S60	SMD 109-5683● RL	6.05	4.04	3.31	– –	– –
SDT04S60	109-5685●	5.22	3.39	2.10	– –	– –
SDT06S60	109-5688●	7.14	4.62	3.28	– –	– –
SDT12S60	109-5690●	13.49	8.56	6.69	– –	– –
IDT04S60C	NEW 147-1719●	3.82	2.97	2.67	2.52	2.44
IDT05S60C	NEW 147-1720●	4.77	3.70	3.35	3.15	3.03
IDT06S60C	NEW 147-1721●	5.73	4.45	4.00	3.77	3.64
IDT08S60C	NEW 147-1722●	7.73	6.02	5.42	5.11	4.93
IDT10S60C	NEW 147-1723●	9.66	7.52	6.77	6.38	6.16
IDT12S60C	NEW 147-1724●	11.60	9.03	8.12	7.67	7.39
IDT16S60C	NEW 147-1725●	15.46	12.03	10.83	10.22	9.84

Reel of 2500 Mftrs. List No.	Order Code	Price Per Reel 1+
SDD04S60	NEW SMD 156-2279●	5,710.69

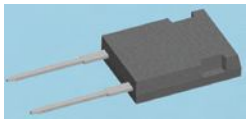
423185

Tube of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
SDT12S60	NEW 156-4004●	513.51	462.16	439.06

600V HiPerDyn Schottky

Electrically Isolated Back Surface

IXYS



ISOPLUS™247

I_F (av) A	I_{FSM} A	V_{RRM} V	V_{FM} @I_F=15A V	Mftrs. List No.
17	200	600	3.32	DSS17-06CR

Applications:
- Antiparallel diode for high frequency switching devices
- Antisaturation diode
- Snubber diode
- Freewheeling diode in convertors
- SMPS and UPS circuits
- Inductive heating

- Fully avalanche rated - for reliable operation
- Silicon Chip on Direct-Copper-Bond Substrate
- High power dissipation
- Low cathode to tab capacitance (<25pf)
- Soft recovery behaviour

453897

Mftrs. List No.	Order Code	Price Each 1+	25+	100+
DSS17-06CR	130-0073●	3.61	3.52	3.43

Single Phase Bridge Rectifiers

Notes:

1. Current ratings (I_0) for small bridge rectifiers are quoted at ambient temperature (T_a). For higher current devices, the ratings are quoted at case temperature (T_C) where it is assumed that some form of heatsink is used to maintain the case temperature.
2. Output current ratings shown relate to resistive loads. For capacitive loads derate to 80% of values shown.
3. On devices above 2.7 amps, the maximum values of I_0 dc quoted are based on the assumption that the device is mounted on a chassis or some form of heatsink.

211432

RMBx Series Bridge Rectifiers

0.5A

multicomp



New

Features:
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- Small size, simple installation

Voltage, Vrrm V	Voltage, input RMS V	Current, Ifs max A	Current, Ir max µA	Mftrs. List No.
200	140	30	0.5	RMB2S
400	280	30	0.5	RMB4S
600	420	30	0.5	RMB6S

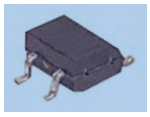
517286

Order Multiple=5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	500+	1K+
RMB2S	SMD 162-1768●	0.330	0.240	0.197	0.168	0.148
RMB4S	SMD 162-1769●	0.330	0.240	0.197	0.168	0.148
RMB6S	SMD 162-1770●	0.350	0.250	0.210	0.176	0.154

0.5A - 2A Miniature

GENERAL SEMICONDUCTOR

multicomp



- High reliability, glass passivated (MBS)
- Silver nitride passivated (S series)
- 30A pk surge rating (General Semiconductor), 35A Multicomp

211153

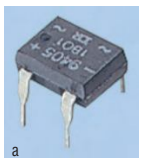
Order Multiple=5 V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Mftr.	I_0	Package	Order Code	Price Each 5+	100+	200+
50	35	W005G	SLX	1.5	WOG	133-6498●	0.450	0.320	0.250
200	140	MB2S	FCH	0.5	SOIC	SMD 122-8220●	0.340	0.240	0.175
200	140	MB2S	GS	0.5	TO-269AA	SMD 955-0003●	0.540	0.470	0.390
200	140	MBS2	MC	0.5	MBS	SMD 408-4977●	0.460	0.410	0.320
200	140	RMB2S	VISH	0.5	TO-269AA	SMD 133-6503●	0.300	0.250	0.200
400	280	MBS4	MC	0.5	MBS	SMD 408-4985●	0.470	0.420	0.330
400	280	MB4S	GS	0.5	TO-269AA	SMD 955-0011●	0.430	0.360	0.310
400	280	RMB4S	VISH	0.5	TO-269AA	SMD 133-6504●	0.310	0.270	0.220
600	420	MB6S	GS	0.5	TO-269AA	SMD 955-0020●	0.630	0.530	0.440
600	420	DFL1506S	VISH	1.5	DFS	SMD 133-6499●	0.580	0.480	0.410
600	420	MBS6	MC	0.5	MBS	SMD 408-4993●	0.530	0.460	0.370
800	560	MBS8	MC	0.5	MBS	SMD 735-5564●	0.550	0.480	0.400
800	560	DFL1508S	VISH	1.5	DFS	SMD 133-6500●	0.430	0.370	0.310
800	560	2W08G	VISH	2	WOG	133-6501●	0.490	0.410	0.350
1000	700	MBS10	MC	0.5	MBS	SMD 735-5572●	0.470	0.410	0.340
1000	700	DFL1510S	VISH	1.5	DFS	SMD 133-6495●	0.580	0.480	0.410

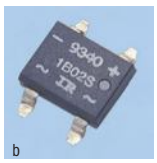
£ € 40,000 PRICES REDUCED

1A to 2A, Dual-In-Line

TAIWAN SEMICONDUCTOR

multicomp


a


b

I_0 @ 40°C A	I_{fsm} A	Mftr.	Series	Package
1	30	MC	DB(S)...	a
1	30	MC	DI10...	a
1.5	50	MC	DI15...	a
2	50	TS/MC	DBL....	a
2	50	TS/MC	DBLS....	b

450750

V_{RRM} V	Max Voltage Vac	Mftr.	Mftrs. List No.	Order Code		Price Each 5+	25+	100+	250+
Order Multiple=5									
1A series, Glass Passivated									
50	20	TS	DB101G	956-5302●		0.360	0.250	0.210	0.138
50	35	TS	DBS101G	SMD 735-5440●	RL	0.450	0.360	0.310	0.220
100	70	MC	DB102G	706-772●		0.380	0.260	0.210	0.138
100	70	TS	DBS102G	SMD 735-5459●	RL	0.460	0.380	0.320	0.240
200	140	TS	DB103G	956-5221●		0.400	0.270	0.210	0.139
200	140	TS	DBS103G	SMD 735-5467●	RL	0.470	0.400	0.320	0.240
400	280	MC	DB104G	706-796●		0.410	0.280	0.210	0.139
400	280	TS	DBS104G	SMD 735-5475●	RL	0.500	0.410	0.340	0.250
600	420	TS	DB105G	956-5310●		0.430	0.340	0.260	0.170
600	420	TS	DBS105G	SMD 735-5483●	RL	0.540	0.430	0.360	0.300
600	420	MC	DI106	938-0752●		1.070	0.660	0.480	0.340
800	560	TS	DB106G	956-5230●		0.450	0.380	0.280	0.192
800	560	TS	DBS106G	SMD 735-5491●	RL	0.570	0.450	0.390	0.310
1000	700	MC	DB107G	956-5248●		0.470	0.380	0.280	0.192
1000	700	TS	DBS107G	SMD 735-5505●	RL	0.600	0.470	0.410	0.320
						5+	**25+**	**100+**	**500+**
100	70	MC	DBL102G	NEW 162-1647●		0.270	0.195	0.162	0.139
200	140	MC	DBL103G	NEW 162-1648●		0.270	0.195	0.162	0.139
400	280	MC	DBL104G	NEW 162-1649●		0.270	0.195	0.162	0.139
600	420	MC	DBL105G	NEW 162-1650●		0.270	0.197	0.164	0.141
800	560	MC	DBL106G	NEW 162-1651●		0.270	0.197	0.164	0.141
1000	700	MC	DBL107G	NEW 162-1652●		0.270	0.197	0.164	0.141
50	35	MC	DBLS101G	NEW SMD 162-1653●		0.310	0.220	0.186	0.159
100	70	MC	DBLS102G	NEW SMD 162-1654●		0.310	0.220	0.186	0.159
200	140	MC	DBLS103G	NEW SMD 162-1655●		0.310	0.220	0.186	0.159
400	280	MC	DBLS104G	NEW SMD 162-1656●		0.310	0.220	0.186	0.159
600	420	MC	DBLS105G	NEW SMD 162-1657●		0.310	0.220	0.188	0.160
800	560	MC	DBLS106G	NEW SMD 162-1659●		0.310	0.220	0.188	0.160
1000	700	MC	DBLS107G	NEW SMD 162-1661●		0.310	0.220	0.188	0.160
1.5A series, Glass Passivated						**5+**	**100+**	**500+**	**1K+**
200	140	MC	DI152	938-0760●		0.380	0.340	0.300	0.220
1000	700	MC	DI1510	938-0779●		0.280	0.260	0.250	0.195
						5+	**25+**	**100+**	**500+**
50	35	MC	DB151G	NEW 162-1638●		0.290	0.210	0.173	0.149
100	70	MC	DB152G	NEW 162-1639●		0.290	0.210	0.173	0.149
200	140	MC	DB153G	NEW 162-1640●		0.290	0.210	0.173	0.149
400	280	MC	DB154G	NEW 162-1642●		0.290	0.210	0.173	0.149
600	420	MC	DB155G	NEW 162-1643●		0.290	0.210	0.173	0.149
800	560	MC	DB156G	NEW 162-1644●		0.300	0.210	0.179	0.153
1000	700	MC	DB157G	NEW 162-1645●		0.300	0.210	0.179	0.153
50	35	MC	DBS151G	NEW SMD 162-1662●		0.330	0.240	0.197	0.168
100	70	MC	DBS152G	NEW SMD 162-1663●		0.330	0.240	0.197	0.168
200	140	MC	DBS153G	NEW SMD 162-1664●		0.330	0.240	0.197	0.168
400	280	MC	DBS154G	NEW SMD 162-1665●		0.330	0.240	0.197	0.168
600	420	MC	DBS155G	NEW SMD 162-1666●		0.330	0.240	0.197	0.168
800	560	MC	DBS156G	NEW SMD 162-1667●		0.330	0.240	0.197	0.168
1000	700	MC	DBS157G	NEW SMD 162-1668●		0.330	0.240	0.197	0.168
Order Multiple=1									
2 A series, Glass Passivated						**1+**	**100+**	**250+**	**1K+**
200	140	TS	DBL203G	129-9294●		0.420	0.250	0.192	0.160
200	140	TS	DBLS203G	SMD 129-9298●		0.540	0.320	0.250	0.200
600	420	TS	DBL205G	129-9295●		0.440	0.260	0.195	0.165
600	420	TS	DBLS205G	SMD 129-9299●		0.590	0.350	0.270	0.220
1000	700	TS	DBL207G	129-9296●		0.590	0.350	0.270	0.220
1000	700	TS	DBLS207G	SMD 129-9301●		0.590	0.350	0.270	0.220
1400	980	TS	DBL209G	129-9297●		0.490	0.290	0.220	0.180
1400	980	TS	DBLS209G	SMD 129-9302●		0.490	0.290	0.220	0.180

DBL Series

TAIWAN SEMICONDUCTOR


DIL Package

- Single Phase Rectifier in DIL package
- 5.2mm Pitch

V_{RRM} V	I_D A	I_{FSM} A	Mftrs. List No.
200	2	50	DBL203G
600	2	50	DBL205G
1000	2	50	DBL207G
1400	2	50	DBL209G

453066

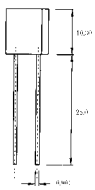
Mftrs. List No.	Order Code	Price Each 1+	100+	250+
DBL203G	129-9294●	0.420	0.250	0.192
DBL205G	129-9295●	0.440	0.260	0.195
DBL207G	129-9296●	0.590	0.350	0.270
DBL209G	129-9297●	0.490	0.290	0.220

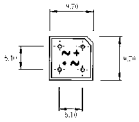
Over 480,000 products online GO

1.2A

VISHAY







I_0=1.2A dc max @ T_a=45°C
0.68A dc max @ T_a=100°C
I_{FSM}=50A

211416

V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Order Code	Price Each 1+	100+	500+
100	40	1KAB10EPBF	909-8224●	0.57	0.54	0.49
200	80	1KAB20EPBF	909-8232●	0.69	0.50	0.43
800	320	1KAB80EPBF	909-8267●	0.59	0.35	0.29
1000	400	1KAB100EPBF	909-8216●	0.93	0.60	0.46

1.5A

TAIWAN SEMICONDUCTOR

multicomp



Series	I_{FSM} A	Body H	Body Dia	Pin Spacing
AM	30	5.5	9.1	5.6
W..	40	4	9.1	5.6

211165

Order Multiple=5

V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Order Code	Price Each 5+	25+	100+	250+	500+
1.5A Series - Multicomp								
50	35	AM150	938-1422●	0.290	0.280	0.270	0.188	0.188
100	70	AM151	938-1430●	0.280	0.270	0.260	0.199	0.199
200	140	AM152	938-1449●	0.290	0.280	0.270	0.200	0.200
400	280	AM154	938-1465●	0.290	0.280	0.270	0.200	0.200
600	420	AM156	938-1473●	0.330	0.320	0.310	0.220	0.220
800	560	AM158	938-1481●	0.360	0.350	0.340	0.260	0.260
50	35	W005M	162-1771●	0.190	0.166	0.139	0.119	0.119
100	70	W01M	162-1772●	0.190	0.166	0.139	0.119	0.119
200	140	W02M	162-1773●	0.190	0.166	0.139	0.119	0.119
400	280	W04M	162-1775●	0.192	0.168	0.141	0.120	0.120
600	420	W06M	162-1776●	0.192	0.168	0.141	0.120	0.120
800	560	W08M	162-1777●	0.210	0.186	0.155	0.133	0.133
1000	700	W10M	162-1778●	0.210	0.186	0.155	0.133	0.133
1.5A Series - Taiwan Semiconductor								
50	35	W005	956-5132●	0.310	0.200	0.154	0.140	0.140
100	70	W01	727-8462●	0.340	0.220	0.164	0.151	0.151
200	140	W02	727-8470●	0.380	0.260	0.187	0.168	0.168
400	280	W04	727-8489●	0.350	0.250	0.170	0.156	0.156
600	420	W06	727-8497●	0.350	0.250	0.170	0.156	0.156
1000	700	W10	727-8519●	0.460	0.310	0.250	0.200	0.200

1.5A/2A

VISHAY



Current, I_{fs} max 50A
Current, I_r max 5μA
Operating temperature -55°C to 150°C
Temperature, Tj max 150°C

H = 5.6, W = 8.6, D = 8.84

496027

V_{RRM} V	V_{RSM} V	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
1.5A Series						
100	70	W01G	149-7575●	0.390	0.270	0.240
200	140	W02G	149-7576●	0.300	0.200	0.178
400	280	W04G	149-7577●	0.390	0.270	0.240
600	420	W06G	149-7578●	0.390	0.270	0.240
800	560	W08G	149-7579●	0.390	0.270	0.240
1000	700	W10G	149-7580●	0.390	0.270	0.240
2A Series				**1+**	**25+**	**100+**
50	35	2W005G	149-7581●	0.390	0.250	0.220
100	70	2W01G	149-7582●	0.390	0.250	0.220
200	140	2W02G	149-7584●	0.390	0.250	0.220
400	280	2W04G	149-7585●	0.390	0.250	0.220
600	420	2W06G	149-7586●	0.390	0.250	0.220
1000	700	2W10G	149-7587●	0.390	0.250	0.220

1.7A to 4A

multicomp

TAIWAN SEMICONDUCTOR

VISHAY



I_{FSM} A	Mftr.	Series	Body H	Body W	Pin Spacing
50	SKN	SKB2...L5A	15	17.5	5.1
50	VISH	2KBB...	15.5	18	5.1
50	VISH		15.5	18	5.1
60	MC/FCH		12.7	15.24	4.1

RL Re-reeling available

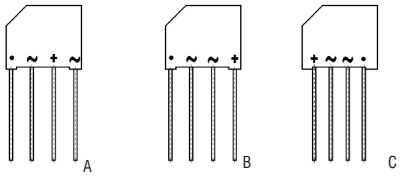
Farnell

Single Phase Bridge Rectifiers - continued

1.7A to 4A - continued

60	TS		11.68	15.24	4.1
60	VSH		15.5	18	3.1
60	MC	KBP...(G)	11.68	15.24	4.1
60	TS/MC		11.68	15.24	4.1
500	MC		15.9	19	5.1

Pin Outs

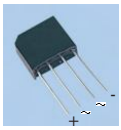


211420

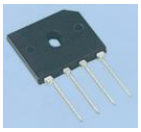
V_{RRM} V	Max. ac, Input Voltage	Mftr	Mftrs. List No.	Order Code	1+	25+	100+	250+
1.7A Series								
200	60	SKN	SKB202L5A	**940-1776**	1.05	0.78	0.63	0.51
400	125	SKN	SKB204L5A	**940-1784**	1.30	0.93	0.73	0.57
800	250	SKN	SKB208L5A	**940-1792**	1.65	1.17	0.91	0.71
1.9A Series					**1+**	**100+**	**500+**	
100	40	VSH	2KBB10RPBF	**909-8305**	0.66	0.39	0.29	
100	40	VISH	2KBB10PBF	**909-8291**	0.90	0.52	0.39	
200	80	VISH	2KBB20PBF	**909-8313**	0.73	0.43	0.39	
200	80	VSH	2KBB20RPBF	**909-8321**	0.85	0.37	0.36	
400	160	VISH	2KBB40PBF	**909-8330**	0.73	0.43	0.39	
400	160	VSH	2KBB40RPBF	**909-8348**	0.73	0.43	0.39	
600	240	VSH	2KBB60PBF	**909-8364**	0.62	0.48	0.34	
600	240	VSH	2KBB60RPBF	**909-8372**	0.85	0.44	0.43	
800	320	VSH	2KBB80RPBF	**909-8380**	0.85	0.47	0.46	
1000	400	VISH	2KBB100PBF	**909-8275**	0.76	0.52	0.39	
2A Series								
100	40	VSH	2KBP01PBF	**909-8690**	0.78	0.53	0.42	
200	140	TS	KBP203G	**727-7865**	0.69	0.38	0.26	
400	160	VSH	2KBP04PBF	**909-8712**	0.69	0.52	0.39	
600	240	VISH	2KBP06PBF	**909-8739**	0.70	0.46	0.35	
800	560	TS	KBP206G	**727-7873**	1.07	0.59	0.44	
1000	400	VISH	2KBP10PBF	**909-8682**	0.80	0.72	0.70	
					1+	**100+**	**500+**	**1K+**
50	35	MC	2KBP02M..	**938-0957**	0.42	0.36	0.31	
800	560	MC	2KBP08M	**938-0965**	0.51	0.42	0.35	
1000	700	FCH	2KBP10M	**122-8209**	0.66	0.48	0.38	– –
					1+	**25+**	**100+**	**500+**
200	140	MC	KBP203G	NEW **162-1733**	0.39	0.28	0.23	0.20
600	140	MC	KBP205G	NEW **162-1734**	0.39	0.28	0.23	0.20
1000	140	MC	KBP207G	NEW **162-1735**	0.41	0.30	0.25	0.21
					1+	**25+**	**100+**	**500+**
3A Series								
50	35	MC	KBP301G	NEW **162-1736**	0.48	0.35	0.29	0.25
200	140	MC	KBP303G	NEW **162-1738**	0.48	0.35	0.29	0.25
600	420	MC	KBP305G	NEW **162-1739**	0.48	0.35	0.29	0.25
1000	700	MC	KBP307G	NEW **162-1740**	0.53	0.38	0.32	0.28
					1+	**100+**	**500+**	**1K+**
4A Series								
100	70	MC	FL401	**938-0922**	1.09	0.67	0.49	0.35
100	70	TS	KBL402	**727-7830**	1.65	0.83	0.55	0.46
200	140	MC	FL402	**938-0930**	2.10	1.24	0.91	0.63
200	140	TS	KBL403	**727-7849**	1.20	0.68	0.48	0.33
600	420	MC	FL406	**938-0949**	1.12	0.66	0.46	0.37
600	420	TS	KBL405	**727-7857**	1.22	0.61	0.41	0.34
					1+	**25+**	**100+**	**500+**
50	35	MC	KBL401	NEW **162-1727**	0.60	0.43	0.36	0.31
200	140	MC	KBL403	NEW **162-1728**	0.60	0.43	0.36	0.31
800	560	MC	KBL406	NEW **162-1730**	0.63	0.46	0.38	0.33
1000	700	MC	KBL407	NEW **162-1731**	0.63	0.46	0.38	0.33
600	420	MC	KBL405G	NEW **162-1729**	0.57	0.41	0.34	0.30
1000	700	MC	KBL407G	NEW **162-1732**	0.66	0.47	0.40	0.34

2.0A and 8.0A

FAIRCHILD SEMICONDUCTOR



(a) 3N2... Series



(b) GBU Series

- Reliable low cost package
- High surge current rating

(a) Body H=12.7, W=15.2, D=3.9, Pin Spacing=4.1
(b) Body H=18.8, W=22.3, D=3.6, Pin Spacing=5.3

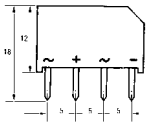
211330

V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Order Code	1+	25+	100+	250+
2.0A @ T_a = 100°C							
400	280	3N256	**101-7647**	1.26	0.72	0.56	0.33
1000	700	3N259	**101-7648**	1.24	0.72	0.56	0.33
8.0A @ T_a = 100°C							
100	70	GBU8B	**101-7702**	1.60	1.24	1.01	0.66
200	140	GBU8D	**101-7703**	1.60	1.24	1.01	0.66
600	420	GBU8J	**101-7705**	1.49	1.16	0.94	0.61
800	560	GBU8K	**101-7707**	1.43	1.12	0.90	0.59

2.5A

SEMIKRON innovation+service





H=12, W=19, D=5

I_O=2.5A @ T_a=45°C
I_{FSM}=80A @ T_{vj}=25°C

211185

V_{RRM} V	V_{RMS} V	Mftrs. List No.	Order Code	1+	50+	100+	200+
120	40	SKBB40C1500L5B	**928-7116**	1.58	1.24	1.14	0.96
400	125	SKBB80C1500L5B	**940-1903**	2.55	1.93	1.62	1.03
800	250	SKBB250C1500L5B	**940-1970**	4.13	3.14	2.67	1.68

GBLx Series Bridge Rectifiers

multicomp

4A



New

Features:

- Single Phase Bridge Rectifier
- UL Recognized File # E-96005
- Glass passivated chip junction
- Ideal for printed circuit board
- High case dielectric strength
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- High surge current capability

Voltage, Vrrm V	Current, Ir max µA	Current, Ifs max A	Time on for ISFM ms	Mftrs. List No.
100	5	150	8.3	GBL01
200	5	150	8.3	GBL02
400	5	150	8.3	GBL04
600	5	150	8.3	GBL06
800	5	150	8.3	GBL08
1000	5	150	8.3	GBL10

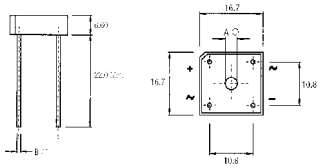
517210

Mftrs. List No.	Order Code	1+	25+	100+	500+	1K+
GBL01	**162-1669**	0.75	0.53	0.45	0.38	0.34
GBL02	**162-1670**	0.75	0.53	0.45	0.38	0.34
GBL04	**162-1672**	0.78	0.56	0.47	0.40	0.35
GBL06	**162-1673**	0.78	0.56	0.47	0.40	0.35
GBL08	**162-1674**	0.84	0.60	0.50	0.43	0.38
GBL10	**162-1675**	0.84	0.60	0.50	0.43	0.38

6A/8A

VISHAY





KBPC6 Series I_O=6.0A dc max @ T_c=50°C, 3.45A dc max @ T_c=100°C, I_{FSM}=125A
KBPC8 Series I_O=8.0A dc max @ T_c=50°C, I_{FSM}=125A

211423

V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Order Code	1+	25+	100+
6A Series						
50	20	KBPC6005PBF	**909-9140**	1.36	0.85	0.69
100	40	KBPC601PBF	**909-9115**	1.95	1.23	0.97
200	80	KBPC602PBF	**909-9123**	2.23	1.44	1.09
400	160	KBPC604PBF	**909-9131**	2.13	1.29	0.97
600	240	KBPC606PBF	**909-9158**	2.25	1.29	1.00
800	320	KBPC608PBF	**909-9166**	2.30	1.29	1.00
1000	400	KBPC610PBF	**909-9107**	2.45	1.29	1.06
8A Series						
50	20	KBPC8005PBF	**909-9212**	1.95	1.38	1.05
100	40	KBPC801PBF	**909-9182**	1.99	1.30	1.00
200	80	KBPC802PBF	**909-9190**	2.06	1.46	1.12
400	160	KBPC804PBF	**909-9204**	2.18	1.31	1.00
600	240	KBPC806PBF	**909-9220**	2.25	1.31	1.00
800	320	KBPC808PBF	**909-9239**	2.41	1.31	1.07
1000	400	KBPC810PBF	**909-9174**	1.84	1.31	1.00

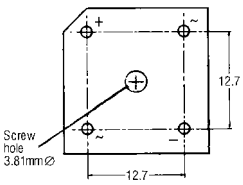
Over 480,000 products online QGO

RL Re-reeling available

Farnell

3A/6A/8A/10A





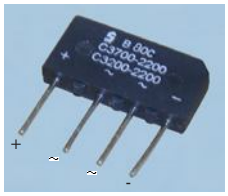
- Competitively priced
- High surge current capability
- PCB mounted/screw fixing

Series	I_O A	@	T_A °C	I_{FSM} A	Body H	Body W/D	Lead L	Lead Spacing	Lead Dia.
CP6...	6		50	125	6.86	15.75	19.1	11.3	1.01typ.
CP8...	8		50	200	7.6	19.1	19.1	12.7	1.3typ.
CP10...	10		50	200	7.6	19.1	19	12.7	1.3typ.

211227

V_{RRM}	Max. ac Input Voltage	Mftrs. List No.	Order Code	Price Each 1+	100+	500+	1K+
6A Series							
50	35	CP600	**938-1295●**	1.47	1.27	1.10	0.51
100	70	CP601	**938-1309●**	1.54	1.37	1.16	0.53
200	140	CP602	**938-1317●**	1.60	1.41	1.17	0.54
600	420	CP606	**938-1325●**	1.67	1.46	1.22	0.57
8A Series							
200	140	CP802	**938-1333●**	2.82	2.54	1.94	1.38
600	420	CP806	**938-1341●**	2.80	2.47	1.87	1.41
10A Series							
50	35	CP1000	**938-1490●**	3.56	2.94	2.17	1.51
100	70	CP1001	**938-1503●**	3.74	3.10	2.28	1.57
400	280	CP1004	**938-1511●**	4.10	3.45	2.52	1.75
600	420	CP1006	**938-1520●**	4.28	3.61	2.65	1.84
800	560	CP1008	**938-1538●**	4.55	3.78	2.75	1.93

4A

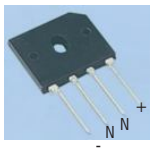


H = 17, W = 32, D =5.6

211186

V_{RRM} V	V_{RMS} V	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
160	80	B80C 3700/2200	**833-6458●**	2.83	1.94	1.69
600	250	B250C 3700/2200	**833-6466●**	3.04	2.08	1.80
800	380	B380C 3700/2200	**833-6474●**	3.59	2.43	2.13
1000	500	B500C 3700/2200	**833-6482●**	3.87	2.63	2.30

4A to 8A Glass Passivated



I_O @ 40°C A	I_{FSM} A	Series	Body H	Body W	Body D
4	150	GBU4...	18.8	22.3	3.56
6	175	GBU6...	18.8	22.3	3.56
8	200	GBU8...	18.8	22.3	3.56

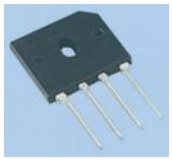
- Glass passivated for improved reliability at higher operating temperatures
- Plastic package material classified to **UL 94V-0**

342571

V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Order Code	Price Each 1+	10+	100+	500+
4A Series							
50	35	GBU401	**408-4748●**	1.21	0.95	0.72	0.52
100	70	GBU402	**408-4756●**	1.21	0.95	0.72	0.52
200	140	GBU403	**408-4764●**	1.21	0.95	0.72	0.52
600	420	GBU405	**408-4780●**	0.97	0.75	0.58	0.43
800	560	GBU406	**408-4799●**	1.24	0.97	0.76	0.59
1000	700	GBU407	**408-4802●**	1.24	0.97	0.76	0.59
6A Series							
100	70	GBU602	**408-4810●**	1.36	1.07	0.82	0.59
200	140	GBU603	**408-4829●**	1.36	1.07	0.82	0.59
400	280	GBU604	**408-4837●**	1.42	1.12	0.85	0.62
600	420	GBU605	**408-4845●**	1.42	1.12	0.85	0.62
800	560	GBU606	**408-4853●**	1.56	1.26	0.94	0.69
1000	700	GBU607	**408-4861●**	1.56	1.26	0.94	0.69
8A Series							
50	35	GBU801	**408-4870●**	0.97	0.75	0.58	0.47
100	70	GBU802	**408-4888●**	1.24	0.97	0.76	0.61
200	140	GBU803	**408-4896●**	1.01	0.80	0.62	0.50
400	280	GBU804	**408-4900●**	1.29	1.00	0.79	0.64
600	420	GBU805	**408-4918●**	1.32	1.02	0.80	0.65
800	560	GBU806	**408-4926●**	1.36	1.06	0.83	0.68

GBU1x Series Bridge Rectifiers

10A



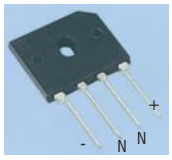
Features:
- Single Phase Bridge Rectifier
- UL Recognized File # E-96005
- Ideal for printed circuit board
- Reliable low cost construction
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500VRMS
- Surge overload rating to 200 amperes peak

Current, If av A	Voltage, Vrrm V	Mftrs. List No.	Current, If av A	Voltage, Vrrm V	Mftrs. List No.
10	50	GBU1001	10	600	GBU1005
10	100	GBU1002	10	800	GBU1006
10	200	GBU1003	10	1000	GBU1007
10	400	GBU1004			

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Mftrs. List No.	Order Code	Price Each 1+	25+	100+	500+	1K+
GBU1001	**162-1719●**	1.12	0.81	0.67	0.57	0.50
GBU1002	**162-1720●**	1.12	0.81	0.67	0.57	0.50
GBU1003	**162-1721●**	1.12	0.81	0.67	0.57	0.50
GBU1004	**162-1722●**	1.13	0.82	0.68	0.58	0.51
GBU1005	**162-1723●**	1.13	0.82	0.68	0.58	0.51
GBU1006	**162-1724●**	1.16	0.84	0.69	0.60	0.52
GBU1007	**162-1726●**	1.16	0.84	0.69	0.60	0.52

4A to 8A



I_O @ 40°C A	I_{FSM} A	Mftr.	Series	Body H	Body W	Body D
4	150	MC/TS	KBU4...(G)	19.3	23.7	7.1
4	150	VSH/MC	GBU4...	18.8	22.3	3.56
6	175	GS/MC	GBU6...	18.8	22.3	3.56
6	175	TS/MC	KBU6...(G)	19.3	23.7	7.1
8	200	VSH/MC	GBU8...	18.8	22.3	3.56
8	300	MC	KBU8...(G)	19.3	23.7	7.1

Glass passivated devices offer greater reliability at higher operating temperatures and improved moisture resistance capability. **UL** Recognised.

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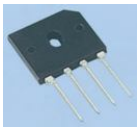
V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Mftr.	Order Code	Price Each 1+	25+	100+
4A Series							
100	70	KBU4B	MC	**938-0973●**	1.50	1.22	1.04
100	70	KBU402	TS	**727-7881●**	2.25	1.11	0.75
600	420	KBU405	TS	**727-7890●**	1.43	1.11	0.91
800	560	KBU406	TS	**727-7903●**	1.59	1.41	1.27
4A Series, Glass Passivated							
100	70	GBU4B	VSH	**954-9439●**	1.87	1.48	1.25
100	70	GBU4B	MC	**938-0981●**	1.67	1.37	1.14
200	140	GBU4D	GS	**954-9447●**	1.96	1.58	1.27
200	140	GBU4D	MC	**938-0990●**	1.82	1.47	1.18
200	140	KBU403G	MC	**162-1753●**	1.08	0.78	0.65
400	280	GBU4G.	GS	**102-1745●**	2.01	1.67	1.33
600	420	GBU4J	VSH	**954-9455●**	2.12	1.72	1.34
600	420	KBU405G	MC	**162-1754●**	1.08	0.78	0.65
800	560	GBU4K	GS	**954-9463●**	1.47	0.87	0.86
800	560	GBU4K	MC	**938-1023●**	0.83	0.71	0.70
1000	700	GBU4M	VSH	**954-9471●**	2.72	2.19	1.76
1000	700	KBU407G	MC	**162-1755●**	1.08	0.78	0.65
6A Series							
200	140	KBU6D	MC	**938-1040●**	1.74	1.43	1.14
200	140	KBU603	TS	**727-7911●**	1.73	1.16	1.05
6A Series, Glass Passivated							
100	70	GBU6B	GS	**954-9480●**	2.69	2.14	1.69
100	70	GBU6B	MC	**938-1031●**	2.22	1.84	1.49
200	140	GBU6D	VSH	**954-9498●**	2.97	2.35	1.89
200	140	KBU603G	MC	**162-1756●**	1.15	0.84	0.69
600	420	GBU6J..	GS	**954-9501●**	2.64	2.07	1.58
600	420	GBU6J	MC	**938-1058●**	2.14	1.75	1.42
600	420	KBU605G	MC	**162-1757●**	1.15	0.84	0.69
800	560	GBU6K	VSH	**954-9510●**	3.75	2.91	2.26
1000	700	KBU607G	MC	**162-1758●**	1.18	0.86	0.71
8A Series							
100	70	KBU802	MC	**162-1759●**	1.28	0.92	0.77
200	140	KBU803	MC	**162-1760●**	1.28	0.92	0.77
600	420	KBU805	MC	**162-1763●**	1.28	0.92	0.77
800	560	KBU806	MC	**162-1765●**	1.30	0.94	0.78
1000	700	KBU807	MC	**162-1766●**	1.30	0.94	0.78
8A Series, Glass Passivated							
50	35	GBU8A	VSH	**954-9528●**	2.89	2.37	1.76
200	140	KBU803G	MC	**162-1761●**	1.41	1.01	0.85
600	420	KBU805G	MC	**162-1764●**	1.48	1.06	0.89
1000	700	KBU807G	MC	**162-1767●**	1.66	1.19	1.00
100	70	GBU8B	MC	**938-1066●**	2.54	2.07	1.65
200	140	GBU8D	GS	**954-9536●**	3.35	2.64	2.18
400	280	GBU8G	VSH	**954-9544●**	3.59	2.82	2.19
800	560	GBU8K	GS	**954-9552●**	4.57	3.67	3.03

RL Re-reeling available

Single Phase Bridge Rectifiers - continued

6A, 15A, 25A In-Line Bridge Rectifiers

VISHAY



GSIB-5S

- Reliable, glass passivation
- 1500V_{rms} case dielectric strength
- **UL94V-0** rated

Body H=20, W=30, D=4.6 Lead pitch=7.5 x 7.5 x 10

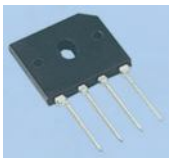
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V_{RRM} V	Max. ac I Voltage	Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
6.0A @ T_c = 100°C								
200	140	GSIB620	**954-9803●**	1.16	0.88	0.73	0.64	0.58
400	280	GSIB640	**954-9811●**	1.18	0.84	0.74	0.65	0.59
600	420	GSIB660	**954-9820●**	1.22	0.86	0.76	0.66	0.60
800	560	GSIB680	**954-9838●**	1.22	0.87	0.76	0.65	0.59
15.0A @ T_c = 107°C								
200	140	GSIB1520	**954-9684●**	1.70	1.21	1.08	0.70	0.64
400	280	GSIB1540	**954-9692●**	1.77	1.34	1.18	0.75	0.70
600	420	GSIB1560	**954-9706●**	1.80	1.30	1.13	0.74	0.66
800	560	GSIB1580	**954-9714●**	1.85	1.33	1.15	0.76	0.67
25.0A @ T_c = 98°C								
200	140	GSIB2520	**954-9722●**	2.15	1.62	1.42	0.99	0.86
400	280	GSIB2540	**954-9730●**	2.08	1.49	1.32	0.87	0.74
600	420	GSIB2560	**954-9749●**	2.05	1.46	1.29	0.84	0.73
800	560	GSIB2580	**954-9757●**	2.19	1.56	1.38	0.90	0.79

KBU1x(G) Series Bridge Rectifiers

multicomp

10A



New

KBU1001 - KBU1007 Features:

- Single Phase Bridge Rectifier
- UL Recognized File # E-96005
- High surge current capability
- Ideal for printed circuit board
- Weight: 8 grams
- Reliable low cost construction technique results in inexpensive product

KBU1001G - KBU1007G Features:

- Single Phase Bridge Rectifier
- UL Recognized File # E-96005
- Glass passivated junction
- Ideal for printed circuit board
- Reliable low cost construction
- Surge overload rating to 200 amperes peak
- Weight: 0. 3 ounce, 8.0 grams
- Mounting torque: 5 in. lb. Max.

Voltage, Vrrm V	Current, If av A	Mftrs. List No.	Voltage, Vrrm V	Current, If av A	Mftrs. List No.
50	10	KBU1001	800	10	KBU1006
100	10	KBU1002	1000	10	KBU1007
200	10	KBU1003	200	10	KBU1003G
400	10	KBU1004	600	10	KBU1005G
600	10	KBU1005	1000	10	KBU1007G

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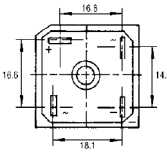
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	500+	1K+
KBU1001	**162-1741●**	1.47	1.06	0.88	0.76	0.66
KBU1002	**162-1742●**	1.51	1.09	0.91	0.78	0.68
KBU1003	**162-1743●**	1.51	1.09	0.91	0.78	0.68
KBU1004	**162-1745●**	1.56	1.12	0.94	0.81	0.70
KBU1005	**162-1746●**	1.56	1.12	0.94	0.81	0.70
KBU1006	**162-1748●**	1.61	1.16	0.97	0.83	0.72
KBU1007	**162-1751●**	1.65	1.19	0.99	0.85	0.75
KBU1003G	**162-1744●**	1.78	1.28	1.06	0.91	0.80
KBU1005G	**162-1747●**	1.83	1.32	1.09	0.94	0.82
KBU1007G	**162-1752●**	1.92	1.38	1.15	0.99	0.87

12A/25A/35A/50A Glass Passivated

FAIRCHILD SEMICONDUCTOR

GENERAL SEMICONDUCTOR





I_0 @ 55°C A	I_{FSM} A	Mftr.	Series
12	200	VSH	GBPC12...
25	300	FCH/GS/MC/VISH	GBPC25...
35	400	GS/VISH	GBPC35...
35	475	VISH	GBPC35...A
50	400	MC	GBPC50...

Body H=7.62 (GS), 11.1 (MC), W=28.8, D=28.8
Mounting hole=5.6 dia., Terminals=6.3 x 0.8

The glass passivation process offers improvements to reliability at high operating temperatures, moisture resistance capability and overall durability. Temperature range -50°C to +150°C, **UL** Recognised.

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V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Order Code	Price Each 1+	25+	100+	1K+
12A Series							
50	35	GBPC12005	**954-9331●**	4.45	3.46	2.65	1.35
200	140	GBPC1202	**954-9340●**	4.48	3.47	2.67	1.37
400	280	GBPC1204	**954-9358●**	4.74	3.68	2.82	1.30
25A Series							
50	35	GBPC25-005 (GS)	**954-9366●**	3.40	2.66	2.13	1.46
100	70	GBPC25-01 (GS)	**954-9374●**	5.26	4.46	3.36	1.54
200	140	GBPC25-02 (GS)	**954-9382●**	2.80	2.38	2.05	1.54
200	140	GBPC2502 (FCH)	**101-7699●**	1.82	1.25	0.89	0.83
400	280	GBPC25-04 (GS)	**954-9390●**	3.31	2.67	2.02	1.28
400	280	GBPC2504 (FCH)	**101-7700●**	3.35	2.61	1.91	1.32
600	420	GBPC25-06 (GS)	**954-9404●**	4.20	3.38	2.83	1.69
600	420	GBPC2506A	**909-8623●**	3.29	1.87	1.43	1.25
800	560	GBPC2508APBF	**909-8658●**	3.83	2.69	1.94	1.76
1000	700	GBPC2510A	**909-8453●**	2.62	2.12	1.60	1.18
1200	840	GBPC2512APBF	**909-8496●**	3.31	2.48	1.87	1.40
35A Series							
200	140	GBPC3502 (GS)	**954-9412●**	4.74	3.66	2.99	1.69
200	140	GBPC3502 (FCH)	**984-3590●**	3.61	2.82	2.06	1.42
200	140	GBPC3502APBF	**909-8852●**	3.56	2.03	1.55	1.36
400	280	GBPC3504APBF	**909-8941●**	3.24	1.84	1.41	1.23
600	420	GBPC3506APBF	**909-8968●**	3.02	2.14	1.61	1.21
800	560	GBPC3508APBF	**909-8992●**	4.08	2.86	2.08	1.86
1000	700	GBPC3510A	**909-8755●**	3.63	2.06	1.58	1.38
1200	840	GBPC3512APBF	**909-8798●**	3.71	2.11	1.61	1.33
50A Series							
50	35	GBPC50005	**956-5159●**	6.76	5.35	4.41	3.18
200	140	GBPC5002	**956-5167●**	9.69	7.66	6.31	4.57
600	420	GBPC5006	**956-5175●**	9.99	7.89	6.52	4.70
1000	700	GBPC5010	**162-1718●**	4.25	3.54	3.04	2.66

NOTE:On devices above 2.7 amps, the maximum values of I_0 dc quoted are based on the assumption that the device is mounted on a chassis or some form of heatsink.

GBPC15,25,35 Series Bridge Rectifiers

multicomp

15A, 25A, 35A, 50A



New

Features:

- Single Phase Bridge Rectifier
- UL Recognized file # E-96005
- The plastic material used carries Underwriters Laboratory Flammability Recognition 94V-0
- Integrally molded heatsink provide very low thermal resistance for maximum heat dissipation
- Surge overload ratings from 300 amperes to 400 amperes
- Terminals solderable per MIL-STD-202, Method 208 (For wire type)
- Isolated voltage from case to lead over 2500 volts

Current, If av A	Voltage, Vrrm V	Mftrs. List No.	Current, If av A	Voltage, Vrrm V	Mftrs. List No.
15	50	GBPC15005	35	100	GBPC3501
15	100	GBPC1501	35	400	GBPC3504
15	200	GBPC1502	35	600	GBPC3506
15	400	GBPC1504	35	800	GBPC3508
15	600	GBPC1506	35	1000	GBPC3510
15	800	GBPC1508	50	100	GBPC5001
15	1000	GBPC1510	50	400	GBPC5004
25	1000	GBPC2510	50	800	GBPC5008
35	50	GBPC35005B0	50	1000	GBPC5010

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Mftrs. List No.	Order Code	Price Each 1+	10+	100+	250+	500+
GBPC15005	**162-1676●**	1.93	1.73	1.37	1.31	0.97
GBPC1501	**162-1678●**	1.93	1.73	1.37	1.31	0.97
GBPC1502	**162-1680●**	1.93	1.73	1.37	1.31	0.97
GBPC1504	**162-1682●**	1.93	1.73	1.37	1.31	0.97
GBPC1506	**162-1685●**	1.93	1.74	1.38	1.31	0.97
GBPC1508	**162-1687●**	2.00	1.80	1.42	1.35	1.00
GBPC1510	**162-1689●**	2.08	1.88	1.48	1.41	1.04
GBPC2510	**162-1698●**	2.37	1.97	1.68	1.48	1.13
GBPC35005B0	**162-1700●**	2.28	1.90	1.62	1.43	1.09
GBPC3501	**162-1703●**	2.29	1.91	1.63	1.43	1.10
GBPC3504	**162-1706●**	2.31	1.93	1.65	1.44	1.11
GBPC3506	**162-1708●**	2.31	1.93	1.65	1.44	1.11
GBPC3508	**162-1710●**	2.34	1.95	1.67	1.46	1.12
GBPC3510	**162-1712●**	2.45	2.04	1.74	1.53	1.17
GBPC5001	**162-1715●**	3.44	2.87	2.45	2.14	1.65
GBPC5004	**162-1716●**	3.71	3.09	2.65	2.32	1.79
GBPC5008	**162-1717●**	3.99	3.33	2.85	2.49	1.92
GBPC5010	**162-1718●**	4.25	3.54	3.04	2.66	2.04

GBPC15,25,35xW Series Bridge Rectifiers

multicomp

15A, 25A, 35A



New

Features:

- Single Phase Bridge Rectifier
- UL Recognized file # E-96005
- The plastic material used carries Underwriters Laboratory Flammability Recognition 94V-0
- Integrally molded heatsink provide very low thermal resistance for maximum heat dissipation
- Surge overload ratings from 300 amperes to 400 amperes
- Terminals solderable per MIL-STD-202, Method 208 (For wire type)
- Isolated voltage from case to lead over 2500 volts

RL Re-reeling available

Farnell

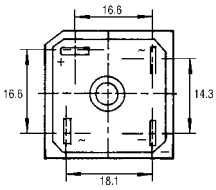
Current, If av A	Voltage, Vrrm V	Mftrs. List No.	Current, If av A	Voltage, Vrrm V	Mftrs. List No.
15	50	GBPC15005W	25	100	GBPC2501
15	100	GBPC1501W	25	200	GBPC2502
15	200	GBPC1502W	25	400	GBPC2504
15	400	GBPC1504W	25	600	GBPC2506
15	600	GBPC1506W	25	800	GBPC2508
15	800	GBPC1508W	35	50	GBPC35005W
15	1000	GBPC1510W	35	100	GBPC3501W
25	50	GBPC25005W	35	200	GBPC3502W
25	100	GBPC2501W	35	400	GBPC3504W
25	200	GBPC2502W	35	600	GBPC3506W
25	400	GBPC2504W	35	800	GBPC3508W
25	600	GBPC2506W	35	1000	GBPC3510W
25	800	GBPC2508W	35	200	GBPC3502
25	1000	GBPC2510W	35	400	GBPC3504
25	50	GBPC25005			

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Mftrs. List No.	Order Code	Price Each 1+	10+	100+	250+	500+
GBPC15005W	**162-1677●**	1.93	1.73	1.37	1.31	0.97
GBPC1501W	**162-1679●**	1.93	1.73	1.37	1.31	0.97
GBPC1502W	**162-1681●**	1.93	1.73	1.37	1.31	0.97
GBPC1504W	**162-1684●**	1.93	1.73	1.37	1.31	0.97
GBPC1506W	**162-1686●**	1.93	1.74	1.38	1.31	0.97
GBPC1508W	**162-1688●**	2.00	1.80	1.42	1.35	1.00
GBPC1510W	**162-1690●**	2.08	1.88	1.48	1.41	1.04
GBPC25005W	**162-1691●**	2.08	1.73	1.49	1.31	1.00
GBPC2501W	**162-1692●**	2.11	1.77	1.51	1.32	1.02
GBPC2502W	**162-1693●**	2.11	1.77	1.51	1.32	1.02
GBPC2504W	**162-1694●**	2.17	1.81	1.55	1.36	1.04
GBPC2506W	**162-1696●**	2.17	1.81	1.55	1.36	1.04
GBPC2508W	**162-1697●**	2.22	1.86	1.59	1.39	1.07
GBPC2510W	**162-1699●**	2.37	1.97	1.68	1.48	1.13
GBPC35005W	**162-1702●**	2.28	1.90	1.62	1.43	1.09
GBPC3501W	**162-1704●**	2.29	1.91	1.63	1.43	1.10
GBPC3502W	**162-1705●**	2.29	1.91	1.63	1.43	1.10
GBPC3504W	**162-1707●**	2.31	1.93	1.65	1.44	1.11
GBPC3506W	**162-1709●**	2.31	1.93	1.65	1.44	1.11
GBPC3508W	**162-1711●**	2.34	1.95	1.67	1.46	1.12
GBPC3510W	**162-1714●**	2.45	2.04	1.74	1.53	1.17
		1+	**25+**	**100+**	**1K+**	**+**
GBPC25005	**408-4675●**	2.38	1.92	1.44	1.41	– –
GBPC2501	**408-4683●**	2.42	1.95	1.46	1.43	– –
GBPC2502	**408-4691●**	2.46	1.98	1.49	1.45	– –
GBPC2504	**408-4705●**	2.50	2.01	1.51	1.47	– –
GBPC2506	**408-4713●**	2.55	2.05	1.53	1.50	– –
GBPC2508	**408-4721●**	2.60	2.08	1.55	1.52	– –
GBPC3502	**408-4730●**	2.59	2.08	1.55	1.52	– –
GBPC3504	**101-7701●**	3.74	2.92	2.13	1.47	– –

15A/25A/35A/40A/50A





I_0 = 15A @ T_C = 55°C I_{FSM} = 300A
I_0 = 25A @ T_C = 55°C I_{FSM} = 300A
I_0 = 35A @ T_C = 55°C I_{FSM} = 400A
I_0 = 40A @ T_C = 55°C I_{FSM} = 500A
I_0 = 50A @ T_C = 55°C I_{FSM} = 500A

Operating temp. -55°C to +150°C

H (inc. tabs)=25.4, W/D=28.7,
Mounting hole=4.9 dia., Terminals=6.3 x 0.8 fast on

211118

V_{RRM} V	Max. ac Input Voltage	Order Code	Price Each 1+	10+	100+	500+	1K+
15A Series							
50	35	**938-1090●**	3.26	2.68	2.38	1.47	1.26
100	70	**938-1104●**	4.16	3.04	2.42	1.50	1.29
200	140	**938-1120●**	3.49	2.91	2.74	1.55	1.34
400	280	**938-1139●**	3.82	3.21	2.83	1.55	1.34
600	420	**938-1147●**	3.93	3.48	3.13	1.61	1.41
800	500	**938-1155●**	4.17	3.65	3.27	1.64	1.42
25A Series							
50	35	**938-1163●**	4.20	3.13	2.46	1.55	1.34
100	70	**938-1171●**	4.28	3.17	2.53	1.59	1.38
200	140	**938-1198●**	4.69	3.45	2.74	1.71	1.49
400	280	**938-1201●**	3.49	2.58	2.06	1.28	1.12
600	420	**938-1210●**	4.60	3.35	2.65	1.69	1.48
800	500	**938-1228●**	4.66	3.44	2.71	1.69	1.48
1000	800	**938-1180●**	5.11	3.75	2.99	1.86	1.57
35A Series			**1+**	**10+**	**100+**	**500+**	**1K+**
100	70	**938-1236●**	4.62	3.37	2.70	1.81	1.62
200	140	**938-1252●**	3.53	2.60	2.05	1.36	1.25
400	280	**938-1260●**	4.87	3.58	2.83	1.89	1.74
600	420	**938-1279●**	4.97	3.62	2.83	1.98	1.79
800	500	**938-1287●**	5.02	3.63	2.79	2.00	1.75
1000	800	**938-1244●**	5.22	3.73	2.86	2.02	1.79
40A Series			**1+**	**25+**	**100+**	**1K+**	
200	140	**938-0817●**	7.41	5.86	4.84	3.49	
600	420	**938-0825●**	7.64	6.05	4.99	3.60	
1000	800	**938-0841●**	8.13	6.40	5.30	3.83	
50A Series							
50	35	**938-0850●**	10.01	7.90	6.53	4.72	
200	140	**938-0868●**	11.11	8.79	7.27	5.25	
600	420	**938-0876●**	10.72	8.44	6.98	5.06	
1000	800	**938-0884●**	12.24	9.67	7.98	5.78	

17A





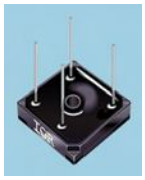
I_0=17A @ T_a=45°C (0.75°C/W heatsink)
6.6A @ T_a=50°C (5°C/W heatsink)
I_{FSM}=320A

H=10, W=28, D=28
Mounting hole=5.2 dia, Terminals=6.3 x 0.8

211050

V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
200	80	SKB2502	**940-1806●**	8.06	5.88	4.63
800	320	SKB2508	**940-1814●**	9.81	7.35	5.88
1200	380	SKB2512	**940-1822●**	13.69	9.97	7.84

25A and 35A, Wire Leaded



- High thermal conductivity package
- Electrically insulated case to 2.7kV
- Glass passivated diode chips
- **UL** Recognised

I_0 dc @ T_c A	°C	I_{FSM} @ 50Hz A	$R_{th(J-C)}$ (per leg) °C/W	Series
25	60	400	1.7	GBPC25...
35	55	475	1.4	GBPC35...

Mounting hole=5.3 dia.

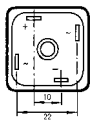
Body: H=7.5, W=28.5, D=28.5 Lead: L=24.5, Dia.=1.02

234583

V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
25A Series						
600	420	GBPC2506W	**909-8631●**	2.71	1.93	1.46
800	560	GBPC2508WPBF	**909-8666●**	2.83	2.00	1.52
1000	700	GBPC2510WPBF	**909-8461●**	1.83	1.53	1.14
35A Series						
400	280	GBPC3504WPBF	**909-8925●**	2.91	2.06	1.56
600	420	GBPC3506WPBF	**909-8976●**	3.05	2.17	1.63
800	560	GBPC3508WPBF	**909-9000●**	2.97	2.12	1.60
1000	700	GBPC3510WPBF	**909-8763●**	2.68	2.17	1.63
1200	840	GBPC3512WPBF	**909-8801●**	3.18	2.55	1.93

25A/35A





I_0 dc @ T_c A	°C	I_{FSM} @ 50Hz A	Mftrs. List No.
25	65	400	26MB...
35	60	475	36MB...

H=10.5, W=29, D=29

Mounting hole=5.1 dia, Terminals=6.3 x 0.8

211051

V_{RRM} V	Max. ac Input Voltage	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
25A Series						
50	35	26MB05APBF	**909-8615●**	5.97	3.39	2.59
100	70	26MB10APBF	**909-8488●**	4.96	3.52	2.66
200	140	26MB20APBF	**909-8526●**	4.96	3.52	2.66
400	280	26MB40APBF	**909-8607●**	4.96	3.52	2.66
600	420	26MB60APBF	**909-8640●**	4.96	3.52	2.66
800	560	26MB80APBF	**909-8674●**	4.96	3.52	2.66
1000	700	26MB100APBF	**909-8470●**	5.07	3.77	2.71
1200	840	26MB120APBF	**909-8500●**	6.10	4.89	3.50
1600	1130	26MB160APBF	**909-8518●**	6.88	5.54	4.18
35A Series						
50	35	36MB05APBF	**909-8950●**	3.28	2.75	2.00
100	70	36MB10APBF	**909-8780●**	5.07	3.59	2.71
200	140	36MB20APBF	**909-8844●**	5.07	3.59	2.71
400	280	36MB40APBF	**909-8933●**	5.07	3.59	2.72
600	420	36MB60APBF	**909-8984●**	5.07	3.59	2.71
800	560	36MB80APBF	**909-9018●**	5.32	3.78	2.86
1000	700	36MB100APBF	**909-8771●**	5.22	3.96	2.84
1200	840	36MB120APBF	**909-8810●**	5.22	3.90	3.09
1400	980	36MB140APBF	**909-8828●**	6.88	5.77	4.22
1600	1130	36MB160APBF	**909-8836●**	6.70	5.54	4.12

30A/50A



- Isolated metal case
- High surge current
- M4 x 2 mounting points
- **UL** recognised

A: H=24, W=45, D=45

I_0 = 30A dc @ T_C = 94°C I_{FSM} =370A @ T_{vj} = 25°C

RL Re-reeling available

Single Phase Bridge Rectifiers - continued

30A/50A - continued

211195

I_0 (A)	V_{RRM} (V)	Package	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
30	800	A	SKB30/08A1	**940-1938**	32.30	25.86	21.56
30	1200	A	SKB30/12	**940-1873**	26.42	21.23	17.99

40A

IXYS



- Planar passivated chips
- Easy to mount
- Low forward voltage drop (less than 1.15V)

H=12.2, W=38, D=25.4

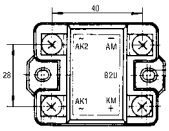
419518

V_{RRM} V	V_{RMS} V	Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+
800	250	VBO 40-08NO6	**108-0116**	8.79	7.63	5.86	– –
1200	400	VBO 40-12NO6	**108-0117**	11.11	9.63	7.42	– –

60A

SEMIKRON innovation+service





H=34, W=65, D=48
Mounting holes=5.3,
Fixing Centres=49

I_0 = 67A dc max @ T_C = 85°C
I_{FSM} = 1000A @ T_{vj} = 25°C

Current ratings (I_0) @ 45°C for the following heatsinks:
175-647 = 30A, 175-648 = 35A, 170-753 = 55A

211091

Mftrs. List No.	V_{RRM} V	Order Code	Price Each 1+	25+	100+
SKB6008	800	**928-6977**	69.37	53.52	43.58
SKB6012	1200	**928-6985**	69.37	57.21	48.69

105A to 125A

IXYS



V_{rrm} V	V_{rms} V	I_d (av) A	@	T_c °C	I_{FSM} A	Mftrs.List No.
1200	400	105		85	1500	VBO105-12NO7
1200	400	125		85	1800	VBO125-12NO7

H=31 (excl. terminals), W=67, D=50
Mounting holes=5.5, fixing centres=50

211353

Mftrs. List No.	Order Code	Price Each 1+	5+	10+
VBO105-12NO7	**935-9494**	48.70	42.22	32.51
VBO125-12NO7	**935-9591**	49.89	43.25	33.31

Three Phase Bridge Rectifiers

20A/25A/35A





H=10, W=28.5, D=28.5
Mounting hole=5.2 dia, Terminals=6.3 x 0.8

SKD Series
I_0 = 20A dc max @ T_c=73°C
I_{FSM} = 320A

26MT Series
I_0 = 25A dc max @ T_c=60°C
I_{FSM}=330A

36MT Series
I_0 = 35A dc max @ T_c=60°C
I_{FSM}=475A

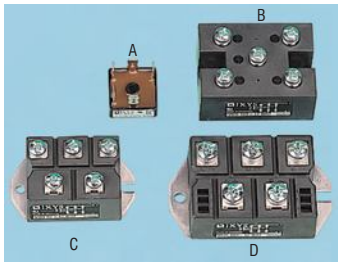
211061

I_0 A	V_{RRM} V	Mftr.	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
20	800	SKN	SKD2508	**940-1830**	22.44	15.53	11.86
25	100	VISH	26MT10PBF	**909-8569**	7.00	5.87	4.28
25	600	VISH	26MT60PBF	**909-8585**	11.01	6.63	5.10
25	800	VISH	26MT80PBF	**909-8542**	7.00	5.64	4.26
25	1000	VISH	26MT100PBF	**909-8550**	11.02	9.25	6.75
25	1200	VISH	26MT120PBF	**909-8593**	8.79	7.05	5.04
25	1600	VISH	26MT160PBF	**909-8534**	11.53	9.28	7.02
35	400	VISH	36MT40PBF	**909-8860**	9.40	7.58	5.72
35	600	VISH	36MT60PBF	**909-8909**	11.20	7.96	6.01
35	800	VISH	36MT80PBF	**909-8887**	13.14	8.70	6.89
35	1200	VISH	36MT120PBF	**909-8917**	11.63	9.23	6.57
35	1400	VISH	36MT140PBF	**909-8895**	11.99	9.88	7.32
35	1600	VISH	36MT160PBF	**909-8879**	11.75	8.34	6.30

25A to 186A

IXYS

B6U Configuration



A: H=10 (excl. terminals),W/D=28.5, Mounting holes=5.2 dia.
B: H=31 (excl. terminals),W=67, D=50 Mounting holes=5.5 dia.,fixing centres=50
C: H=30 (excl. terminals), W=72, D=42 Mounting holes=5.3 dia., fixing centres=60
D: H=30 (excl. terminals), W=94, D=54 Mounting holes=6.5 dia., fixing centres=80

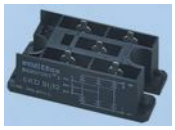
$I_{f\ (av)}$ A	@	T_c °C	V_{rr} V	V_{rms} V	I_{FSM} A	Package	Mftrs. List No.
35		62	1200	400	550	A	VUO36-12NO8
63		110	1200	400	550	C	VUO62-12NO7
88		110	1200	400	750	C	VUO82-12NO7
127		110	1200	400	1200	D	VUO110-12NO7
160		85	1200	400	1500	B	VUO105-12NO7
175		110	1200	400	1800	D	VUO160-12NO7

211354

Mftrs. List No.	Order Code	Price Each 1+	5+	25+
VUO36-12NO8	**935-9486**	11.69	10.13	7.80
VUO62-12NO7	**935-9443**	32.53	28.19	21.71
VUO82-12NO7	**935-9460**	38.26	33.15	25.54
VUO105-12NO7	**935-9613**	55.84	48.41	38.10
VUO110-12NO7	**935-9605**	58.53	50.75	39.06
VUO160-12NO7	**935-9478**	70.55	61.17	46.06

30A

SEMIKRON innovation+service



- Isolated metal base plate
- Fast-on terminals, solder tips
- High surge current rating
- Suitable for wave soldering
- M5 x 2 mounting points

H=23.5, W=63, D=32

I_0=30A @ T_C = 100°C I_{FSM}=370A @ T_{vj} = 25°C

211197

V_{RRM}(V)	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
800	SKD31/08	**940-1890**	52.66	36.05	26.03
1200	SKD31/12	**940-1954**	63.38	43.65	31.19

High Power, High Surge

SEMIKRON innovation+service



SemiPont-3, L=72, W=42, D=30, 60mm hole fixings(M5)



Semipont-2, L=65, W=48, D=35.5 (see datasheet for hole fixings)



SemiPont-4, L=94 W=54, D=30, 80mm hole fixings(M6)



SemiUnk, L=63.5, W=29.5, D=17

498133

Mftrs. List No.	V_{RRM} (V)	I_D (A)	I_{FSM} (A)	Order Code	Price Each 1+	5+	25+	+
2 Phase - SemiPont 3								
SKB52/08	800	60	500	**145-5750**	47.81	42.64	39.64	– –
3 Phase - SemiPont 3								
SKD62/16	1600	86	500	**145-5751**	53.06	47.31	43.99	– –
SKD62/08	800	86	500	**145-5752**	46.78	38.62	32.21	– –
3 Phase - SemiPont-2								
SKD100/16	1600	110	1150	**146-7131**	104.65	81.39	73.25	– –
3 Phase - SemiPont-4								
SKD210/16	1600	207	2000	**146-7132**	97.68	75.98	68.38	– –
3 Phase - SemiUnk								
SKD53/16	1600	53	370	**146-7133**	46.64	36.27	32.64	– –

3-Phase Bridge Rectifier + 3-Phase Bridge Inverter

Semitop 3

SEMIKRON innovation+service

New



Features:
- Compact Design
- One screw mounting
- Heat transfer and isolation through direct copper
- Ultrafast NPT technology IGBT
- CAL technology FWD
- Integrated NTC temperature sensor

SEMITOP 3 - H=55, W=31, D=15.43

RL Re-reeling available

Farnell

Configuration	V_{CEsat} @ 25°C V	I_F A	V_{RRM} A	I_{TSM} @ 25°C, 10 ms A	Mftrs. list No.
Thyristor/Diode Module	2	25	800	220	SK9DGD065ET
Thyristor/Diode Module	1.8	35	800	370	SK25DGD065ET

518903

Mftrs. List No.	Order Code	Price Each 1+	5+	25+
SK9DGD065ET	**163-1609●**	21.11	19.19	18.20
SK25DGD065ET	**163-1610●**	29.03	26.39	25.03

3-Phase Bridge Rectifier + Brake Chopper + 3-Phase Bridge Inverter

Semitop 3 & 4

SEMIKRON innovation+service

New



SEMITOP 3 - H=55, W=31, D=15.43

Features:
- Compact Design
- One screw mounting
- Heat transfer and isolation through direct copper
- Ultrafast NPT technology IGBT
- CAL technology FWD
- Integrated NTC temperature sensor



SEMITOP 4 H=55, W=60.25, D=15.8

Features:
- One screw mounting module
- Fully compatible with Semitop 1,2,3
- Improved thermal performances by aluminium oxide substrate
- Trech IGBT technology
- CAL technology free-wheeling diode
- Integrated NTC temperature sensor

Configuration	I_C A	V_{CEsat} @ 25°C V	I_F A	V_{RRM} A	I_{FSM} @ 25°C, 10 ms A	Mftrs. list No.
Thyristor/Diode Module	81	1.45	58	800	700	SK75DGDL066T
Thyristor/Diode Module	38	1.45	32	800	700	SK30DGDL066ET

518909

Mftrs. List No.	Package	Order Code	Price Each 1+	5+	25+
SK75DGDL066T	Semitop 4	**163-1611●**	66.00	60.00	56.89
SK30DGDL066ET	Semitop 3	**163-1612●**	35.36	32.15	30.48

30A/50A

SEMIKRON innovation+service





- Isolated metal case
- High surge current
- M4 x 2 mounting points

H=30, W=71, D=60

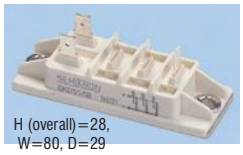
I_0=30A dc @ T_a=98°C I_{FSM}=370A @ T_{vj}=25°C
I_0=50A dc @ T_c=92°C I_{FSM}=750A @ T_{vj}=25°C

211191

I_0 A	V_{RRM} (V)	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
30	1200	SKD30/12A1	**940-1989●**	47.52	40.19	35.05
30	1600	SKD30/16A1	**109-5595●**	17.35	14.68	12.78
15	1600	DBI 15-16	**109-5591●**	8.90	6.47	5.74
25	1400	DBI 25-14	**109-5592●**	9.06	6.47	5.62

50A

SEMIKRON innovation+service



H (overall)=28, W=80, D=29

- Glass passivated diodes
- Fast-on terminals
- Isolated metal base
- Low thermal impedance
- High surge current capability

I_0=50A @ T_C=125°C I_{FSM}=775A T_{vj}=25°C

211188

Mftrs. List No.	V_{RRM} (V)	Order Code	Price Each 1+	25+	100+
SKD51/08	800	**928-7078●**	54.99	43.38	35.81
SKD51/12	1200	**928-7086●**	64.60	50.96	42.07

Help us to help the environment

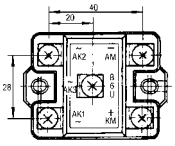
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60A

SEMIKRON innovation+service





H=34, W=65, D=48
Mounting holes=5.3,
Fixing Centres=49

I_0=92A dc max @ T_c=85°C
I_{FSM}=1000A @ T_{vj}=25°C

Current ratings (I_0) @ 45°C for the following heatsinks:
175-647=26A, 175-648=30A, 170-753=60A

211092

Mftrs. List No.	V_{RRM} (V)	Order Code	Price Each 1+	25+	100+
SKD6008	800	**928-6993●**	75.35	59.16	48.70
SKD6012	1200	**940-1857●**	91.68	73.29	61.05

SEMiX Modules

SEMIKRON innovation+service



SEMiX

- Terminal height of 17mm
- Chip soldier on direct copper bonded Al_2O_3 ceramic
- Heat transfer through Al_2O_3 ceramic isolated baseplate

Typical applications:
- Input Bridge Rectifer for:
- AC/DC motor control
- Power Supplies

V_{RRM} Max. V	I_D@ 85°C Max. A	I_{FSM} Max. A	Order Code	Mftrs. list No.
1600	340	2500	130-0533	SEMIX341D16S
1600			130-0534	SEMIX241DH16S

451623

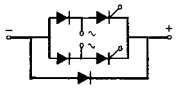
Mftrs. List No.	Order Code	Price Each 1+	4+	12+
SEMIX241DH16S	**130-0534●**	66.37	56.11	51.46
SEMIX341D16S	**130-0533●**	70.83	59.89	54.92

Controlled Bridge Rectifiers

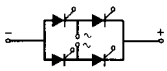
PACE-Pak, 25A and 40A

International IOR Rectifier





Thyristor/diode bridge



Thyristor bridge

Body: H=14 (excl terminals), W=48, D=32
Base plate: W=64, D=32, Fixing Centres=49.5

PACE-pak modules give single phase bridge configurations of thyristors and diodes, mounted on an alumina substrate to provide a completely isolated assembly. A free wheeling diode is included with the half-controlled bridges which are in B2HKF configuration. Connections are by 6.4 x 0.8mm faston terminals. Isolation voltage=2500V.

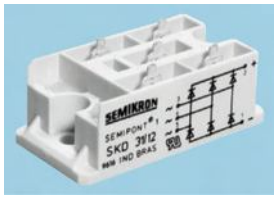
211386

I_0 @T_C=85°C A	I_{TSM} A	V_{RRM} V	Mftrs. List No.	Order Code	Price Each 1+	10+	25+
Thyristor/Diode Bridges							
25	300	600	P102WPBF	**910-4810●**	26.70	16.34	12.95
25	300	1200	P105WPBF	**910-4828●**	27.17	16.84	13.35
40	385	600	P402WPBF	**910-4836●**	27.17	16.86	12.97
40	385	1200	P405WPBF	**910-4852●**	27.84	17.54	13.50
Thyristor Bridge							
25	300	1200	P135PBF	**910-4151●**	30.34	19.11	14.70

Controllable Bridge Rectifier

SEMIKRON innovation+service

New



H=48mm, W=32mm, D=25.3mm

Features:
- Sturdy isolated metal baseplate
- Fast-on terminals with solder tips
- Suitable for wave soldering
- High surge current rating
- UL recognized, file no. E63 532

Typical Applications:
- Controllable single phase rectifier
- DC power supplies
- DC motor controllers
- DC motor field controllers

504718

Mftrs. List No.	Time on, for I_{FSM} ms	I_{FSM} A	V_{RRM} V	Order Code	Price Each 1+	25+	100+
SKBT 28/12	10	320	1200	**145-6964●**	52.16	46.18	43.29

RL Re-reeling available

Farnell

Controlled Bridge Rectifiers - continued

SEMIPONT, 30A

SEMIKRON innovation+service



- Typical Applications include:
- Controllable single phase rectifier
- DC power supplies
- DC motor controllers
- DC motor field controllers

- Isolated base plate to 2500V
- Fast-on terminals with solder tips
- High surge current rating
- Suitable for wave soldering
- UL recognized, file no. E 63 532

H=25.3, W=63, D=32
Mounting holes=5.3 dia
Fixing centres=48

211071

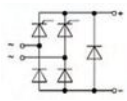
Mftrs. List No.	I_D @ T_C=85°C A	I_{TSM} (*I_{FSM}) A	V_{RRM} V	Order Code	Price Each 1+	5+	50+
SKCH28/08	30	320	800	**940-1865**	29.00	26.77	24.00
SKCH28/12	30	320	1200	**940-1881**	59.08	40.96	36.33
SKD 31/16	44	370*	1600	NEW **145-6962**	28.68	25.39	23.80
SKBT28/14	30	320*	1400	NEW **146-7129**	37.12	28.87	25.98

Controlled Bridge Rectifers

SEMIKRON innovation+service



H=50,W=48,D=35



- Fully controlled single phase bridge rectifier
- Robust plastic case with screw terminals
- Large, isolated base plate
- Blocking voltage to 1600V
- High surge currents
- Easy chassis mounting
- UL recognized, file no. E 63 532

Typical Applications:

- For DC drives with a fixed direction of rotation
- Controlled field rectifiers for DC motors
- Controlled battery charger rectifiers

ID @ 85°C (A)	I_{TSM} @ 25°C, t= 10ms (A)	I_{GT} (mA)	V_{GT} (V)	I^2T (A^2s)	dV/dt (V/us)
46	470	150	2.3	1100	500

497628

Mftrs. List No.		Order Code	Price Each 1+	5+	25+	+
SKCH40/08	800	**145-5748**	85.43	76.17	70.82	– –
SKCH40/16	1600	**145-5747**	97.97	87.36	81.22	– –

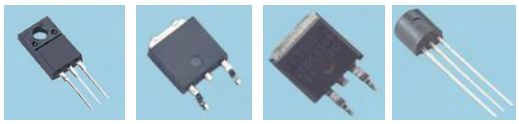
Thyristors

AC Power Switches

General Purpose



SO-8 | SOT-223 | TO-220AB



TO-220FP | D-PAK (TO-252) | D_2PAK (TO-263) | TO-92

Applications:

- AC static switching in appliance & industrial control systems
- Washing machine with bi-directional induction motor drive.
- Induction motor drive for:
  -refrigerator / freezer compressor.
  -air conditioning compressor.

Benefits:

- Enables equipment to meet EN61000-4-5 standard.
- High off-state reliablity with planar technology.
- Need no external overvoltage protection.
- Reduces the power component count.

V_{RRM} / VDRM V	I_T RMS A	I_{TSM} 1 cycle 50Hz None repetitive A	I_{GT} mA	dV/dt V/<mu/>s	V_{GT} V	Package	Mfftrs List No.
600	0.2	7.3	5	300	0.9	SO-8	ACS102-6T1
600	0.2	7.3	5	300	0.9	TO-92	ACS102-6TA
600	0.8	7.3	10	500	1	TO-92	ACS108-6SA
600	0.8	7.3	10	500	1	SOT-223	ACS108-6SN-TR
700	1	8	10	500	1	SOT-223	ACS110-7SN
700	1.5	45	10	200	1.5	TO-220AB	ACST6-7ST
700	2	20	10	500	1	TO-220AB	ACS120-7ST
700	4	30	10	200	1	TO-220FP	ACST4-7SFP
700	4	30	10	200	1	D-PAK	ACST4-7SB
800	8	80	30	750	1.5	TO-220FP	ACST8-8CFP

489073

Mftrs. List No.		Order Code	Price Each 1+	25+	100+	250+	1K+
ACS102-6T1	SMD	**129-5337**	0.420	0.370	0.280	0.180	0.155
ACS102-6TA		**129-5338**	0.630	0.550	0.410	0.280	0.230
ACS108-6SA		**129-5339**	0.700	0.590	0.440	0.360	0.310
ACS108-6SN-TR	SMD	**129-5340** RL	1.070	0.930	0.700	0.460	0.410
ACS120-7ST		**129-5341**	1.110	0.790	0.620	0.560	0.500
ACS110-7SN	SMD	**129-5343** RL	1.000	0.710	0.560	0.510	0.440
ACST4-7SFP		**129-5344**	1.460	1.080	0.860	0.720	0.590
ACST4-7SB	SMD	**129-5346**	1.180	0.970	0.810	– –	– –
ACST6-7ST		**129-5348**	2.250	1.650	1.340	– –	– –
ACST8-8CFP		**129-5349**	2.440	2.010	1.660	– –	– –

Thyristors

NXP founded by Philips



TO-92

- High reliability glass mesa and planar technologies
- Glass passivated, where applicable, for stable voltage blocking beyond 125°C
- Reduces $^{dI}/_{dt}$ rating to eliminate MT2 to MT1 false triggering
- High reliability
- Snubbers and $^{dI}/_{dt}$ limiting inductors can be eliminated

$I_{T\ (rms)}$ A	V_{RRM}	$I_{GT\ (max)}$, µA	TO-92 (SOT-54)
0.8	400	200	BT149D
0.8	600	50	BT169G

211370

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
BT149D	**108-1323**	0.220	0.120	0.086	0.050	0.048
BT169G	**109-7281**	0.290	0.171	0.103	0.063	0.058

Thyristors and Triacs

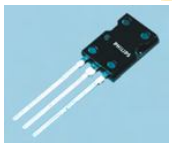
NXP founded by Philips



SOT-223



D^2-PAK



SOT-82



TO-92



SOT-186A



TO-220AB

- High reliability glass mesa and planar technologies
- Glass passivated, where applicable, for stable voltage blocking beyond 125°C
- High reliability
- SMD package options for optimised PCB size and reduce assembly costs
- Logic level and sensitive gate triacs can be driven directly by low power ICs
- 3 Quadrant Triacs offer enhanced dV_D/dt, dV_{com}/dt and dI_{com}/dt capabilities
- Snubbers and dI/dt limiting inductors can be eliminated

FOUR-QUADRANT TRIACS

I_T (rms) A	VOLTAGE GRADES V	I_{GT} (max.) µA	PACKAGE SOT-223	SOT-82	SOT-186A (isolated TO-220AB)	TO-220AB (SOT-78)
1	500/600/800	D*/E	BT134W			
4	600/800	D*/E/F				BT136
12	500/600/800	E/F				BT138
16	500/600/800	E/F				BT139
25	500/600/800	—				BTA140

THREE-QUADRANT TRIACS

I_T (rms) A	VOLTAGE GRADES V	I_{GT} (max.) µA	PACKAGE SOT-223	D^2-PAK (SOT-404)	SOT-82	SOT-186A (isolated TO220AB)	TO-220AB (SOT-78)
	600	B					BTA225

THYRISTORS

I_T (rms) A	VOLTAGE GRADES V	I_{GT} (max.) µA	PACKAGE SOT-223	TO-92 (SOT-54)	SOT-82	TO-220AB (SOT-78)	TO-220F
0.8	400/600	200µA		BT169			
1	600	200µA	BT148/BT168				
12	500/650/800	15mA				BT151	BT151X
20	400/600/800	32mA				BT152	

RL Re-reeling available

Farnell

DIAC

I_{FRM} A	V_{BO} V	I_{BO} µA	PACKAGE	TYPICAL APPLICATIONS
			SOD27	
2	28–36	50	BR100/03	Home Appliances

* 'D' version Triacs are only available in 500 & 600V range
BT149 has reversed pinning to BT169

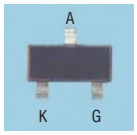
Order Multiple=5				Price Each		
Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
BR100-03	109-7280●	0.198	0.167	0.132	0.082	0.075
Order Multiple=1		**1+**	**25+**	**100+**	**250+**	**1K+**
BT134W-600D	SMD 108-1315● RL	0.890	0.540	0.360	0.181	0.173
BT136-600	108-1316●	0.620	0.400	0.290	0.210	0.170
BT137-600	108-1318●	0.720	0.510	0.390	0.290	0.260
BT138-600	108-1319●	0.910	0.640	0.490	0.370	0.330
BT138-800	108-1320●	0.950	0.560	0.550	0.300	0.290
BT139-600	108-1321●	1.130	0.730	0.540	0.390	0.300
BT139-800	108-1322●	0.890	0.650	0.540	0.380	0.350
BTA140-600	108-1332●	1.120	0.790	0.610	0.460	– –
BTA140-800	108-1333●	1.010	0.720	0.550	0.410	– –
BT148W-600R	SMD 151-0728●	0.460	0.340	0.260	0.193	0.155
BT151-500C	151-0729●	0.580	0.470	0.390	0.290	0.230
BT151-500R	108-1324●	0.690	0.440	0.320	0.240	0.189
BT151-650R	108-1325●	0.660	0.470	0.340	0.250	– –
BT151-800R	108-1326●	0.680	0.480	0.370	0.270	0.240
BT151X-500R	151-0730●	0.580	0.460	0.400	0.350	0.320
BT152-400R	108-1327●	1.010	0.720	0.550	0.400	0.390
BT152-600R	108-1328●	0.950	0.800	0.650	0.500	0.350
BT152-800R	108-1331●	1.410	0.880	0.580	0.360	0.350
BT152-800R	108-1331●	1.410	0.880	0.580	0.360	0.350
BT168GW	SMD 151-0732●	0.240	0.194	0.167	0.122	0.092
BT169D	151-0734●	0.095	0.073	0.063	0.054	0.053
BT169G	109-7281●	0.290	0.171	0.103	0.063	0.058

Reel of 10000		Price Per Reel
Mftrs. List No.	Order Code	1+
BR100/03.113	NEW 156-2394●	718.61

453036

Tubes of 50		Price Per Tube		
Mftrs. List No.	Order Code	1+	4+	10+
BT152-600R	NEW 156-4174●	33.94	23.44	19.04
BT152-800R	NEW 156-4175●	18.47		

SOT-23, SOT-223 Sensitive Gate



SOT-23 H=1.04, W=3.0, D=2.5



SOT-223 H=1.7, W=36.7, D=7.3

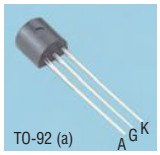
I_T rms	V_{DRM} max. V	I_T av A	I_{TSM} max. A	I_{GT} µA	V_{GT} V	Package	Mftrs. List No.
0.26	200	0.17	7	200	0.8	SOT-23	P0102BL
0.8	600	0.5	7	200	0.8	SOT-223	P0102MN
0.8	600	0.5	7	25	0.8	SOT-223	P0111MN
0.8	400	0.5	7	200	0.8	TO-92	P0102DA5AL3
0.8	400	0.5	7	25	0.8	TO-92	P0111DA1AA3
1.4	600	0.64	22.5	200	0.8	SOT-223	X0202MN

211212

Order Multiple=5				Price Each		
Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
P0102BL	SMD 980-2533● RL	0.480	0.240	0.220	0.195	0.194
P0102MN	SMD 991-0670●	0.440	0.340	0.270	0.220	0.200
P0111MN	SMD 991-0689●	0.450	0.350	0.270	0.220	0.210
X0202MN	SMD 980-4536● RL	0.530	0.420	0.370	0.340	0.300
P0102DA5AL3	129-5315●	0.124	0.090	0.075	0.067	0.063
P0111DA1AA3	129-5316●	0.092	0.072	0.064	0.057	0.052

TO-92/TO-126/TO-202/SOT-82, Sensitive Gate

ON Semiconductor



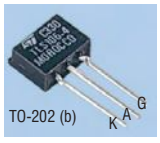
TO-92 (a)



TO-92 (c)



TO-202 (a)



TO-202 (b)

I_T rms A	V_{RRM}/ V_{DRM} V	I_T av A	I_{TSM} A	I_{GT} µA	V_{GT} V	Package	Mftr.	Mftrs. List No.
0.8	30	0.32	5	350	1.2	TO-92 (a)	ON	2N5060G
0.8	60	0.32	5	350	1.2	TO-92 (a)	ON	2N5061G
0.8	60	0.32	7	500	1	TO-92 (a)	SEM	C203YY
0.8	100	0.32	5	350	1.2	TO-92 (a)	—	2N5062G
0.8	200	0.32	5	350	1.2	TO-92 (a)	—	2N5064G
0.8	400	0.5	7	50	0.8	TO-92 (a)	ST	P0115DA
1.25	600	0.8	22.5	200	0.8	TO-92 (a)	ST	X0202MA
1.25	600	0.8	22.5	200	0.8	TO-92 (c)	ST	X0202MA
2.5	400	1.7	17	500	1	TO-126	ON	C106D1G
2.5	600	1.7	17	500	1	TO-126	ON	C106M1G
4	600	2.5	30	200	0.8	TO-202-3 (b)	ST	X0402MF
4	600	2.5	30	200	0.8	TO-202-3 (b)	ST	X0403MF

229177

Order Multiple=5				Price Each		
Mftrs. List No.	Mftr. Order Code	5+	25+	100+	250+	1K+
C106D1G	ON 955-6494●	0.430	0.290	0.220	0.179	0.138
C106M1G	ON 955-6508●	0.460	0.290	0.240	0.179	0.138
C203YY	SEM 120-8633	1.330	0.920	0.730	0.440	0.420
P0102DA	ST 980-2541●	0.280	0.186	0.125	0.080	0.071
P0115DA	ST 980-2550●	0.340	0.230	0.151	0.103	0.096
Order Multiple=5		**5+**	**25+**	**100+**	**250+**	**1K+**
X0202MA	ST 980-4528●	0.460	0.330	0.220	0.186	0.181
X0402MF	ST 980-4544●	1.070	0.530	0.380	0.220	0.200
X0403MF	ST 980-4552●	1.200	0.580	0.430	0.240	0.230
2N5060G	ON 955-6516●	0.350	0.240	0.161	0.121	0.090
2N5061G	ON 955-6524●	0.350	0.240	0.161	0.121	0.090
2N5062G	ON 955-6532●	0.310	0.194	0.160	0.119	0.090
2N5064G	ON 955-6540●	0.350	0.240	0.161	0.121	0.090

TO-92, TO-126, TO-220

ON Semiconductor



TO-92



TO-126



TO-220



TO-220 Full-Pack

I_T rms A	V_{RRM}/ V_{DRM} V	I_T (av) A	I_{TSM} A	I_{GT} mA	V_{GT} V	Package	Mftrs. List No.
Standard Gate Sensitivity							
16	800	10	160	30	1.5	TO-220	2N6405G
25	400	16	300	40	1.5	TO-220	2N6507G
25	600	16	300	40	1.5	TO-220	2N6508G
25	800	16	300	40	1.5	TO-220	2N6509G
Sensitive Gate, Reverse Blocking Triode							
0.8	400	-	10	0.2	0.8	TO-92	MCR100-6G
0.8	600	-	10	200	0.8	TO-92	MCR100-8G
4	600	2.55	25	200	1	TO-126	MCR106-8G

* High performance, reverse blocking thyristor

222093

Order Multiple=5			Price Each		
Mftrs. List No.	Order Code	5+	100+	250+	500+
MCR100-6G	955-7270●	0.410	0.260	0.174	0.108
MCR100-8G	955-7288●	0.220	0.148	0.117	0.056
MCR106-8G	955-7318●	0.530	0.350	0.270	0.161
Order Multiple=1		**1+**	**25+**	**100+**	**500+**
2N6405G	955-6176●	1.540	1.140	0.840	0.700
2N6507G	955-7199●	1.540	1.140	0.840	0.700
2N6508G	955-7180●	1.540	1.140	0.840	0.700
2N6509G	955-7202●	1.540	1.140	0.840	0.700

10A to 40A



TO-247



TO-220

I_T rms A	V_{RRM}/ V_{drm} V	I_T (av) A	I_{TSM} @ 25°C A	I_{GT} @ 25°C mA	V_{GT} V	Package	Mftrs. List No.
10	800	6.5	140	15	1	TO-220AB	12TTS08PBF
25	1200	16	250	20	1.25	TO-220	25TTS12PBF
30	1200	20	300	60	2.5	TO-247	30TPS12PBF
30	1600	20	300	60	2.5	TO-247	30TPS16PBF
55	1200	35	500	150	2.5	TO-247AC	40TPS12APBF

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
12TTS08PBF	910-4291●	2.11	1.28	0.94	0.75	0.70
25TTS12PBF	910-4550●	3.57	2.07	1.45	1.09	1.05
30TPS12PBF	910-4658●	2.85	1.72	1.28	0.96	0.91
30TPS16PBF	910-4666●	2.80	2.15	1.90	1.21	1.13
40TPS12APBF	910-4755●	5.47	3.67	2.75	2.15	2.05

211346

Mftrs. List No.		Order Code	Price Per Tube 1+	4+	10+
25TTS12PBF	TUBE 50	NEW 156-4176●	81.76	62.93	60.98
30TPS16PBF	TUBE 25	NEW 156-4177●	42.77	28.00	26.47
40TPS12APBF	TUBE 25	NEW 156-4178●	69.49	55.23	53.20

RL Re-reeling available

Thyristors - continued

TO-220, TO-218, TO-247





I_T rms A	V_{RRM}/ V_{DRM} V	I_T av A	I_{TSM} A	I_{GT} mA	V_{GT} V	Package	Mftr.	Mftrs. List No.
4	600	2.5	30	200	0.8	TO-220AB	ST	TS420-600T
8	600	5	70	200	0.8	TO-220AB	ST	TS820-600T
12	400	7.5	100	30	1.5	TO-220	ON	2N6397G
12	400	8	120	15	1.5	TO-220	ST	TYN412
12	600	8	120	15	1.5	TO-220	ST	TYN612
12	600	8	120	15	1.5	TO-220	ST	TXN612
12	800	8	120	15	1.5	TO-220	ST	TYN812
12	1000	8	120	15	1.5	TO-220	ST	TYN1012
12	1000	8	120	15	1.5	TO-220	ST	TXN1012
25	600	16	300	40	1.5	TO-220	ST	TYN625
25	800	16	300	40	1.5	TO-220	ST	TYN825
30	800	19	420	50	1.5	TOP-3	ST	BTW68-800
30	1200	19	420	50	1.5	TO-218	ST	BTW68-1200RG
50	600	32	525	80	1.5	TOP-3	ST	BTW69-600
50	800	32	525	80	1.5	TOP-3	ST	BTW69-800RG
50	1200	32	525	80	1.5	TOP-3	ST	BTW69-1200RG

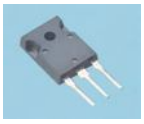
◆ Sensitive gate

211225

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
BTW68-800	**980-1758**	4.40	3.75	3.26	2.89	2.59
BTW68-1200RG	**117-5639**	10.08	6.21	4.90	4.76	4.64
BTW69-600	**980-1774**	6.84	4.05	3.07	2.37	2.18
BTW69-800RG	**105-7302**	4.37	3.53	3.43	3.35	3.25
BTW69-1200RG	**105-7300**	9.57	6.99	6.20	6.03	5.87
TS820-600T	**991-0760**	1.09	0.84	0.66	0.52	0.46
TS420-600T	**980-4269**	0.59	0.48	0.42	0.37	0.36
TXN612	**980-4285**	2.80	1.76	1.35	0.97	0.92
TXN1012	**980-4277**	3.36	2.08	1.62	1.14	1.11
TYN412	**980-4307**	0.56	0.46	0.38	0.34	0.33
TYN612	**980-4323**	2.40	1.28	1.13	0.52	0.51
TYN625	**980-4331**	2.61	1.60	1.36	1.23	1.20
TYN812	**980-4340**	1.13	1.02	0.91	0.82	0.77
TYN825	**994-6420**	2.58	1.96	1.62	1.36	1.29
TYN1012	**980-4293**	3.39	2.11	1.59	1.00	0.91
2N6397G	**955-6753**	0.85	0.65	0.48	0.39	0.30

19A to 48A

IXYS





TO-247AD | TO-220 | SOT-227B (mini-BLOC)

- Thyristor for line frequency
- Long-term stability of blocking currents and voltages
- Ideal for motor control, power conversion, SMPS's, light and temperature control

I_T rms A	V_{RRM}/ V_{drm} V	I_T (av) A	I_{TSM} @ 45°C A	I_{GT} @ 25°C mA	V_{GT} @ 25°C V	Mftrs. List No.
TO-220AB						
29	800	19	160	28	1.5	CS 19-08HO1
29	1200	19	160	28	1.5	CS 19-12HO1
SOT-227B (miniBLOC)						
60	1200	38	500	100	1.5	MCD 40-12IO6
TO-247AD						
30	1200	19	200	65	1	CS 20-12IO1
49	1200	31	300	65	1	CS 30-12IO1
75	1200	48	520	100	1.5	CS 45-12IO1
75	1600	48	520	100	1.5	CS 45-16IO1

422982

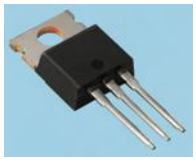
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
CS 19-08HO1	**108-0105**	1.33	1.07	0.93	– –	– –
CS 19-12HO1	**108-0107**	1.40	1.31	1.12	– –	– –
CS 20-12IO1	**108-0108**	2.58	2.15	1.83	– –	– –
CS 30-12IO1	**108-0110**	2.81	2.19	2.01	– –	– –
CS 45-12IO1	**108-0112**	4.15	3.19	2.96	– –	– –
CS 45-16IO1	**108-0113**	5.08	4.26	3.73	– –	– –
MCD 40-12IO6	**108-0114**	9.28	7.14	6.61	– –	– –

£ € 40,000 PRICES REDUCED

Thyristors

Littelfuse

New



TO-220

Features
- RoHS Compliant
- Electrically-isolated package
- High voltage capability - 200V to 1000V
- High surge capability - up to 950 A
- Glass-passivated chip

Compak SCR
- Surface mount package - 1 A series
- New small profile three-leaded Compak package
- Can replace SOT-223

Case Style	Voltage Vdrm V	Voltage, Vgt max. V	Current, Igt max. mA	Current, Itsm @ 50Hz A	Current It rms max. A	Mftrs. List No.	Order Code
TO-220IS	200	1.5	35	300	25	S2025L	160-5722
TO-220	200	1.5	35	300	25	S2025R	160-5723
TO-218X	200	2	50	800	65	S2065J	160-5724
TO-218IS	200	2	50	800	65	S2065K	160-5725
TO-220IS	400	1.5	35	300	25	S4025L	160-5726
TO-220	400	1.5	35	300	25	S4025R	160-5727
TO-218IS	400	2	50	800	65	S4065K	160-5728
TO-220	600	1.5	35	300	25	S6025R	160-5729
TO-218X	600	2	50	800	65	S6065J	160-5730
TO-220	800	1.5	35	300	25	S8025R	160-5731
TO-218X	800	2	50	800	65	S8065J	160-5733

511730

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
S2025L	**160-5722**	1.04	1.01	0.99	0.96	0.93
S2025R	**160-5723**	0.93	0.90	0.88	0.86	0.84
S2065J	**160-5724**	3.71	3.60	3.51	3.41	3.33
S2065K	**160-5725**	3.63	3.53	3.44	3.35	3.26
S4025L	**160-5726**	1.11	1.09	1.06	1.03	1.01
S4025R	**160-5727**	1.01	0.99	0.96	0.93	0.90
S4065K	**160-5728**	3.90	3.78	3.68	3.59	3.50
S6025R	**160-5729**	1.07	1.04	1.02	0.99	0.97
S6065J	**160-5730**	4.23	4.12	4.01	3.90	3.81
S8025R	**160-5731**	1.13	1.10	1.07	1.04	1.02
S8065J	**160-5733**	4.50	4.38	4.26	4.14	4.04

16A to 360A, Metal Stud



TO-64, TO-48, TO-65



B1



TO-93, TO-94

Package	Thread Size
B1	M5 2A
TO-64	1/4"28UNF 2A
TO-64 / TO-65	1/4"28UNF 2A
TO-93	3/4"16UNF 2A
TO-94	1/2"20UNF 2A

I_T (rms) A	I_T (av) A	I_{TSM} A	I_{GT} mA	V_{GT} V	Package	Mftrs.	Mftrs. List No./ Series...
16	10	150	30	1.5	TO-64	MAG	BTY79...R
30	10	250	100	3	B1	SKN	SKT10...
40	25	350	60	2.0	TO-48	IR	25RIA...
50	24	450	100	3	B2	SKN	SKT24...
80	50	1200	100	2.5	TO-65	VISH	50RIA...
125	80	1900	120	2.5	TO-94	VISH	81RIA...
175	110	1750	100	2.5	TO-94	VISH	110/111RKI...
360	230	4890	150	3	TO-93	VISH	ST230S...

211331

V_{RRM} V	Mftrs. List No.	Order Code	Price Each 1+	25+	100+
400	BTY79-400R	**118-2785**	9.01	8.08	7.08
600	BTY79-600R	**118-2787**	10.76	9.68	7.70
800	BTY79-800R	**118-2788**	9.18	8.62	7.67
1000	BTY79-1000R	**118-2789**	23.08	20.80	17.85
1200	SKT10/12E	**118-2756**	17.59	14.07	11.73
1200	SKT24/12E	**118-2757**	19.49	16.01	13.59
			1+	**12+**	**48+**
800	ST230S08P0VPBF	**910-4534**	41.72	37.53	32.01
1200	ST230S12P1VPBF	**910-4518**	67.84	54.20	40.77
			1+	**10+**	**50+**
600	25RIA60PBF	**910-4593**	9.61	5.68	4.11
800	25RIA80PBF	**910-4607**	13.94	8.23	5.98
			1+	**10+**	**25+**
200	50RIA20PBF	**910-4712**	10.72	8.21	6.17
400	50RIA40PBF	**910-4720**	13.65	8.21	6.17
600	50RIA60PBF	**910-4739**	13.65	8.33	6.69
800	50RIA80PBF	**910-4747**	13.65	9.67	7.76
1000	50RIA100PBF	**910-4690**	14.62	9.85	7.29
1200	50RIA120PBF	**910-4704**	13.91	9.07	8.01
800	81RIA80PBF	**910-4780**	29.61	19.96	14.79
1200	81RIA120PBF	**910-4771**	26.45	18.95	14.98
1200	110RKI120PBF	**910-4313**	24.26	21.83	17.86
1200	111RKI120PBF	**910-4305**	18.76	18.02	15.83

424903

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
SKT24/16 E	**109-5597●**	14.99	10.70	9.30	– –	– –

Thyristor, 250A 1600V B7

SEMIKRON innovation+service

New



Features:
- Hermetic metal case with glass insulator
- Threaded stud ISO M24 x 1.5
- High i^2t and I_{TSM} values for easy fusing
- International standard case

Typical Applications:
- DC motor control (e.g. for machine tools)
- Controlled rectifiers (e.g. for battery charging)
- AC controllers (e.g. for temperature control)
- Recommended snubber network

VDRM (V)	I_{RMS} (A)	I_{TSM} (A)	V_{GT} min (V)	I_{GT} min (mA)	Case Style	Mftrs. List No.
1600	450	7000	3	200	TO-209AD	SKT 250/16 E

504771

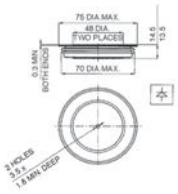
Mftrs. List No.	Order Code	Price Each 1+	3+	8+
SKT 250/16 E	**145-6966●**	117.11	103.66	97.18

125A to 2913A

VISHAY



TO-93 (¾" 16-UNF 2A) **TO-118** (¾" 16-UNF 2A) **TO-94** (½" 20-UNF 2A)



B-PUK: H=27.0, Dia=58.5 (excl. tab)
E-PUK: H=15.1, Dia=42 (excl. tab)
K-PUK: H=27.5, Dia=74.5 (excl. tab)

I_T rms A	I_T (av) A	I_{TSM} @ 50Hz A	I_{GT} @ T_j=25°C A	V_{GT} @ T_j=25°C V	Package	Mftrs. List No./ Series...
125	80	1990	120	2.5	TO-94	80RIA...
285	180	3800	150	2.5	TO-93	181RKI...
285	180	4000	150	2.5	TO-93	180RKI...
Inverter Grade – Fast Turn-Off						
135	85	2450	200	3	TO-94	ST083S..PFM1

211345

V_{rrm} V	Mftrs. List No.	Order Code	Price Each 1+	4+	12+
800	180RKI80PBF	**910-4640●**	23.94	21.56	17.63
1000	181RKI100PBF	**910-4623●**	21.87	19.69	16.09
			1+	**10+**	**25+**
800	80RIA80PBF	**910-4348●**	16.96	14.75	12.38
1200	80RIA120PBF	**910-4330●**	20.41	17.76	14.89
			1+	**5+**	**25+**
800	ST083S08PFM1PBF	**910-4356●**	37.67	33.90	28.25

49A to 156A Single Thyristor Module

IXYS



- Isolation voltage 2500 V
- Solid state switches
- Applications include; motor control, soft starter circuits, light and temperature control

SOT-227B - miniBLOC

I_T @ 110 °C rms A	V_{RRM}/ V_{drm} V	I_T (av) A	V_{GT} @ 25 °C V	I_{GT} @ 25 °C mA	I_{TSM} @ 45°C A	Mftrs. List No.
49	1200	31	1.5	55	370	MCO 25-12IO1
85	1600	54	1.4	80	740	MCO 50-16IO1
156	1200	99	1.5	100	1400	MCO 100-12IO1

422994

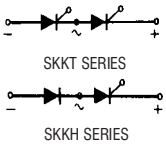
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
MCO 25-12IO1	**108-0126●**	7.43	6.24	5.46	– –	– –
MCO 50-16IO1	**108-0129●**	9.76	8.70	7.24	– –	– –
MCO 100-12IO1	**108-0130●**	11.54	9.67	8.45	– –	– –

40A to 200A Thyristor/Diode Power Modules

SEMIKRON innovation+service

SEMIPACK 1 (A46, A7 and A10 configurations)







SKNH Series

SEMIPACK 1 H=20, W=92, D=30

- Thyristor power module
- Ceramic isolated baseplate to 2.5 kV
- **UL** recognised

The SKNH56/14E is a special module for DC braking of AC induction motors, incoorporating a reverse biased diode in series with a thyristor.

I_T (RMS) @ T_a = 35°C A	V_{RRM} A	I_{TSM} @ 25°C A	I_{GT} mA	V_{GT} V	Mftrs. list No.
SKKT Series - Dual Series Thyristors					
40	1200	320	150	3	SKKT20B12E
42	800	320	150	3	SKKT20B08E
50	1200	470	150	3	SKKT27B12E
50	1400	470	150	3	SKKT27B14E
50	1600	470	150	3	SKKT27B16E
52	800	470	150	3	SKKT27B08E
75	800	1000	150	3	SKKT42B08E
75	1200	1000	150	3	SKKT42B12E
75	1600	1000	150	3	SKKT42B16E
95	1200	1500	150	3	SKKT57B12E
95	1600	1500	150	3	SKKH57/16E
125	1200	1600	150	3	SKKT72B12E
130	1600	1500	150	3	SKKT57B16E
150	1600	2000	150	3	SKKT92B16E
150	800	2000	150	3	SKKT92B08E
150	1200	2000	150	3	SKKT92B12E
180	1600	6000	150	3	SKKT106B16E
180	1200	6000	150	3	SKKT106B12E
SKKH Series - Series Thyristor Diode					
50	1200	470	150	3	SKKH27/12E
75	800	1000	150	3	SKKH42/08D
150	800	2000	150	3	SKKH92/08D
125	1600	1600	150	3	SKKH72/16E
150	1600	2000	150	3	SKKH92/16E
180	1200	2250	150	3	SKKH106/12E
190	1200	2000	150	3	SKKH92/12E
SKNH Series - Back to Back Series Diode + Thyristor					
95	1400	1500	150	3	SKNH56/14E
SKKD Series					
—	1600	2000	—	—	SKKD81/16
—	1600	700	—	—	SKKD46/16
—	800	700	—	—	SKKD46/08
—	1200	700	—	—	SKKD46/12
—	800	2000	—	—	SKKD81/08
—	1200	2000	—	—	SKKD81/12
—	800	2500	—	—	SKKD100/08
—	1200	2500	—	—	SKKD100/12

431147

Mftrs. List No.	Package/Circuit	Order Code	Price Each 1+	5+	50+
SKKD46/08	A7	**956-2796●**	33.41	26.14	23.05
SKKD46/12	A7	**956-2800●**	40.70	31.84	28.08
SKKD46/16	A7	**956-2583●**	57.98	45.14	36.96
SKKD81/08	A10	**956-2818●**	46.33	35.20	28.37
SKKD81/12	A10	**956-2826●**	62.74	46.37	36.79
SKKD81/16	A10	**956-2540●**	60.13	39.20	33.14
SKKD100/08	A10	**956-2842●**	39.87	31.56	26.47
SKKD100/12	A10	**956-2850●**	46.92	38.13	32.14
SKNH56/14E	A7	**109-5606●**	49.89	35.58	30.95
SKKH27/12E	A46	**956-2745●**	24.62	22.02	19.74
SKKH42/08D	A46	**956-2753●**	33.93	23.13	19.47
SKKH57/16E	A46	**956-2613●**	51.17	47.24	41.24
SKKH72/16E	A46	**109-5600●**	48.53	34.59	30.10
SKKH92/08D	A46	**956-2770●**	40.08	29.41	25.06
SKKH92/12E	A46	**956-2788●**	46.09	41.09	36.23
SKKH92/16E	A46	**956-2591●**	61.57	56.83	48.40
SKKH106/12E	A46	**956-2885●**	47.07	43.45	38.95
SKKH106/16E	A46	**109-5601●**	63.00	58.16	49.53
SKKT20B08E	A46	**956-2621●**	22.66	17.58	14.36
SKKT20B12E	A46	**956-2630●**	28.55	22.00	17.89
SKKT27B08E	A46	**956-2656●**	27.17	20.16	16.02
SKKT27B12E	A46	**956-2664●**	29.44	22.61	18.34
SKKT27B14E	A46	**956-3075●**	30.83	26.54	24.50
SKKT27B16E	A46	**956-2605●**	46.58	36.25	29.67
SKKT72B12E	A46	**956-2907●**	40.15	37.06	31.57
SKKT42B08E	A46	**956-2672●**	33.14	25.85	21.18
SKKT42B12E	A46	**956-2680●**	43.66	33.83	27.62
SKKT42B16E	A46	**956-2559●**	46.50	33.92	28.76
SKKT57B12E	A46	**956-2702●**	60.14	44.87	35.78
SKKT57B16E	A46	**956-2567●**	58.92	45.76	37.40
SKKT92B08E	A46	**956-2710●**	54.65	41.11	32.95
SKKT92B12E	A46	**956-2729●**	62.53	48.83	39.41
SKKT92B16E	A46	**956-2575●**	70.90	54.94	44.85
SKKT106B12E	A46	**956-2737●**	66.82	51.15	41.43
SKKT106B16E	A46	**956-3083●**	69.68	52.86	42.58

RL Re-reeling available

Farnell

Thyristors - continued

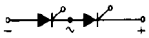
Thyristor/Diode Modules, 18A - 160A

Semipack 2, (A21 and A22 configurations)

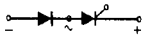
SEMIKRON innovation+service



SEMIPACK 2 - H=28.5, W=94, D=34



SKKT SERIES



SKKH SERIES

- Isolated base plate to 2.5kV
- Standard 80mm fixing centres

Applications include general power control, motor speed control, battery charging, welding, lamp dimming etc. Auxiliary gate and cathode connections are made by 2.8 x 0.8 faston tabs (supplied), or may be soldered. Screw terminals are M6.

I_T (RMS) @ T_a = 35°C A	V_{RRM} A	I_{TSM} @ 25°C A	I_{GT} mA	V_{GT} V	Mftrs. list No.
SKKT Series - Dual Series Thyristors					
220	1200	4700	150	2	SKKT132/12E
220	1600	4700	150	2	SKKT132/16E
250	1200	5400	150	2	SKKT162/12E
SKKH Series - Series Thyristor Diode					
220	1600	4700	150	2	SKKH132/16E

431156

Mftrs. List No.	Package Circuit	Order Code	Price Each 1+	5+	50+
SKKT Series - Dual Series Thyristor					
SKKT132/12E	A21	**956-4381**	74.82	65.61	58.82
SKKT132/16E	A21	**956-4560**	85.55	78.96	70.79
SKKT162/12E	A21	**956-4390**	95.96	88.58	79.42
SKKH Series -Thyristor and Series Diode					
SKKH132/16E	A22	**109-5603**	85.86	61.24	53.27

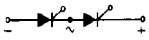
Thyristor Modules, 920A

Semipack 5, (A60a configuration)

SEMIKRON innovation+service



SEMIPACK-5



SKKT SERIES

- Isolated base plate to 2.5kV
- Standard 80mm fixing centres

This high quality dual series thyristor module, offers cutting edge power control for a wide range of industrial applications.Applications include general power control, motor speed control, battery charging, welding, lamp dimming etc. Auxiliary gate and cathode connections are made by 2.8 x 0.8 faston tabs (supplied), or may be soldered.

I_T (RMS) @ T_a = 35°C A	V_{RRM} A	I_{TSM} @ 25°C A	Mftrs. list No.
SKKT Series - Dual Series Thyristors			
850	1600	19000	SKKT570/16E

431236

Mftrs. List No.	V_{RRM}/V_{DRM} V	Order Code	Price Each 1+	3+	8+
SKKT Series - Dual Thyristor					
SKKT570/16E	1600	**145-5753**	304.07	271.12	252.05

P3 Heatsink and Fan Assemblies

SEMIKRON innovation+service

Number of Devices	b / dϕ mm	R_{thha} Natural cooling, K/W	R_{thha} with Fan SKF 3-320-01 (K/W)	Type
3	20	0,43 (150W)	0,147	P3/180B
3	34	—	0,0847	P3/300B

423070

Mftrs. List No.	Order Code	Price Each 1+	10+	25+
P3 Heatsinks				
P3/180B	**109-5607**	33.92	30.53	28.83
P3/300B	**109-5608**	65.59	59.03	55.75

25A to 41A

IXYS



SOT-227B - mini-BLOC

- Thyristor for line frequency
- Isolation Voltage 2500 V
- Ideal for switching and control of single and 3 phase AC

I_T (av) A	I_T @ 110 °C rms A	V_{RRM}/V_{drm} V	I_{TSM} @ 45°C A	I_{GT} mA	V_{GT} V	Mftrs. List No.
25	54	1200	400	100	1.5	MMO 62-12IO6
25	54	1600	400	100	1.5	MMO 62-16IO6
34	74	1200	600	100	1.5	MMO 74-12IO6
41	90	1600	800	100	1.5	MMO 90-16IO6

422979

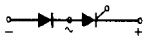
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	+	+
MMO 62-12IO6	**108-0119**	8.85	7.43	6.49	– –	– –
MMO 62-16IO6	**108-0121**	9.60	8.09	7.05	– –	– –
MMO 74-12IO6	**108-0122**	9.74	8.16	7.14	– –	– –
MMO 90-16IO6	**108-0125**	11.26	9.47	8.27	– –	– –

25A to 105A, ADD-A-Pak™ Power Modules

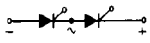
International IOR Rectifier



H=37 (incl terminals), W=92, D=20
Mounting Holes=6.2 dia, Fixing centres=80



IRKH SERIES



IRKT SERIES

The ADD-A-pak range of power modules containing either two thyristors or a thyristor and diode offers simple circuit elements that can be interconnected to form various circuits. The isolated base allows mounting on an earthed heatsink alongside other modules and devices. They are intended for general purpose phase control applications. Screw terminals are M5. **Auxiliary gate and cathode leads are supplied separately.**

211385

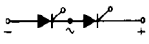
Mftrs. List No.	$I_{O\ (AV)}$, A T_C=85°C	I_{TSM} A	V_{RRM}/V_{DRM} V	Order Code	Price Each 1+	10+	25+
IRKT26/12APBF	25	400	1200	**910-4160**	32.91	20.72	16.43
IRKT26/16APBF	27	400	1600	**910-4178**	18.61	17.56	15.81
IRKT41/12APBF	45	850	1200	**910-4186**	21.08	20.58	19.38
IRKT41/16APBF	45	850	1600	**910-4194**	21.32	20.15	17.97
IRKT56/12APBF	60	1310	1200	**910-4208**	44.04	26.48	19.92
IRKT56/16.PBF	60	1310	1600	**910-4216**	21.59	18.14	16.31
IRKT91/12APBF	90	1500	1200	**910-4240**	48.56	30.59	23.54
IRKT91/14APBF	95	1785	1400	**910-4267**	26.47	22.23	20.01
IRKT91/16S90APBF	95	1785	1600	**910-4275**	25.21	21.17	19.05
IRKT105/12S90APBF	105	1785	1200	**910-4089**	25.78	21.63	19.48
IRKT105/16S90APBF	105	1785	1600	**910-4097**	27.27	22.89	20.60
Thyristor/Diode Modules							
IRKH56/06APBF	60	1310	600	**910-4860**	22.21	17.48	15.84
IRKH71/08APBF	75	1665	800	**910-4879**	25.52	21.42	17.37
IRKH91/12APBF	95	1785	1200	**910-4887**	25.62	21.53	17.61

135A, 140A and 160A INT-A-Pak™ Power Modules

VISHAY



H=37 (incl terminals), W=94, D=36
Mounting Holes=6.5 dia, Fixing centres=80



IRKT SERIES

- High voltage
- Electrically isolated by DBC ceramic (Al_2O_3)
- 3500V_{RMS} isolating voltage
- Industrial standard package
- High surge capability
- Glass passivated chips
- Simple mounting
- **UL** Recognised

234585

$I_{O\ (AV)}$, A T_C= 85°C	I_{TSM} A	V_{RRM}/V_{DRM} V	Mftrs. List No.	Order Code	Price Each 1+	10+	25+
Thyristor Modules							
135	3200	1600	IRKT136/16PBF	**910-4100**	51.16	42.94	33.03
140	4500	1600	IRKT142/16PBF	**910-4119**	58.48	49.09	37.75
160	4870	1200	IRKT162/12PBF	**910-4127**	59.60	50.04	38.23
160	4870	1600	IRKT162/16PBF	**910-4135**	59.37	49.86	38.33
Leads for IRKT/IRKH modules			64432115AAPBF	**910-1950**	3.32	1.96	1.43

33A to 68A, SEMITOP 1 and SEMITOP 3

SEMIKRON innovation+service



SEMITOP 1 H=24, W=31, D=15.43



SEMITOP 3 - H=55, W=31, D=15.43

Hole diameter for SEMITOP 1 and 3 = 4.4 mm

- Compact Designs
- One screw mounting
- Heat transfer and isolation through direct copper bonded aluminium oxide ceramic
- Glass passivated thyristor chips
- Up to 1600V reverse voltage
- UL recognized, file no. E 63 532

Configuration	I_T @ temp A	V_{GT} V	I_{GT} A	V_{RRM} A	@ Temp °C	I_{TSM} @ 25°C, 10 ms A	Package	Mftrs. list No.
Thyristor	68	2	100	1600	80	450	SEMITOP 3	SK70DT16

423216

Mftrs. List No.	Order Code	Price Each 1+	4+	10+
SK70DT16	109-5564●	20.59	19.00	17.04

SCR/Diode module

SEMIKRON innovation+service

New



SEMIX171KH16S

Features:
- Terminal height 17 mm
- Chips soldered directly to isolated substrate

Typical Applications:
- Input Bridge Rectifier for
- AC/DC motor control
- Power Supply



SKKH250/16 E

Features:
- Heat transfer through aluminium nitride ceramic isolated metal baseplate
- Precious metal pressure contacts for high reliability
- Thyristor with amplifying gate

Typical Applications:
- DC motor control (e.g. for machine tools)
- AC motor starters
- Temperature control (e.g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)

V_{RRM} (V)	I_{TRMS} (A)	I_{TAV} (A)	V_{GT} (V)	I_{GT} (mA)	I_{TSM} (A)	Case Style	Mftrs. List No.
1600	250	170	2	150	5400	SEMiX 1s	SEMIX171KH16S
1600	420	250	3	200	9000	SEMIPACK 3	SKKH250/16 E

504781

Mftrs. List No.	Order Code	Price Each 1+	3+	8+
SEMIX171KH16S	146-7123●	76.73	59.68	53.71
SKKH250/16 E	146-7136●	168.25	130.85	117.77

Thyristor Module

Three Phase Antiparallel

SEMIKRON innovation+service

New



I_{RMS} A	I_{TSM} A	I_{GT} mA	V_{GT} V	Mftrs. List No.
105	1250	150	3	SKUT115/16T

Features:
- Compact design
- Two screws mounting
- Heat transfer and isolation through direct copper board
- Low resistance in Steady-State and high reliability
- High surge currents
- Glass passived thyristors chips

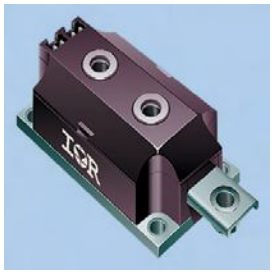
Typical Applications:
- Soft starter
- Light control
- Temperature control

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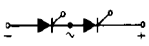
Mftrs. List No.	Order Code	Price Each 1+	5+	25+
SKUT115/16T	146-7148●	80.25	62.42	56.18

230A and 250A, MAGN-A-Pak™ Power Modules

International IOR Rectifier



- High voltage
- Electrically isolated base plate
- 3000 V RMS isolating voltage
- Industrial standard package
- Simplified mechanical designs, rapid assembly
- High surge capability
- Large creepage distances
- **UL** Recognised



IRKT SERIES

H=37 (incl terminals), W=94, D=36
Mounting Holes=6.5 dia, Fixing centres=80

$I_{O\ (AV)}$ A, T_C=85°C	I_{TSM} A	V_{RRM}/V_{DRM} V	Mftrs. List No.	Order Code	Price Each 1+	10+
Thyristor Modules						
250	8500	1200	IRKH250/12PBF	910-4801●	114.77	105.40
250	8500	1600	IRKT250/16PBF	910-4143●	115.44	106.02

234588

Capsule, Line Frequency

WESTCODE



- Optimized to give low conduction losses
- For line frequencies up to 400 Hz

Applications include:
- Industrial DC drives
- Induction melting
- Wind power convertors
- Electrochemical power supplies

I_T rms A	V_{RRM}/V_{drm} V	I_T (av) @ 55 °C A	I_{TSM} (T_{on} = 10ms) A	I_{GT} @ 25°C mA	V_{GT} @ 25°C V	Mftrs. List No.
1465	1200	734	8400	150	3	N0734YS120
1465	1600	734	8400	150	3	N0734YS160
2431	1600	1265	15000	300	3	N1265LS160

452804

Mftrs. List No.	Order Code	Price Each 1+	5+	10+
N0734YS120	130-0139●	44.08	40.08	36.74
N0734YS160	130-0140●	49.99	45.44	41.66
N1265LS160	130-0142●	87.29	79.36	72.75

SCR Capsules

SEMIKRON innovation+service



- Hermetic metal/ceramic cases
- International standard cases
- Capsule package for double sided cooling
- Amplifying gates (SKT551/12E)
- Shallow design for single sided cooling
- Supplied with leads

SKT340 series H=14, Dia=41, Lead length=230 SKT551 series H=14, Dia=41, Lead length=230
SKT600 series H=26, Dia=57.3, Lead length=250

V_{RRM} V	$I_{T\ (av)}$ @ 85°C A	I_{TSM} @ 25°C A	V_T V	$R_{th\ j\text{-}c}$ °C/W	F kN	Mftrs. list No.
1200	340	5700	1.65	0.07	10-13	SKT340/12E
1200	550	9000	1.65	0.045	5.2-8	SKT551/12E
1200	600	11500	2	0.038	10-13	SKT600/12E
1600	340	5700	2	0.07	10-13	SKT340/16

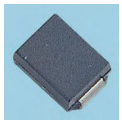
211192

Mftrs. List No.	Order Code	Price Each 1+	5+	25+
SKT340/12E	118-2758●	51.40	47.45	41.34
SKT340/16	118-2759●	59.12	56.18	52.85
SKT551/12E	928-7051●	326.47	225.89	173.95
SKT600/12E	928-7060●	387.82	259.86	200.11

Thyristor Overvoltage Protectors

SMB, High Voltage Ringing SLIC Protector

BOURNS



This TISP® device series protects central office, access and customer premise equipment against overvoltages on the telecom line.

The TISP4350H3BJ is available in a wide range of voltages and has a high current capability, allowing minimal series resistance to be used.
These protectors have been specified mindful of the following standards and recommendations: GR-1089-CORE, FCC Part 68, UL1950, EN 60950,IEC 60950, ITU-T K.20, K.21 and K.45. The TISP4350H3BJ meets the FCC Part 68 B" ringer voltage requirement and survives the Type A and B impulse tests.

V_{DRM} V	V_{BO} V	V_T @ I_T V	I_{DRM} A	$I_{(BO)}$ mA	I_H mA	I_T A	Mftrs List No.
275	350	3	5	600	150	5	TISP4350H3BJ

422920

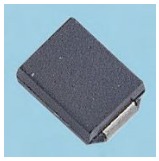
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
TISP4350H3BJ	SMD 109-8164●	0.54	0.38	0.32	0.30	0.28

Thyristor, TVS

DO-214AA & TO-92

Littelfuse

New



DO-214AA



TO-92

The DO-214AA and TO-92 SIDACtor solid state protection devices protect telecommunications equipment such as modems, line cards, and CPE (telephones, answering machines, and fax machines).

RL Re-reeling available

Farnell

Thyristor Overvoltage Protectors - continued

Thyristor, TVS - continued

DO-214AA & TO-92 - continued

Voltage Vdrm V	Current Peak Pulse @ 10/1000 µS A	Current Peak Pulse @ 8/20 µS A	Current Itsm A	Mftrs. List No.	Order Code
Bidirectional DO-214AA					
6	45	150	20	P0080SALRP	160-5682
6	45	150	20	P0080SALRP	160-5682
6	100	400	30	P0080SCLRP	160-5683
6	100	400	30	P0080SCMCLRP	160-5684
25	45	150	20	P0300SALRP	160-5686
25	45	150	20	P0300SAMCLRP	160-5687
25	80	250	30	P0300SBLRP	160-5688
25	100	400	50	P0300SCLRP	160-5691
25	100	400	30	P0300SCMCLRP	160-5692
58	45	150	20	P0640SALRP	160-5693
58	80	250	30	P0640SBLRP	160-5694
58	100	400	50	P0640SCLRP	160-5695
58	45	150	20	P0642SALRP	160-5696
65	100	400	50	P0720SCLRP	160-5697
75	80	250	80	P0900SBLRP	160-5698
90	100	400	50	P1100SCLRP	160-5699
120	45	150	20	P1300SALRP	160-5701
140	100	400	20	P1500SCLRP	160-5702
170	100	400	50	P1800SCLRP	160-5703
170	100	400	30	P1800SCMCLRP	160-5704
220	80	250	30	P2600SBLRP	160-5706
220	100	400	50	P2600SCLRP	160-5708
275	80	250	30	P3100SBLRP	160-5713
275	100	400	50	P3100SCLRP	160-5714
275	100	400	50	P3100SCRP	160-5715
320	100	400	50	P3500SCLRP	160-5716
320	100	400	50	P3500SCRP	160-5717
Bidirectional TO-92					
25	45	150	20	P0300EAL	160-5685
220	45	150	20	P2600EAL	160-5705
275	45	150	20	P3100EAL	160-5709
275	80	250	30	P3100EBL	160-5710
275	80	250	30	P3100EBLRP2	160-5711
275	45	150	20	P3100SALRP	160-5712
Unidirectional DO-214AA					
95	100	400	50	P1101SCLRP	160-5700

511707

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
P0080SALRP	SMD 160-5682●	0.55	0.54	0.52	0.51	0.50
P0080SCLRP	SMD 160-5683●	0.66	0.64	0.63	0.61	0.59
P0080SCMCLRP	SMD 160-5684●	0.73	0.71	0.69	0.66	0.65
P0300EAL	160-5685●	0.48	0.47	0.46	0.45	0.44
P0300SALRP	SMD 160-5686●	0.55	0.53	0.52	0.51	0.49
P0300SAMCLRP	SMD 160-5687●	0.60	0.59	0.57	0.56	0.55
P0300SBLRP	SMD 160-5688●	0.59	0.58	0.56	0.55	0.54
P0300SCLRP	SMD 160-5691●	0.66	0.64	0.63	0.61	0.59
P0300SCMCLRP	SMD 160-5692●	0.73	0.71	0.69	0.66	0.65
P0640SALRP	SMD 160-5693●	0.55	0.53	0.52	0.51	0.49
P0640SBLRP	SMD 160-5694●	0.59	0.58	0.56	0.55	0.54
P0640SCLRP	SMD 160-5695●	0.66	0.64	0.63	0.61	0.59
P0642SALRP	SMD 160-5696●	0.57	0.56	0.54	0.53	0.52
P0720SCLRP	SMD 160-5697●	0.66	0.64	0.63	0.61	0.59
P0900SBLRP	SMD 160-5698●	0.59	0.58	0.56	0.55	0.54
P1100SCLRP	SMD 160-5699●	0.66	0.64	0.63	0.61	0.59
P1101SCLRP	SMD 160-5700●	0.72	0.71	0.69	0.66	0.64
P1300SALRP	SMD 160-5701●	0.55	0.53	0.52	0.51	0.49
P1500SCLRP	SMD 160-5702●	0.66	0.64	0.63	0.61	0.59
P1800SCLRP	SMD 160-5703●	0.66	0.64	0.63	0.61	0.59
P1800SCMCLRP	SMD 160-5704●	0.73	0.71	0.69	0.66	0.65
P2600EAL	SMD 160-5705●	0.48	0.47	0.46	0.45	0.44
P2600SBLRP	SMD 160-5706●	0.59	0.58	0.56	0.55	0.54
P2600SCLRP	SMD 160-5708●	0.66	0.64	0.63	0.61	0.59
P3100EAL	160-5709●	0.48	0.47	0.46	0.45	0.44
P3100EBL	160-5710●	0.54	0.52	0.51	0.50	0.48
P3100EBLRP2	160-5711●	0.57	0.56	0.54	0.53	0.52
P3100SALRP	160-5712●	0.55	0.53	0.52	0.51	0.49
P3100SBLRP	SMD 160-5713●	0.59	0.58	0.56	0.55	0.54
P3100SCLRP	SMD 160-5714●	0.65	0.64	0.62	0.60	0.59
P3100SCRP	SMD 160-5715●	0.60	0.59	0.57	0.56	0.54
P3500SCLRP	SMD 160-5716●	0.66	0.64	0.63	0.61	0.59
P3500SCRP	SMD 160-5717●	0.60	0.59	0.57	0.56	0.54

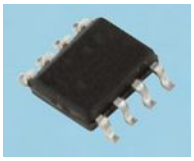
Thyristor Array, TVS

Littelfuse

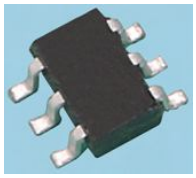
New



PDIP



SOIC



SOT-23

The SP720 is an array of SCR/Diode bipolar structures for ESD and overvoltage protection to sensitive input circuits.

The SP721, SP723 is an array of SCR/Diode bipolar structures for ESD and overvoltage protection to sensitive input circuits.

The SP724 is a quad array of transient voltage clamping circuits designed to suppress ESD and other transiet overvoltage events.

The SP725 is an array of SCR/Diode bipolar structures for ESD and overvoltage protection of sensitive input circuits.

Case Style	Voltage Vdrm V	Current Peak Pulse @ 8/20 µS A	Mftrs. List No.	Order Code
SOT-23	20	3	SP724AHTP	160-5748
PDIP	35	3	SP720APP	160-5742
SOIC	35	3	SP721ABG	160-5743
PDIP	35	3	SP721APP	160-5745
SOIC	35	7	SP723ABG	160-5746
PDIP	35	7	SP723APP	160-5747
SOIC	35	14	SP725ABG	160-5749

511777

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	500+
SP724AHTP	SMD 160-5748●	0.68	0.52	0.45	0.42	0.38
SP720APP	160-5742●	1.60	1.56	1.52	1.47	1.43
SP721ABG	160-5743●	1.11	1.09	1.06	1.03	1.01
SP721APP	160-5745●	1.11	1.09	1.06	1.03	1.01
SP723ABG	SMD 160-5746●	1.91	1.86	1.81	1.75	1.71
SP723APP	160-5747●	1.51	1.46	1.42	1.39	1.35
SP725ABG	SMD 160-5749●	1.47	1.43	1.40	1.36	1.33

Triacs

Standard and High Commutation

SanRex

5mA to 30mA Gate Sensitivity, V_{DRM} = 600V

I_T RMS A	I_{TSM} 1 cycle 50Hz Non-repetitive A	I_{GT}, mA t_2+ g+	t_2+ g-	t_2- g-	t_2- g+	Package	Mfftrs List No.
SOT-89							
1	9.1	5	5	5	10	SOT-89	TMG1CQ60A*
D-PAK							
2	18	15	15	15	—	D-PAK	TMG2CQ60D
2	18	5	5	5	10	D-PAK	TMG2DQ60D*
3	27	15	15	15	—	D-PAK	TMG3CQ60D
3	27	5	5	5	10	D-PAK	TMG3DQ60D*
5	50	20	20	20	—	D-PAK	TMG5CQ60D

* = sensitive gate

423446

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
TMG1CQ60A	SMD 109-6274● RL	0.44	0.38	0.30	0.27	0.24
TMG2CQ60D	SMD 109-6275● RL	0.80	0.70	0.55	0.50	0.42
TMG2DQ60D	SMD 109-6276● RL	0.58	0.51	0.40	0.36	0.31
TMG3CQ60D	SMD 109-6277● RL	0.69	0.61	0.48	0.43	0.37
TMG3DQ60D	SMD 109-6279● RL	0.69	0.61	0.48	0.43	0.37
TMG5CQ60D	SMD 109-6281● RL	0.73	0.64	0.51	0.47	0.39

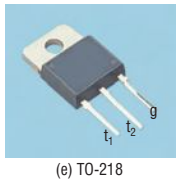
Isolated



(a), (b) TO-92



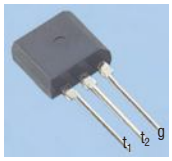
(c) TO-220



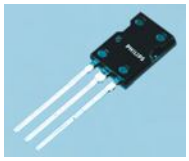
(e) TO-218



(f) TO-3 Flanged



(g) TO202-2



(h) SOT-82

Pin Out	1	2	3
(a)	t_2	g	t_1
(b)	t_1	t_2	g

Isolated devices offer simplified heatsinking without the need for additional insulating hardware, and reduced assembly costs.

V_{DRM} V	I_T rms A	I_{TSM} A	I_{GT}, mA t_2+ g+	t_2+ g-	t_2- g-	t_2- g+	V_{GT} V	V_{DRM} Package	Pack-age	Mftr.	Mftrs. List No.
400	0.8	8.0	5	5	5	7	1.5	TO-92	a	ST	Z0107DA
600	40	300	50	50	50	100	1.5	RD-91	f	ST	BTA40-600B
600	40	300	50	50	100	50	1.5	TOP-3	e	ST	BTA41-600BRG
600	30	260	50	50	50	100	1.5	RD-91	f	ST	BTA25-600B
600	25	250	50	50	100	50	1.5	TOP-3	e	ST	BTA26-600BRG
600	16	170	50	50	50	100	1.5	TO-220AB	c	ST	BTA16-600B
600	16	160	25	—	—	—	1.3	TO-220AB	c	ST	BTA16-600C
600	16	170	10	10	10	—	1.3	TO-220AB	c	ST	BTA16-600SWRG
600	12	120	50	50	100	50	1.5	TO-220AB	c	ST	BTA12-600BRG
600	10	100	50	50	100	50	1.5	TO-220AB	c	ST	BTA10-600BRG
600	10	100	25	25	50	25	1.5	TO-220AB	c	ST	BTA10-600CRG
600	8	80	50	50	100	50	1.5	TO-220AB	c	ST	BTA08-600BRG

RL Re-reeling available

Farnell

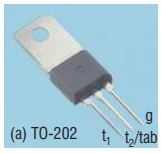
V_{DRM} V	I_T rms A	I_{TSM} A	I_{GT} mA t_2+ g+	t_2+ g-	t_2- g-	t_2- g+	V_{GT} V	V_{DRM} Package	Pack-age	Mftr.	Mftrs. List No.
600	6	60	5	5	5	5	1.5	TO-220AB	c	ST	BTA06-600TRG
600	6	60	50	50	100	50	1.5	TO-220AB	c	ST	BTA06-600BRG
600	4	20	5	5	5	5	1.5	TO-202-3	g	ST	Z0405MF
600	0.8	8.0	5	5	5	7	1.5	TO-92	a	ST	Z0107MA
600	0.8	8.0	3	3	3	5	1.5	TO-92	a	ST	Z0103MA
600	0.8	10	5	5	5	7	1.5	TO-92	a	ST	Z00607MA
700	40	300	50	50	50	100	1.5	RD-91	f	ST	BTA40-700B
700	40	300	50	50	100	50	1.5	TOP-3	e	ST	BTA41-700BRG
700	30	250	50	50	50	100	1.5	RD-91	f	ST	BTA25-700B
700	25	250	50	50	100	50	1.5	TOP-3	e	ST	BTA26-700BRG
700	12	120	50	50	100	50	1.5	TO-220AB	c	ST	BTA12-700BRG
800	40	300	50	50	100	50	1.5	TOP-3	e	ST	BTA41-800BRG
800	16	160	50	50	100	50	1.5	TO-220AB	c	ST	BTA16-800BRG
800	40	300	50	50	50	100	1.5	RD-91	f	ST	BTA40-800B
800	8	84	25	25	50	25	1.5	TO-220AB	c	ST	BTA08-800C

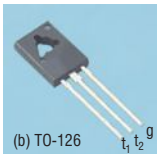
Order Multiple=1 Mftrs. List No.	Mfr.	Order Code	Price Each 1+	25+	100+	250+	1K+
TO-220AB							
BTA06-600BRG	ST	**105-7265●**	1.070	0.800	0.630	0.510	0.480
BTA06-600TRG	ST	**105-7267●**	1.090	0.810	0.660	0.510	0.490
BTA08-600BRG	ST	**105-7269●**	0.630	0.590	0.560	0.500	0.490
BTA08-800C	ST	**980-1626●**	2.070	1.520	1.250	0.880	0.840
BTA10-600BRG	ST	**105-7272●**	1.720	1.230	0.930	0.700	0.610
BTA10-600CRG	ST	**105-7274●**	1.030	0.780	0.590	0.440	0.420
BTA12-600BRG	ST	**105-7275●**	1.690	1.190	0.920	0.770	0.650
BTA12-700BRG	ST	**105-7278●**	1.730	1.160	0.950	0.850	0.730
BTA16-600B	ST	**980-1642●**	2.250	1.620	1.200	0.740	0.700
BTA16-600C	ST	**991-0506●**	1.600	1.240	1.000	0.840	0.820
BTA16-600SWRG	ST	**105-7280●**	1.860	1.390	1.110	0.950	0.760
BTA16-800BRG	ST	**105-7281●**	1.960	1.390	1.110	0.930	0.760
RD-91							
BTA25-600B	ST	**980-1677●**	5.320	4.080	3.100	2.600	2.370
BTA25-700B	ST	**980-1693●**	7.550	5.610	4.560	4.430	4.320
BTA40-600B	ST	**980-1715●**	6.660	5.380	4.080	3.430	3.050
BTA40-700B	ST	**980-1723●**	10.300	7.590	6.160	4.780	4.560
BTA40-800B	ST	**980-1731●**	7.350	5.450	5.130	5.000	4.870
TOP-3							
BTA26-600BRG	ST	**105-7286●**	4.800	3.600	2.910	2.530	2.160
BTA26-700BRG	ST	**105-7287●**	5.420	3.920	3.180	2.550	2.370
BTA41-600BRG	ST	**105-7288●**	5.710	4.080	2.750	2.170	2.150
BTA41-700BRG	ST	**105-7289●**	7.170	5.350	4.340	3.530	3.430
BTA41-800BRG	ST	**105-7290●**	5.290	3.920	3.360	3.280	3.190
Order Multiple=5			**5+**	**25+**	**100+**	**250+**	**1K+**
TO-92							
Z00607MA	ST	**980-4560●**	0.280	0.182	0.144	0.108	0.094
Z0103MA	ST	**980-4579●**	0.710	0.510	0.350	0.220	0.210
Z0107DA	ST	**980-4587●**	0.290	0.197	0.135	0.110	0.093
Z0107MA	ST	**980-4595●**	0.380	0.240	0.230	0.137	0.133
Order Multiple=1			**1+**	**25+**	**100+**	**250+**	**1K+**
TO-202-3							
Z0405MF	ST	**980-4617●**	1.070	0.550	0.380	0.280	0.230

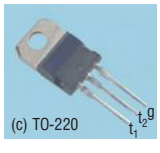
211144

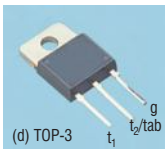
Tubes of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+	10+
BTA16-600SWRG	NEW **156-4184●**	44.50	38.50	31.24
BTA16-600B	NEW **156-4186●**	56.86	35.97	34.43

Non-Isolated













V_{DRM} V	I_T rms A	I_{TSM} A	I_{GT} mA t_2+ g+	t_2+ g-	t_2- g-	t_2- g+	V_{GT} V	Pack-age	Mftr.	Mftrs. List No.
400	4	30	5	5	5	10	2	TO-220	BNS	TIC206D
400	4	30	5	5	5	10	2.5	TO-126	ON	2N6073AG
600	30	250	50	50	50	100	1.5	TOP-3	ST	BTB26-600BRG
600	25	200	50	50	50	100	1.5	TO-220AB	ST	BTB24-600BRG
600	16	160	50	50	50	100	1.5	TO-220AB	ST	BTB16-600B
600	16	170	10	10	10	—	1.3	TO-220AB	ST	BTB16-600SWRG
600	16	160	25	25	—	50	1.3	TO-220AB	ST	BTB16-600C
600	12	120	25	25	25	50	1.5	TO-220AB	ST	BTB12-600CRG
600	10	100	50	50	—	100	1.3	TO-220AB	ST	BTB10-600B
600	8	80	50	50	50	100	1.5	TO-220AB	ST	BTB08-600BRG
600	8	80	10	10	10	10	1.5	TO-220AB	ST	BTB08-600SRG
600	8	80	50	50	50	100	1.3	D-PAK	ST	T810-600B
600	8	80	25	25	—	50	1.3	TO-220AB	ST	BTB08-600C
600	8	70	—	—	—	—	0.8	TO-220AB	ST	TS820-600T
600	6	60	5	5	5	5	1.5	TO-220AB	ST	BTB06-600TRG
600	6	60	50	50	—	100	1.3	TO-220AB	ST	BTB06-600B
600	4	30	5	5	5	—	1.3	D-PAK	ST	T405-600B

V_{DRM} V	I_T rms A	I_{TSM} A	I_{GT} mA t_2+ g+	t_2+ g-	t_2- g-	t_2- g+	V_{GT} V	Pack-age	Mftr.	Mftrs. List No.
600	4	30	10	10	10	—	1.5	TO-220	ST	T410-600T
600	4	30	5	5	5	10	2.5	TO-126	ON	2N6075AG
600	4	30	10	10	10	—	1.3	D-PAK	ST	T410-600B
600	4	35	10	10	—	25	1.3	TO-220AB	ST	BTB04-600SL
600	4	30	5	—	—		1.3	I-PAK	ST	T405-600H
600	4	30	5	—	—		1.3	TO-220AB	ST	T405-600T
600	4	30	5	—	—		1.3	D-PAK	ST	T405Q-600B
600	1	8	10	10	—	10	1.3	SOT-223	ST	Z0109MN
600	1	8	25	25	—	25	1.3	SOT-223	ST	Z0110MN
800	16	168	50	50	50	—	1.3	TO-220AB	ST	BTA16-800BWRG
800	25	260	50	50	—	50	1.3	TO-220AB	ST	BTA24-800BWRG

211365

Mftrs. List No.	Mfr.	Order Code	Price Each 1+	25+	100+	250+
BTA16-800BWRG	ST	**105-7282●**	2.27	1.78	1.43	1.07
BTA24-800BWRG	ST	**117-5643●**	3.46	2.59	2.10	1.81
BTB04-600SL	ST	**991-0522●**	0.63	0.48	0.37	0.29
BTB06-600TRG	ST	**105-7291●**	1.15	0.77	0.63	0.57
BTB08-600BRG	ST	**105-7292●**	1.00	0.71	0.55	0.41
BTB08-600SRG	ST	**105-7293●**	0.93	0.70	0.56	0.44
BTB08-600C	ST	**991-0581●**	0.96	0.86	0.79	0.68
BTB10-600B	ST	**991-0603●**	1.36	1.06	0.87	0.71
BTB16-600C	ST	**991-0646●**	1.25	0.95	0.80	0.64
BTB12-600CRG	ST	**105-7295●**	1.23	0.87	0.66	0.50
BTB16-600B	ST	**980-1740●**	1.47	1.07	0.80	0.59
BTB16-600SWRG	ST	**105-7296●**	1.57	1.13	0.84	0.64
BTB24-600BRG	ST	**105-7298●**	1.84	1.32	0.99	0.78
BTB26-600BRG	ST	**105-7299●**	2.71	1.95	1.54	1.26
T405-600B	ST	SMD **994-6675●**	0.74	0.63	0.48	0.35
T410-600B	ST	SMD **994-6667●**	1.13	0.86	0.63	0.53
T410-600T	ST	**980-3955●**	0.99	0.63	0.51	0.38
T810-600B	ST	SMD **994-6683●**	1.46	0.86	0.64	0.52
2N6073AG	ON	**955-6559●**	0.62	0.42	0.30	0.26
2N6075AG	ON	**955-6567●**	0.62	0.42	0.30	0.26
T405-600H	ST	**991-0719●**	0.49	0.35	0.29	0.24
T405-600T	ST	**991-0727●**	0.71	0.52	0.42	0.35
T405Q-600B	ST	SMD **991-0735●** RL	0.52	0.38	0.30	0.26
TS820-600T	ST	**991-0760●**	1.09	0.84	0.66	0.52
Z0109MN	ST	SMD **991-0778●**	0.51	0.46	0.42	0.36
Z0110MN	ST	SMD **991-0786●**	0.52	0.38	0.31	0.28
BTB06-600B	ST	**991-0530●**	0.60	0.45	0.36	0.27

600 V, Insulated TO-220 and TO-3P Triacs

SanRex

General Purpose


TO-220F/F2


TO-3PF

V_{DRM}	I_T RMS A	I_{TSM} 1 cycle 50Hz None repetitive A	I_{GT} mA t_2+ g+	t_2+ g-	t_2- g-	t_2- g+	Package	Mfftrs List No.
600	2	18	15	15	15	—	TO-220F	TMG2CQ60F
600	3	27	15	15	15	—	TO-220F	TMG3CQ60F
600	5	50	20	20	20	—	TO-220F	TMG5CQ60F
600	8	80	30	30	30	—	TO-220F	TMG8CQ60F
600	10	100	30	30	30	—	TO-220F	TMG10CQ60F
600	12	119	30	30	30	—	TO-220F	TMG12CQ60F
600	16	155	30	30	30	—	TO-220F	TMG16CQ60F
600	20	183	30	30	30	—	TO-220F	TMG20CQ60F
600	25	360	30	30	30	—	TO-220F2	TMG25CQ60F
600	16	155	30	30	30	—	TO-3PF	TMG16CQ60J
600	25	225	30	30	30	—	TO-3PF	TMG25CQ60J
Sensitive gate								
600	2	18	5	5	5	10	TO-220F	TMG2DQ60F
600	3	27	5	5	5	10	TO-220F	TMG3DQ60F

423425

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
TMG2CQ60F	**109-6258●**	0.89	0.78	0.62	0.56	0.48
TMG2DQ60F	**109-6259●**	0.89	0.78	0.62	0.56	0.48
TMG3CQ60F	**109-6260●**	0.91	0.80	0.64	0.57	0.49
TMG3DQ60F	**109-6261●**	0.92	0.81	0.64	0.57	0.49
TMG5CQ60F	**109-6262●**	1.11	0.96	0.77	0.69	0.58
TMG8CQ60F	**109-6263●**	0.98	0.85	0.67	0.62	0.52
TMG10CQ60F	**109-6264●**	1.33	1.16	0.91	0.83	0.70
TMG12CQ60F	**109-6265●**	1.41	1.24	0.97	0.89	0.76
TMG16CQ60F	**109-6267●**	1.51	1.31	1.05	0.94	0.80
TMG20CQ60F	**109-6268●**	1.82	1.59	1.25	1.14	0.96
TMG25CQ60F	**109-6269●**	2.47	2.17	1.71	1.55	1.31
TMG16CQ60L	**109-6270●**	2.53	2.21	1.77	1.61	1.35
TMG25CQ60L	**109-6271●**	3.35	2.93	2.35	2.13	1.80

3-Quadrant Triacs (High Commutation)

NXP founded by Philips


TO-220/TO-220AB


TO-220F


DPAK


SOT-223

RL Re-reeling available

Farnell

Triacs - continued

3-Quadrant Triacs (High Commutation) - continued

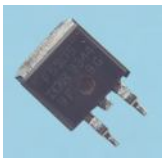
V_{DRM} V	I_T rms A	I_{TSM} A	I_{GT} mA	V_{GT} V	V_{DRM} Package	Mftrs. List No.
600	8	65	10	1.5	TO-220F	BTA208X-600E
600	12	110	35	1.5	TO-220	BTA312Y-600C
800	4	25	10	1.5	TO-220AB	BTA204-800E
800	4	25	10	1.5	D-PAK	BTA204S-800E
800	4	25	10	1.5	SOT-223	BTA204W-800E
800	8	65	10	1.5	TO-220AB	BTA208-800E
800	8	65	10	1.5	D-PAK	BTA208S-800E

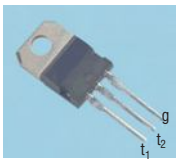
496606

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
BTA204-800E	**152-4127**	0.59	0.45	0.35	0.30	0.24
BTA204S-800E	SMD **152-4128**	0.45	0.34	0.27	0.25	0.22
BTA204W-800E	SMD **152-4129**	0.42	0.31	0.25	0.22	0.21
BTA208-800E	**152-4131**	0.60	0.43	0.35	0.32	0.30
BTA208S-800E	SMD **152-4132**	0.60	0.43	0.35	0.32	0.30
BTA208X-600E	**152-4133**	0.88	0.63	0.51	0.43	0.39
BTA312Y-600C	**152-4134**	0.66	0.48	0.39	0.35	0.33

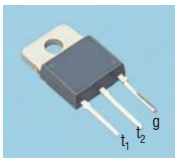
High Commutation, V_{DRM}=600 V

Logic Drive


D_2-PAK



TO-220



TOP-3


RD91

- No additional snubber networks required
- Isolated or non-isolated tab
- Sensitive gate, logic-level drive options
- Optimised for high inductive load switching

I_T rms A	I_{TSM} A	I_{GT} mA t_2+ g+	t_2+ g-	t_2- g-	V_{GT} V	Package	Mftrs. List No.
4	30	35	—	—	1.3	TO-220AB	T435-600T
6	60	5	—	—	1.3	TO-220AB	BTA06-600TW
6	60	10	—	—	1.3	TO-220AB	BTA06-600SW
6	60	10	—	—	1.3	TO-220AB	BTB06-600SW
6	60	35	—	—	1.3	TO-220AB	BTA06-600CW
6	60	50	—	—	1.3	TO-220AB	BTB06-600BW
6	63	50	50	50	1.5	TO-220AB	BTA06-600BWRG
8	80	5	5	5	1.5	TO-220AB	BTA08-600TW
8	80	10	10	10	1.5	TO-220AB	BTA08-600SWRG
8	80	35	35	35	1.5	TO-220AB	BTA08-600CWRG
8	80	35	—	—	1.3	D2-PAK	T835-600G
8	80	35	—	—	1.3	D2-PAK	T835-600G
8	80	35	—	—	1.3	TO-220AB	BTB08-600CW
8	80	50	50	50	1.5	TO-220AB	BTA08-600BW
10	100	35	—	—	1.3	TO-220AB	BTA10-600CW
10	105	50	50	50	1.5	TO-220AB	BTA10-600BW
12	126	10	10	10	1.5	TO-220AB	BTA12-600SWRG
12	126	10	—	—	1.3	TO-220AB	BTB12-600SW
12	126	35	—	—	1.3	TO-220AB	BTA12-600CW
12	126	35	35	35	1.3	D2-PAK	T1235-600G
12	126	50	50	50	1.5	TO-220AB	BTA12-600BWRG
12	120	35	35	35	1.5	TO-220AB	BTA12-700CWRG
12	120	50	50	50	1.5	TO-220AB	BTB12-600BWRG
16	170	35	35	35	1.3	D2-PAK	T1635-600G
16	160	35	35	35	1.5	TO-220AB	BTA16-600CW
16	160	35	—	—	1.3	TO-220AB	BTB16-600CWRG
16	157	50	50	50	1.5	TO-220AB	BTA16-600BWRG
20	210	50	50	50	1.5	TO-220AB	BTA20-600CWRG
20	200	35	—	—	1.3	TO-220	T2035H-600TRG
24	240	50	50	50	1.5	TO-220AB	BTA24-600BWRG
25	262	50	50	50	1.5	TOP-3	BTA26-600BW
25	250	35	—	—	1.3	TO-220AB	BTA24-600CW
25	250	35	—	—	1.3	TO-220AB	BTB24-600CW
25	250	50	50	50	1.5	RD-91	BTA25-600BW

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
BTA06-600BWRG	**105-7266**	1.26	0.91	0.68	0.55	0.48
BTA06-600CW	**991-0450**	1.03	0.80	0.63	0.55	0.48
BTA06-600SW	**991-0468**	1.14	0.87	0.71	0.58	0.56
BTA06-600TW	**991-0476**	1.13	0.86	0.70	0.56	0.55
BTA08-600BW	**980-1600**	1.20	0.88	0.65	0.42	0.38
BTA08-600CWRG	**105-7270**	1.45	1.08	0.88	0.70	0.57
BTA08-600SWRG	**105-7271**	2.08	1.25	0.99	0.59	0.51
BTA08-600TW	**980-1618**	1.47	1.07	0.80	0.59	0.51
BTA10-600BW	**980-1634**	1.35	0.99	0.73	0.46	0.45
BTA10-600CW	**991-0484**	1.28	0.95	0.79	0.63	0.62
BTA12-600BWRG	**105-7276**	1.51	1.15	0.91	0.74	0.62

Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
BTA12-600SWRG	**105-7277**	1.45	1.02	0.79	0.66	0.56
BTA12-700CWRG	**105-7279**	1.62	1.21	0.97	0.78	0.73
BTA12-600CW	**991-0492**	1.33	0.94	0.78	0.66	0.56
BTA16-600BWRG	**117-5636**	1.93	1.43	1.13	0.97	0.78
BTA16-600CW	**980-1650**	1.89	1.36	1.01	0.81	0.70
BTA20-600CWRG	**105-7283**	1.77	1.25	1.01	0.84	0.72
BTA24-600BWRG	**105-7284**	2.74	1.88	1.53	1.36	1.15
BTA24-600CW	**991-0514**	2.67	2.04	1.64	1.32	1.30
BTA25-600BW	**980-1685**	7.84	5.64	4.23	3.54	3.04
BTA26-600BW	**980-1707**	3.79	2.83	2.30	1.95	1.72
BTB06-600BW	**991-0549**	0.70	0.52	0.42	0.36	0.31
BTB06-600SW	**991-0573**	0.99	0.73	0.59	0.43	0.38
BTB08-600CW	**991-0590**	0.65	0.51	0.42	0.36	0.31
BTB12-600BWRG	**105-7294**	1.50	1.01	0.82	0.74	0.58
BTB12-600SW	**991-0620**	1.03	0.80	0.67	0.53	0.52
BTB16-600CWRG	**991-0654**	1.20	0.91	0.73	0.59	0.49
BTB24-600CW	**991-0662**	1.45	1.11	0.91	0.78	0.73
T435-600T	**991-0743**	0.66	0.50	0.41	0.35	0.30
T835-600G	SMD **991-0751**	1.31	1.00	0.81	0.64	0.55
T1235-600G	SMD **980-3939**	1.04	0.80	0.64	0.58	0.57
T1635-600G	SMD **980-3947**	2.05	1.50	1.21	1.00	0.87
T2035H-600TRG	**129-5314**	2.46	1.73	1.36	1.24	1.11
T2550H-600T	**991-0700**	2.95	2.20	1.78	1.43	1.40

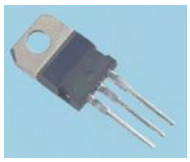
451992

Tube of 50 Mftrs. List No.	Order Code	Price Per Tube 1+	4+
BTA24-600BWRG	NEW **156-4185**	57.28	48.76

TRIAC, 600V TO-220

Littelfuse

New


TO-220

Features:
- RoHS Compliant
- Glass -passivated junction

V_{DRM} V	$I_{T(RMS)}$ A	I_{TSM} 60/50Hz	I_{GT}	Package	Mftrs. List No.
600	15	200A/167A	1.5A	TO-220	Q6015LT
600	25	250A/208A	80mA	TO-220	Q6025L6

Q6015LT
- Internal trigger diac
- Electrically-isolated package
- High surge capability - up to 200 A
- High voltage capability - 200 V to 600 V

Q6025L6
- High surge current capability
- 2500V ac isolation for L, J, & K Packages
- High commutating dv/dt
- High static dv/dt

503822

Mftrs. List No.	Order Code	Price Each 1+	25+	100+
Q6015LT	**145-6975**	2.01	1.52	1.31
Q6025L6	**145-6976**	2.59	1.96	1.69

Alternistors


TOP3

- High commutation
- High surge current
- High voltage
- Suitable for inductive load power control

I_T rms (A)	V_{DRM} V_{RRM} (V)	I_{TSM}* (A)	I_{GT} mA t_2+ g+	t_2+ g-	t_2- g-	t_2- g+	V_{GT} (V)	Package	Mftrs. List No.
25	1200	230	150	150	150	—	1.5	TOP-3	TPDV1225RG
40	600	350	200	200	200	—	1.5	TOP-3	TPDV640RG
40	1200	350	200	200	200	—	1.5	TOP-3	TPDV1240

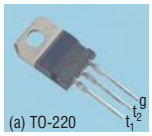
* I_{TSM} @ t_p=10ms

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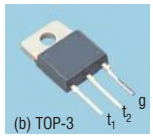
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
TPDV640RG	**105-7305**	9.98	7.53	5.81	5.34	4.66
TPDV1225RG	**105-7304**	9.38	7.36	5.90	5.43	4.73
TPDV1240	**980-4242**	14.41	10.77	8.55	6.95	6.66

High Commutation, V_{DRM}=600 V


(c) D_2-PAK



(a) TO-220



(b) TOP-3


(d) RD91

- No additional snubber networks required
- Isolated or non-isolated tab
- Sensitive gate, logic-level drive options
- Optimised for high inductive load switching

I_T rms A	I_{TSM} A	I_{GT} mA t_2+ g+	t_2+ g-	t_2- g-	V_{GT} V	Package	Mftrs. List No.
Isolated tab (to 2.5kV rms), V_{DRM}=600 V							
4	30	35			1.3	TO-220AB	T435-600T
6	63	50	50	50	1.5	TO-220AB	BTA06-600BWRG
6	60	35			1.3	TO-220AB	BTA06-600CW

RL Re-reeling available

Farnell

I_T rms	I_{TSM}	I_{GT}, mA t_2+	t_2+	t_2-	V_{GT}	Pack-	Mftrs.
Isolated tab (to 2.5kV rms), V_{DRM}=600 V							
6	60	10			1.3	TO-220AB	BTA06-600SW
6	60	5			1.3	TO-220AB	BTA06-600TW
8	80	50	50	50	1.5	TO-220AB	BTA08-600BW
8	80	35	35	35	1.5	TO-220AB	BTA08-600CWRG
8	80	10	10	10	1.5	TO-220AB	BTA08-600SWRG
8	80	5	5	5	1.5	TO-220AB	BTA08-600TW
8	80	35			1.3	D2-PAK	T835-600G
10	105	50	50	50	1.5	TO-220AB	BTA10-600BW
10	100	35			1.3	TO-220AB	BTA10-600CW
12	140				1.3	TO-220AB	T1235H-600T
12	126	50	50	50	1.5	TO-220AB	BTA12-600BWRG
12	126	10	10	10	1.5	TO-220AB	BTA12-600SWRG
12	126	35			1.3	TO-220AB	BTA12-600CW
12	126	35	35	35	1.3	D2-PAK	T1235-600G
16	170	35	35	35	1.3	D2-PAK	T1635-600G
16	160	35	35	35	1.5	TO-220AB	BTA16-600CW
16	157	50	50	50	1.5	TO-220AB	BTA16-600BWRG
20	210	50	50	50	1.5	TO-220AB	BTA20-600CWRG
24	240	50	50	50	1.5	TO-220AB	BTA24-600BWRG
25	262	50	50	50	1.5	TOP-3	BTA26-600BW
25	250	35			1.3	TO-220AB	BTA24-600CW
25	250	50	50	50	1.5	RD-91	BTA25-600BW
8	80	35			1.3	D2-PAK	T835-600G
Isolated tab (to 2.5kV rms), V_{DRM}=700 V							
12	120	35	35	35	1.5	TO-220AB	BTA12-700CWRG
Non-isolated tab (=t_2)							
6	60	50			1.3	TO-220AB	BTB06-600BW
6	60	35			1.3	TO-220AB	BTB06-600CW
6	60	10			1.3	TO-220AB	BTB06-600SW
8	80	35			1.3	TO-220AB	BTB08-600CW
12	126	10			1.3	TO-220AB	BTB12-600SW
12	126				1.3	TO-220AB	BTB12-800BW
12	120	50	50	50	1.5	TO-220AB	BTB12-600BWRG
16	160	35			1.3	TO-220AB	BTB16-600CWRG
25	250	35			1.3	TO-220AB	BTB24-600CW

● Low gate drive, logic level devices

211152

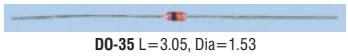
Mftrs. List No.	Order Code	Price Each 1+	25+	100+	250+	1K+
Isolated Tab						
BTA06-600BWRG	**105-7266**●	1.26	0.91	0.68	0.55	0.48
BTA06-600CW	**991-0450**●	1.03	0.80	0.63	0.55	0.48
BTA06-600SW	**991-0468**●	1.14	0.87	0.71	0.58	0.56
BTA06-600TW	**991-0476**●	1.13	0.86	0.70	0.56	0.55
BTA08-600BW	**980-1600**●	1.20	0.88	0.65	0.42	0.38
BTA08-600CWRG	**105-7270**●	1.45	1.08	0.88	0.70	0.57
BTA08-600SWRG	**105-7271**●	2.08	1.25	0.99	0.59	0.51
BTA08-600TW	**980-1618**●	1.47	1.07	0.80	0.59	0.51
BTA10-600BW	**980-1634**●	1.35	0.99	0.73	0.46	0.45
BTA10-600CW	**991-0484**●	1.28	0.95	0.79	0.63	0.62
BTA12-600BWRG	**105-7276**●	1.51	1.15	0.91	0.74	0.62
BTA12-600SWRG	**105-7277**●	1.45	1.02	0.79	0.66	0.56
BTA12-700CWRG	**105-7279**●	1.62	1.21	0.97	0.78	0.73
BTA12-600CW	**991-0492**●	1.33	0.94	0.78	0.66	0.56
BTA16-600BWRG	**117-5636**●	1.93	1.43	1.13	0.97	0.78
BTA16-600CW	**980-1650**●	1.89	1.36	1.01	0.81	0.70
BTA20-600CWRG	**105-7283**●	1.77	1.25	1.01	0.84	0.72
BTA24-600BWRG	**105-7284**●	2.74	1.88	1.53	1.36	1.15
BTA24-600CW	**991-0514**●	2.67	2.04	1.64	1.32	1.30
BTA25-600BW	**980-1685**●	7.84	5.64	4.23	3.54	3.04
BTA26-600BW	**980-1707**●	3.79	2.83	2.30	1.95	1.72
T435-600T	**991-0743**●	0.66	0.50	0.41	0.35	0.30
T835-600G	SMD **991-0751**●	1.31	1.00	0.81	0.64	0.55
T1235H-600T	**991-0697**●	1.31	0.98	0.79	0.69	0.59
T2550H-600T	**991-0700**●	2.95	2.20	1.78	1.43	1.40
Non-isolated Tab						
BTB06-600BW	**991-0549**●	0.70	0.52	0.42	0.36	0.31
BTB06-600CW	**991-0565**●	0.99	0.91	0.81	0.73	0.49
BTB06-600SW	**991-0573**●	0.99	0.73	0.59	0.43	0.38
BTB08-600CW	**991-0590**●	0.65	0.51	0.42	0.36	0.31
BTB12-600BWRG	**105-7294**●	1.50	1.01	0.82	0.74	0.58
BTB12-600SW	**991-0620**●	1.03	0.80	0.67	0.53	0.52
BTB12-800BW	**991-0638**●	1.23	0.94	0.78	0.64	0.63
BTB16-600CWRG	**991-0654**●	1.20	0.91	0.73	0.59	0.49
BTB24-600CW	**991-0662**●	1.45	1.11	0.91	0.78	0.73
T1235-600G	SMD **980-3939**●	1.04	0.80	0.64	0.58	0.57
T1635-600G	SMD **980-3947**●	2.05	1.50	1.21	1.00	0.87

Thyristor/Triac Trigger Devices

Diacs



Minimelf
L=3.6, Dia=1.62



DO-35 L=3.05, Dia=1.53

V_{bo} min. V	V_{bo} typ V	V_{bo} max. V	I_{trm} max. A	V_o min. V	I_{bo} max. µA	Package	P_{tot} mW	Mftrs. List No.
28	32	36	2	5	100	MiniMELF	150	TMMDB3
28	32	36	2	5	100	DO-35	150	DB3
35	40	45	2	5	100	DO-35	150	DB4

Order Multiple = 5 Mftrs. List No.	Order Code	Price Each 5+	25+	100+	250+	1K+
DB3	**980-2231**●	0.250	0.135	0.127	0.085	0.061
DB4	**994-6292**●	0.370	0.210	0.195	0.109	0.102
TMMDB3	SMD **994-6284**● RL	0.510	0.360	0.260	0.210	0.155

211374

Reel of 5000 Mftrs. List No.	Order Code	Price Per Reel 1+
DB3	NEW **156-2395**●	215.37

Hybrid Burst Firing Trigger Circuit

united automation limited



A hybrid burst firing trigger circuit, which generates virtually no RFI or arcing. Its simple 7-pin SIL package maing it versatile and useful as a low cost firing circuit to suit a wide range of load applications with the addition of a potentiometer and triac.

H = 26 , W = 26, D = 7

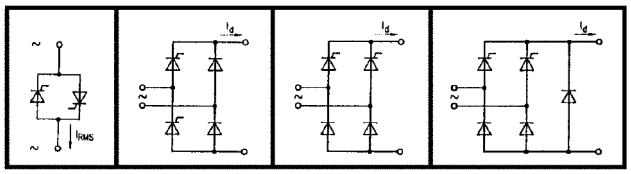
- Supply voltage 240Vac or 110Vac
- Low power consumption (<0.5W)
- Fast cycle time
- Compact 7 pin SIL package

462317

Mftrs. List No.	Order Code	Price Each 1+	10+	25+
BFM-TH-UAL	**133-8086**●	10.00	8.00	7.18

Trigger Modules

Converter Stack Configurations



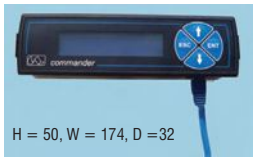
Typical output configurations for SCR/diode trigger modules.

211122

Three Phase Thyristor Driver and Controller

Commander Controller Display

united automation limited



H = 50, W = 174, D =32

- Compact and user friendly
- Portable (removable) or panel (fixed) mounting
- CM Program locking facility
- Set parameter and copy facility
- Simple RJ45 connections
- Easily read - back-lit LCD display
- Tamper proof 'PIN' protection

Three Phase Driver Modules

The CM-FC(M/MV) Commander module (CM) is a remote 'Human Machine Interface' (HMI) programming and display console. It incorporates a simple keypad to input data and a console that displays all the functional information relating to the firing circuit settings. Connections are made by a standard RJ45 lead.Once connected, all functional parameters and settings may be configured on either the FC36M or FC36MV firing circuit.
The panel is mounted , by clipping into panel cutout (integrated spring clips).





RL Re-reeling available

Trigger Modules - continued

Three Phase Thyristor Driver and Controller - continued

Commander Controller Display - continued

FC36M H=36, W=100, L=160 HFM36A H=67, W=80, D=173, Mounting holes spacing 160 and 48mm

FC36M Features:

- Phase angle or burst firing options
- No external phasing transformers or pcb wiring required
- Opto coupled, digital isolated control 5-25V dc
- Analogue control inputs 0.5V dc or 4-20mA
- Output status indicator
- Selectable current limit switch 0-100mA dc
- Over current latching trip
- Selectable phase reversal switch
- Resistive or inductive load select
- Adjustable ramp control 0-30s

FC36M Specification:

Integral transformer	380/415V ac
Secondary voltage	20V ac
Current consumption	300mA
Initial short circuit gate current	1A
Sustaining short circuit gate current	0.5A
Initial pulse voltage	15V
Voltage signal into 10kW	0-5V
Sustaining pulse voltage	8V
Initial gate pulse rate of rise	1A/µs
Pulse width 50/60Hz	22µs
Pulse train frequency	25kHz
Operating temperature	-5°C to +85°C

HFM36A is the enlosed version of the FC36M

460784

Mftrs. List No.	Order Code	Price Each 1+	5+	10+
Three Phase Thyristor Driver - Base Circuit				
FC36M	**121-3102●**	225.32	189.00	169.68
Three Phase Thyristor Driver - Base Circuit				
HFM36A	**133-8089●**	242.59	189.00	175.81
Commander Module				
CM-FC36(M/MV)	**132-9206●**	119.90	110.68	104.26

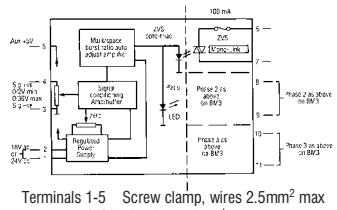
Burst Firing

Three Phase

united automation limited



H (overall) = 43, W = 92, D = 60
Fixing centres = 80 (M5 clear)



Terminals 1-5 Screw clamp, wires 2.5mm² max
6-11 Push on tabs ¼

Burst firing trigger modules for regulating AC heater power stacks from 110V to 440V at 1, 2 or 3 phase into loads up to 2000 A. The varying switching ratio (nominal 1 second time base), is proportional to signal input, as is indicated by a flashing LED.

RFI free firing of thyristors, triacs or thyristor/diode modules, is due to zero voltage, time proportional switching. Opto-isolated output stages eliminate the need for phase timing or matching.

Input power @	18V ac or 24V dc	Trigger o/p rating (cont.)	100mA max.
Signal voltage max	2 to 30V dc	Trigger level (typ.)	5V from zero crossover
Zero offset	0-30% of span	Auxiliary output (protected)	5V dc @ 5mA max
Signal input resistance	5KΩ ±20%	Isolation	2500V rms
Trigger/output channel	1A for 1ms (pk)	Line voltage	110 to 415V rms
Off state dv/dt	430V/µs	Operating Temp (ambient)	60°C max.

211378

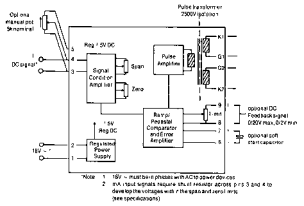
	Mftrs. List No.	Order Code	Price Each 1+	10+	25+
Three phase	BM3	**121-3101●**	92.68	79.63	65.63

Phase Angle, Single Phase

united automation limited



H = 43, W = 92, D = 60
Fixing centres = 80 (M5 clear)



A versatile, single phase universal trigger module for firing thyristors, triacs and thyristor-diode stacks from 1A to 1000A, of 100V to 1600V rating. The unit provides adjustable signal matching to voltage or current signals, selectable soft start delay and adjustable current limit control.

When used with a suitable transformer (not supplied), the module will trigger to 110V and 240V.

Signal span min	0 to 2V dc	Trigger isolation	2500V rms
Signal span max	0 to 25V dc	AC i/p voltage	18V rms ±15% @ 65mA
Signal zero offset	0 to 30% of span	Auxiliary o/p	5V dc @ 5mA protected
Signal i/p resistance	5000 Ω ±20%	Manual potentiometer	2K, 4K7, 5K or 10K
Trigger pulse height	8V (open circuit)	Thyristor line voltage	110V to 550V rms 50/60Hz
Trigger pulse rating	250mA into 10Ω	Max. ambient temp	65°C operational
Trigger shorted o/p	Protected		

211090

Mftrs. List No.	Order Code	Price Each 1+	5+	50+
AFM-11	**121-3099●**	74.00	55.00	46.28

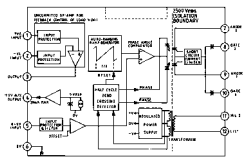
Phase Angle, Integral Transformer

Single Phase

SEMIKRON innovation+service



H=32, W=92, D=70



Fixing centres = 80 (M5 clear)

Advanced trigger module for single phase ac control. Integral 240V supply transformer allows operation at non-standard voltages. Short circuit protected steered gate triggering is used for inductive load control and an uncommitted internal op-amp provides feedback control. Aux 5V reference.
Conforms to **UL94V-0**, **CSA** and **VDE** approvals.

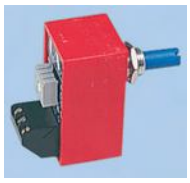
Supply voltage	204V to 264V ac	Off-state dv/dt	500V/µs min.
Supply frequency	45Hz to 65Hz	Auxilliary output	5V, 20mA dc min.
Input range	0 to 5V dc	Isolation voltage	2.5kV rms
Input threshold	0.3V dc typ.	Controllable retard angle	180° typ.
Max. input voltage	25V dc	Gate short-circuit response	250ms to 500ms
Input impedance	100kΩ min.	Op-amp input voltage range	±10.5V
Output current (per gate)	1.9A max.	Operating temperature	0°C to +55°C

211107

Supply Voltage	Mftrs. List No.	Order Code	Price Each 1+	5+	10+
240V	SKPC200-240	**120-8447●**	107.04	85.48	76.17

Low Cost, Manual Triac Trigger

united automation limited



- Low cost
- Simple, 3 screw terminal connection
- No heatsink required
- Panel mounted via the control potentiometer
- 110/240V, 50/60Hz operation, 1.5W

H = 42, W = 22, D = 22
Panel fixing 10mm hole dia.

211120

Mftrs. List No.	Order Code	Price Each 1+	10+	50+
MAT	**121-3100●**	25.00	15.00	13.08

Power Modules

Combined Trigger Module and 25A Triac

united automation limited



H = 44, W = 73, D = 44

- In-built triac reduces system complexity
- Requires additional heatsink
- Universal span and zero matching to voltage or current control signals
- +5V dc output
- LED output power indicator
- Low power consumption
- Isolated output
- Selectable soft-start on FC11AL/2

N.B. FC11AL/2 requires external RFI Suppression Module, Order Code 663-864
SEE PAGE 0000, for **CE Approval**.

Signal span	0 to 2V dc min. 0 to 25V dc max.	AC input power	18V rms ±15%
		Line voltage	110V to 240V
Signal zero offset	0 to 30% of span	Triac rms on current	25A
Signal i/p resistance	5kΩ, ±20%	Surge current	250A
Manual pot	2kΩ, 5kΩ or 10kΩ @ 1W	Max. pk voltage	600V
Soft start capacitor	22µF 16V	Power consumption	0.5W

211069

Mftrs. List No.	Order Code	Price Each 1+	10+	50+
Phase angle FC11AL/2	**121-3097●**	67.11	49.00	42.30

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Power Regulators

6A, 10A, 15A, Enclosed or IC only

united automation limited



- Solid state reliability
- 0-99% phase angle power control (resistive load)
- Enclosed design incorporates earthable, isolated heatsink
- Power IC offers 6.3mm or 10.3mm mounting holes, and requires an additional potentiometer
- Uses include heating control, lighting and motor speed control
- Earthable heatsink

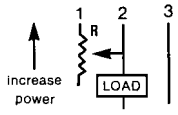


H = 44, W = 33, D = 23 (exc spindle), Shaft dia = 6.3
Bush L = 6, Fixing hole dia = 10, Cable L = 170 min

Connections: Red Line 220/240V, 50/60Hz
White Neutral through load

H (excl pins) = 27.7 (small mounting hole series)
34.1 (large mounting hole series)
W = 16.0, D = 6.4

Connections:



AC input 240V ac, R = 250kΩ
AC input 110V ac, R = 120kΩ

RMS max. on state current (tab 70°C)	6A, 10A and 15A
Peak one cycle surge current	121-3086, 121-3082=100A 121-3087, 121-3083=120A 121-3089, 121-3084, 121-3085=150A
Minimum holding load current	30mA
Repetitive peak voltage (tab 70°C)	400V
Hysteresis (typical)	5%
Total conduction phase angle (typical)	0 to 160°
Controlled conduction phase angle (typical)	30 to 160°
Tab surface operating range	-40°C to +70°C
Insulation withstand capability (tab 70°C)	1600V for 1 minute

Recommended heatsink to achieve quoted ratings: Below 5A use 8°C/W heatsink, or 7 x 7cm panel. 10A use 4°C/W heatsink or 10 x 10cm panel. 15A use 2°C/W heatsink or 17 x 17cm panel.

Fusing: Use only high speed fuses.

211379

Mftrs. List No.	Current	Order Code	Price Each 1+	10+	25+	100+
CSR2-6E	6	**121-3086●**	27.90	16.74	14.99	14.06
CSR2-10E	10	**121-3087●**	28.44	17.06	14.70	14.32
CSR2-15E	15	**121-3089●**	29.77	17.86	15.37	14.97
CSR06-04A	6	**121-3082●**	15.00	10.64	9.32	7.86
CSR10-04A	10	**121-3083●**	15.84	12.55	10.37	8.58
CSR15-04A	15	**121-3084●**	17.62	13.88	11.44	9.43
CSR15-04B	15A	**121-3085●**	21.85	8.74	7.68	7.49

Variable AC Regulator with RFI Suppression

13A Current Capability

united automation limited



- Large Triac for inrush protection
- Three position & off control
- Single hole fixing
- Rugged and compact
- Supplied complete with hairline knob and dial

H = 82 , W = 65, D = 44, 6.3mm shaft dia.

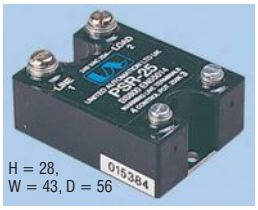
A switchable phase angle power regulator, both compact and robust. This unit is ideal for controlling single phase mains driven loads.Designed for mains 230Vac with an integral 3 position on/off control switch. The large triac enables the unit to handle high inrush currents with ample safety margin on industrial installations. An adhesive backed silver label and hairline knob are supplied.

479519

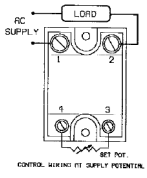
Mftrs. List No.	Order Code	Price Each 1+	10+	25+
SPC-240-13	**133-8085●**	27.98	19.29	17.83

25A Enclosed

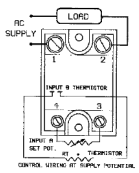
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H = 28,
W = 43, D = 56



1213091



1213092

Compact, reliable phase angle power controllers for loads up to 6kW at 240V ac, in epoxy encapsulated, simple to wire packages.

Order code 1213092 incorporates a thermistor input to allow for fan speed regulation in heating, ventilation and air conditioning systems.

Suitable thermistor available seperately.

N.B. Requires external RFI Suppression Module, order code 663-864, for **CE Approval**.

RMS max. on state current	25A	Off state voltage	400V
Hysteresis	15%	Forward voltage drop	1.5V
Leakage current	5mA	Base isolation voltage	1500V rms

Mftrs. List No. PSR-25 =121-3091 TPSR-25 =121-3092

211121

List Number	Order Code	Price Each 1+	10+	25+	50+
PSR-25	**121-3091●**	30.52	23.90	19.20	15.42
TPSR-25	**121-3092●**	28.00	19.60	17.59	16.41
Thermistor for TPSR-25					
UQT 1090B	**133-8095●**	11.65	9.35	7.82	– –

17A, With RFI Suppression

united automation limited



H=58, W=65, D=41 (excl. spindle)
Shaft dia.=6.3, bush L=5

- Integrated RFI filter to EMC(Class A) regulations
- Choice of **switched** (QLC) or **variable** (QVR) output control
- QLChas 3 pre-set voltage levels, and 'off' position
- QVR output range is from 0-98%, with 'off' position
- Single 10mm dia. hole fixing
- Compact, rugged design
- **CE approved**
- Optional self-adhesive label and knob sets available
- Applications include quartz lamps, resistance heating, transformers and motors

Triac current limit	25A rms	Isolation voltage	2500V rms
Surge current	320A	It max. for fusing	112As
Max. fwd voltage drop	1.5V	Max. unit temperature	65°C
Max. load @ 20°C	10A		

211307

	Mftrs. List No.	Order Code	Price Each 1+	10+	25+
Controllers					
Switched output	QLC/RFI-17A	**121-3093●**	40.44	38.30	34.47
Variable output	QVR/S-RFI 17	**121-3094●**	49.08	48.07	43.92
Label/knob Set					
Switched output	QLC-KL	**121-3121●**	3.29	2.72	2.21
Variable output	QVR-KL	**121-3119●**	3.38	2.79	2.27

25A Phase Angle Power Controller, PAC-2

united automation limited



- Solid -state reliability
- Simple wiring
- Up to 25A
- Low thermal impedance
- High electrical isolation
- Rugged and compact
- High current capability
- Internal snubber
- Resistive and inductive loads

H = 26, W = 43, D = 56 Fixing centres = 48

The PAC2 module is a high power, full wave AC phase angle controller in a compact package capable of regulating up to 6KW (25A) 230Vac. The PAC2 regulator governs the amount of power supplied to the load, by controlling the phase angle of the AC supply. The low thermal impedance and high electrical isolation provides the equipment designer with a greater flexibility in a wide variety of applications.

Applications:

Suitable for most power control applications such as infrared, quartz lamps and ceramic heaters. It can also be used on inductive loads such as transformers and AC motors.

AC Line voltage	230V @ 50/60Hz	AC aux. input supply	10V ac @ 50mA
Max. load current	25A rms.	Max. peak voltage	600V ac.
Peak one cycle surge current	250A	Leakage current	5mA
Min. op. current	0.05A	Control signal	0-5V / 5V Aux. o/p
Isolation voltage	3500V	Power consumption	1.2W
Power terminals	M5 x 10mm	Weight	0.63kg
Potentiometer	5kΩ 1W	Max. operating temperature	65°C
Unit storage temperature	-20 to 85°C		

241491

Mftrs. List No.	Order Code	Price Each 1+	10+	25+
PAC2	**121-3112●**	39.50	29.00	25.05

16A, Burst Firing, Dual Voltage

united automation limited



- Low RFI emission, zero voltage cross-over
- Dual voltage input
- Improved heat dissipation
- Low power consumption
- Variable mark/space output 0-100%
- Suitable for resistive loads <3.6kW @ 240V ac
- **CE approved**

H = 55, W = 55, D = 35 (excl. spindle)

Nominal power rating	3.6kW (240V ac) 1.6kW (110V ac)	Input voltage range	100V to 240V rms
		Peak repetative voltage	600V max
On-state current	16A rms max	Power consumption	0.5W
Peak surge current	200A	Operating temperature	-20°C to +70°C

RL Re-reeling available

Farnell

Power Regulators - continued

16A, Burst Firing, Dual Voltage - continued

227280

Mftrs. List No.	Order Code	Price Each 1+	10+	50+
ZVS16DV	121-3096●	36.17	29.00	24.95

Power Controller
2.5KW

united automation limited



New

This triac control assembly provides full seamless control of resistive loads up to 2.5Kw. The units are solid state switches which uses zero volts switching technology, to minimise RFI problem. They incorporate dc voltage signal control, temperature trip with automatic reset. No additional heatsink is required for this power rating. The unit is Din-Rail mountable, which simplifies installation and maintenance.

Features:
- 2.5KW compact (module only).
- Integral heat sink for maximum power capability.
- 0-10vdc control input.
- Solid State Control.
- Simple DIN Rail or panel mounting.
- LED power level indication.
- Over temperature protection with auto shutdown and reset.

507004

Mftrs. List No.	Order Code	Price Each 1+	3+
PR1-DIN-2.5KW	155-2411●	35.99	34.40

Special Application Power Controllers

8V-24V, 40A DC Motor Controller

united automation limited



- Multiple applications
- 2 optional frequency ranges
- Over current protection
- Variable voltage, 8-24V
- Solid state reliability
- Compact and easy to use

Overall H = 26, W = 43, D = 56
Fixing centres = 48

The DCM-24 is a multi-functional, 8-24V DC motor control that can handle loads of up to 40A. Its additional features of optional frequency range and thermistor input allow it to be used for many applications.

Applications:
Motor control (high frequency), lighting/heating control and temperature control

Line Voltage	8V to 24V	Low frequency range	180Hz
Max Current	40A	Thermistor (typical 10K3A1)	5 - 130°C
Control input voltage range	0V to 5Vdc	Operating temperature	0 - 65°C
Control input current @ 5V	1mA	Unit storage temperature	-20 to 85°C
High frequency range	350Hz		

241480

Mftrs. List No.	Order Code	Price Each 1+	10+	25+
DCM-24-40	121-3113●	37.55	31.70	27.44

Infresco Controller
3.5KW

united automation limited



INFRESCO IR 3.5KW

New

Features:
- Soft Start - up to 30% extended life of Lamp
- Variable Control - Ability to find comfort level
- Simple Installation - Ability to plug directly in 13A Plug with up to 3kW load
- Energy Saving - Automated system. (Only heat when required)
- Temperature Monitoring - If ambient temperature is above preset the Infresco unit remains switched off

The Infresco has been designed specifically to work with Infra Red Heaters, with a rating of 3.5kW it will allow you to control a variety of heating and lighting solution. The Infresco has a 1 to 10 step setting allowing you to find the optimum comfort setting in you specific area. With energy saving a major factor in the design brief, once the Infresco is switched on it will automatically manage the heating system. With a built in temperature sensor only allowing the unit to switch on when required and a PIR that will detects a requirement for the heater to switch on only when needed. An optional remote control allows for the unit to be fitted out of the way so safety is paramount.

507035

Mftrs. List No.	Order Code	Price Each 1+	+
INFRESCO IR 3.5KW	155-2418●	201.99	– –
INFRESCO REMOTE HANDSET	155-2419●	27.41	– –
INFRESCO LOCAL SENSOR	155-2420●	4.47	– –
INFRESCO OUTDOOR SENSOR	155-2421●	14.06	– –
INFRESCO PIR	155-2422●	45.68	– –

Infresco Controllers
4KW

united automation limited

The Infresco Controllers are a range of products that have been designed to work with Quartz Infrared Halogen Lamps.

New



Infresco T

The Infresco-T 4kW switches the lamps on for a pre-determined time period of between 1 and 30 minutes.



Infresco P

The infresco-P 4kW has a built in PIR sensor allowing the lamps to automatically switch on only when people are present. In addition to the PIR, a temperature sensor monitors the outside temperature and inhibits the lamps when the temperature exceeds a pre-determined set point of between 1 and 40 degrees Celsius.



Infresco S

The Infresco-S when operated from a conventional light switch soft starts on switch on and soft stops at switch off each time the lamps are required. The Soft Start feature will add up to 30% addition life to the lamp joined with the benefit of having control. With the addition of a sensor you can monitor the temperature also ensuring the lamps only switch on when theenvironment is cold enough.

507007

Mftrs. List No.	Order Code	Price Each 1+	2+
INFRESCO T 4KW	155-2412●	70.27	67.16
INFRESCO P 4KW	155-2413●	77.29	73.88
INFRESCO S 4KW	155-2414●	55.44	52.98

Infresco Controllers
6KW

united automation limited

The Infresco Controllers are a range of products that have been designed to work with Quartz Infrared Halogen Lamps.

New



Infresco T

The Infresco-T 6kW switches the lamps on for a pre-determined time period of between 1 and 30 minutes. The microcontroller-based unit incorporates zero-voltage switching and a soft-startfunction to eliminate the lamps' initial high inrush current - potentially increasing lamp life by as much as 30% and reducing the stress on the mains supply.
Typical use is for Infra RedHeating lamps, Garden lighting.



Infresco P

The Infresco-P 6kW has a built in PIR sensor allowing the lamps to automatically switch on only when people are present. In addition to the PIR, a temperature sensor monitors the outside temperature and inhibits the lamps when the temperature exceeds a predetermined set point of between 5 and 25 degrees Celsius. The lamps are switched on for a pre-determined time period of between 5 and 30 minutes. This period is reset each time the PIR detects any further movement.
Typical applications are Pub Patio areas, Smoking Shelters, Restaurants, Warehouses, Work shops. Garden Lighting

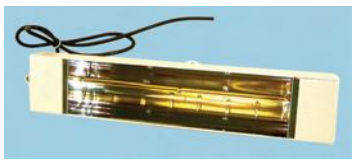
Mains Voltage	230Vac +/- 10% 50 Hz
Operation Current Max	25A
Power Consumption	50mA
Factory Set Temperature trip point	20°C
Max load at 20°C ambient	6.0 kW
IP Rating	65

507009

Mftrs. List No.	Order Code	Price Each 1+	2+
INFRESCO T 6KW	155-2415●	109.62	101.19
INFRESCO P 6KW	155-2416●	120.79	111.18

RL Re-reeling available

Infresco Heater



united automation limited

New

Electric heater with scratch-proof body and long life bulb. Increase tube life up to 30% with switch or PR operated soft start controllers (available separately).

IP Rating	65	Supply Frequency	50/60Hz
Supply Voltage	220/240 vAC	Power Rating	1500 Watts

507034

Mftrs. List No.	Order Code	Price Each 1+	2+
INFRESCO 1.5KW HEATER	155-2423●	131.82	126.37

Power Regulator Accessories

Soft-Start Control Module



H = 26, W = 43, D = 56

united automation limited

- Mains operated
- Adjustable ramp-up 1s-40s.
- 10%–50% pedestal, allows variable set point for voltage ramp-up
- Suitable for loads up to 25A
- In-built snubber network
- High in-rush capability
- Solid state reliability
- 5kV isolation voltage
- Triac limiting current 26A rms
- Unit current rating 15A

211336

Mftrs. List No.	Order Code	Price Each 1+	10+	25+	50+
SSC-25	121-3104●	37.05	32.60	29.64	26.95

RFI Suppression Modules



1213114 / 1213115 H=43, W=44, D=72

1213116 H=45, W=62, D=92

1213117 H=55, W=75, D=105

united automation limited

Choke-capacitor filter modules for use with United Automation phase-angle power controllers.

211199

Current Rating	Mftrs. List No.	Order Code	Price Each 1+	5+	10+	25+
6A	F155-6A	121-3114●	20.42	16.73	14.17	12.00
10A	F155-10A	121-3115●	20.93	17.15	14.53	12.31
15A	F165-15A	121-3116●	26.81	21.96	18.60	15.75
25A	F175-25A	121-3117●	30.99	25.40	21.53	18.25

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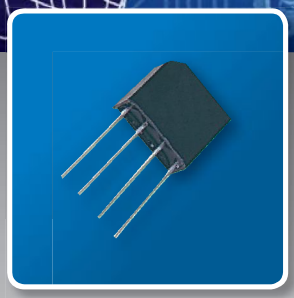
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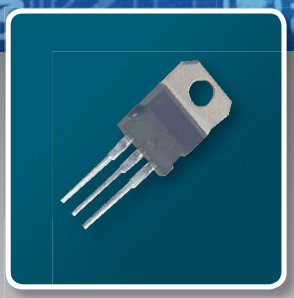
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