

Connectors – Signal & Data

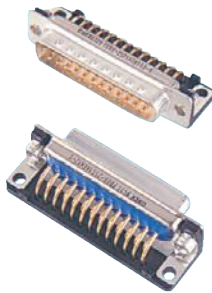
Latest Products from...

Shielded Die-Cast Backshells



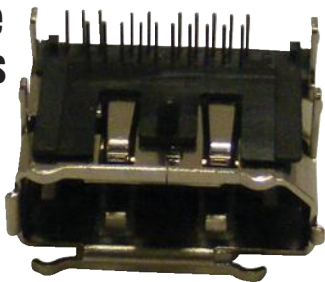
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Filtered PCB D Sub Connectors



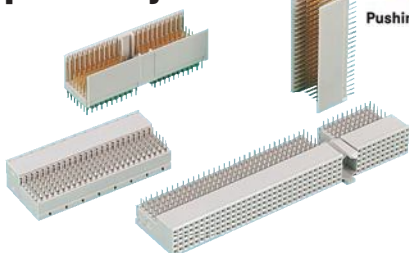
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Display Port; Plug & Receptacle Connectors



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Harting 2.0mm Backpanel Systems

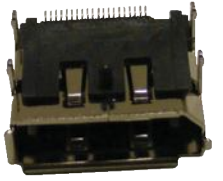


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Signal, Data & Networking

452331

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Value 'D' Range

Economy D-Sub
Solder Bucket

Current Rating	3A	DWV	1000V AC for 1 Min
Contact Resistance	30mΩ Max at DC 100mA	Contacts	Copper alloy nickel/Gold plated
Temperature range	-40°C85°C to +	Insulator	PBT and glass fibre UL94V-0
Insulation Resistance	1000MΩ Min	Housing	Steel - Nickel plated

240392

Order Multiple=10 No. of Ways	Order Code	10 +	100 +	500 +	1K +
Plugs					
9	108-4672●	0.24	0.22	0.21	0.20
15	108-4673●	0.34	0.33	0.31	0.28
25	108-4674●	0.37	0.36	0.35	0.34
37	108-4675●	0.55	0.48	0.46	0.45
50	108-4676●	0.75	0.72	0.70	0.67
Sockets					
9	108-4678●	0.24	0.22	0.21	0.20
15	108-4679●	0.34	0.33	0.31	0.28
25	108-4681●	0.37	0.36	0.35	0.34
37	108-4682●	0.55	0.48	0.46	0.45
50	108-4683●	0.75	0.72	0.70	0.67

Economy D-Sub
Straight PCB - Formed Pin

Current Rating	5A	Insulation Resistance	1000MΩ Min
Contact Resistance	5MΩ Max at 1A	DWV	500V AC for 1 Min
Temperature range	-40°C100°C to +	Contacts	Brass Gold plated

240398

Order Multiple=10 No. of Ways	Order Code	10 +	100 +	500 +	1K +
Plugs					
9	108-4684●	0.30	0.27	0.24	0.21
15	108-4686●	0.40	0.37	0.36	0.35
25	108-4687●	0.49	0.47	0.45	0.44
37	108-4688●	0.68	0.65	0.61	0.57
50	108-4691●	1.36	1.23	1.11	1.00
Sockets					
9	108-4692●	0.30	0.27	0.24	0.21
15	108-4693●	0.40	0.37	0.36	0.35
25	108-4694●	0.49	0.47	0.45	0.44
37	108-4695●	0.68	0.65	0.61	0.57
50	108-4696●	1.36	1.23	1.11	1.00

Economy D-Sub - Formed Pin
90° PCB with Boardlocks

Current Rating	5A	Insulation Resistance	1000MΩ Min
Contact Resistance	30MΩ Max at 1A	DWV	1000V AC for 1 Min
Temperature range	-55°C105°C to +	Contacts	Brass Selective Gold plated

240399

Order Multiple=10 No. of Ways	Order Code	10 +	100 +	500 +	1K +
Plugs					
9	108-4697●	0.45	0.43	0.40	0.38
15	108-4698●	0.56	0.53	0.48	0.46
25	108-4699●	0.68	0.65	0.57	0.49
37	108-4700●	0.90	0.79	0.72	0.65
Sockets					
9	108-4701●	0.45	0.43	0.40	0.38
15	108-4702●	0.56	0.53	0.48	0.46
25	108-4703●	0.68	0.65	0.57	0.49
37	108-4704●	0.90	0.79	0.72	0.65

Economy D-Sub - Formed Pin
90° PCB with Boardlocks and Screw Lock

Current Rating	5A	Insulation Resistance	1000MΩ Min
Contact Resistance	30MΩ Max at 1A	DWV	1000V AC for 1 Min
Temperature range	-55°C105°C to +	Contacts	Brass Selective Gold plated

240403

Order Multiple=10 No. of Ways	Order Code	10 +	100 +	500 +	1K +
Plugs					
9	108-4705●	0.52	0.48	0.46	0.44
15	108-4706●	0.64	0.61	0.57	0.55
25	108-4708●	0.74	0.71	0.65	0.60
37	108-4709●	0.49	0.45	0.39	0.36
Sockets					
9	108-4710●	0.52	0.48	0.46	0.44
15	108-4711●	0.64	0.61	0.57	0.55
25	108-4712●	0.74	0.71	0.65	0.60
37	108-4713●	0.98	0.90	0.77	0.72

Commercial 'D' Range

Commercial 'D' (Formed Pin)



- Solder bucket, right angled and PCB termination styles
- Solder bucket and 90° contacts are stamped and formed
- 90° style features a 2.54mm spacing between contact rows and screwlocks
- Suitable for applications in instrumentation, computer interfacing, process control and professional electrical equipment

Contact rating	5A @70 °C	Housing	Steel, yellow passive over Zinc plating
Contact resistance	15mΩmax	Insulator	White or Black two piece polyester UL94V-0
Working voltage	300V dc/ac peak	Contacts	Formed Copper Alloy
Temperature range	-55°C to +105°C	Terminations	Solder Bucket - Tinned
Mating cycles	100		PCB - gold plated

209912

Solder Bucket



Mfrs. List No.	SDE9P = 150-808, SDE9S = 150-812,	SDA15P = 150-809, SDC37P = 150-811,	SDC37P = 150-811, SDC37S = 150-815
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209923

Order Multiple=5 No. of Ways	Order Code	5 +	25 +	100 +	250 +	500 +	1K +
Plugs							
9	150-808●	0.46	0.43	0.37	0.34	0.32	0.29
15	150-809●	0.63	0.62	0.57	0.47	0.44	0.40
25	150-810●	0.80	0.73	0.65	0.55	0.50	0.46
37	150-811●	1.27	1.18	1.08	1.04	0.96	0.84

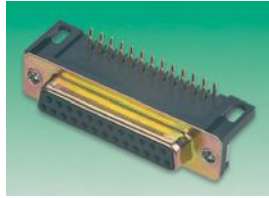


Commercial 'D' Range - continued

Solder Bucket - continued

Order Multiple=5							
No of Ways	Order Code	5+	25+	100+	250+	500+	1K+
Sockets							
9	150-812●	0.66	0.63	0.52	0.36	0.34	0.31
15	150-813●	0.80	0.73	0.65	0.55	0.50	0.46
25	150-814●	1.05	0.90	0.73	0.61	0.55	0.49
37	150-815●	1.86	1.79	1.63	1.45	1.31	1.11

90° PCB



ITW **McMurdo**
Connectors

Mfrs. List No. SDE9PN=150-816, SDA15PN=150-817, SDB25PN=150-818,
SDE9SN=150-820, SDA15SN=150-821, SDC37SN=150-823
209934

No of Ways	Order Code	1+	25+	100+	250+	500+	1K+
Plugs							
9	107-5281●	1.34	1.27	1.17	1.10	0.99	0.91
15	107-5282●	1.28	1.21	1.12	1.06	0.97	0.85
25	107-5283●	2.05	1.98	1.86	1.63	1.55	1.45
37	107-5284●	3.00	2.95	2.77	2.54	2.35	2.11
Sockets							
9	107-5285●	1.46	1.43	1.33	1.07	0.99	0.88
15	107-5286●	1.48	1.44	1.32	1.17	1.09	1.02
25	107-5288●	2.40	2.35	2.13	1.89	1.77	1.63
37	107-5289●	4.12	3.96	3.58	3.22	3.02	2.80

90° PCB with Screwlocks



ITW **McMurdo**
Connectors

Mfrs. List No. SDES9PN = 107-5243 SDES9PN = 107-5244 SDBS25PN = 107-5245
SDCS37PN = 107-5246 SDES9SN = 107-5247 SDAS15SN = 107-5248
SDBS25SN = 107-5249 SDCS37SN = 107-5250
209947

No of Ways	Order Code	1+	25+	100+	250+	500+
Plugs						
9	107-5243●	1.51	1.46	1.32	1.23	1.12
15	107-5244●	1.95	1.87	1.68	1.56	1.44
25	107-5245●	2.41	2.36	2.13	1.86	1.75
37	107-5246●	3.33	3.26	3.05	2.79	2.52
Sockets						
9	107-5247●	1.69	1.63	1.48	1.20	1.12
15	107-5248●	2.14	2.08	1.87	1.63	1.54
25	107-5249●	2.68	2.59	2.36	2.09	1.93
37	107-5250●	4.61	4.39	3.92	3.54	3.30

ZD Connectors

Solder Cup & PCB



Solder Cup



PCB

ITT
Engineered for life

- Secure Blind mating
- Compatible with all other D sub-miniature series
- Glass filled thermoplastic insulator, UL94V-0
- Class 3

Contact Rating 5A 60°C
Contact Resistance 20mW Max.
Working Voltage 350V dc/ac peak
Temperature Range -55°C to +105°C
Mating Cycles 50
Housing Insulator Steel, tin plating
Male Contacts Glass Filled Black Thermoplastic, UL94V-0
Female Contacts Brass
Contact Plating Phosphor Bronze
Gold over Nickel

475165

No. of Mfrs. Ways List No.	Order Code	1+	25+	100+	250+	500+
Solder Cup Plugs						
9 ZDE9P	134-8011●	0.44	0.41	0.39	0.38	0.37
15 ZDA15P	134-8013●	0.55	0.51	0.50	0.49	0.47
25 ZDB25P	134-8014●	0.64	0.59	0.58	0.57	0.54
37 ZDC37P	134-8015●	1.01	0.94	0.92	0.90	0.85

No. of Mfrs. Ways List No.	Order Code	1+	25+	100+	250+	500+
Solder Cup Sockets						
9 ZDE9S	134-8016●	0.48	0.45	0.44	0.43	0.40
15 ZDA15S	134-8017●	0.59	0.55	0.54	0.53	0.50
25 ZDB25S	134-8018●	0.71	0.66	0.64	0.63	0.60
37 ZDC37S	134-8019●	1.11	1.03	1.01	0.99	0.92
90°C PCB Plugs						
9 ZDE9P1AKN-146	134-8020●	1.14	1.07	1.03	1.01	0.95
15 ZDA15P1AKN-146	134-8021●	1.87	1.74	1.66	1.57	1.50
25 ZDB25P1AKN-146	134-8022●	1.68	1.56	1.54	1.49	1.41
37 ZDC37P1AKN-146	134-8023●	2.38	2.20	2.17	2.10	1.99
90°C PCB Sockets						
9 ZDE9S1AKN-146	134-8025●	1.23	1.14	1.12	1.10	1.03
15 ZDA15S1AKN-146	134-8026●	1.51	1.41	1.38	1.35	1.26
25 ZDB25S1AKN-146	134-8027●	1.81	1.67	1.64	1.60	1.51
37 ZDC37S1AKN-146	134-8028●	2.67	2.49	2.44	2.39	2.23

Straight PCB (Turned Pin)



ITW **McMurdo**
Connectors

Mfrs. List No. SDE9POL = 1340811, SDC37POL = 1340814, SDBS25SOL = 1075155,
SDA15POL = 1340812, SDE9POL = 1210827, SDC37SOL = 1075156,
SDB25POL = 1340813, SDA15SOL = 1340816,
209958

No of Ways	Order Code	1+	25+	100+	250+	500+	1K+
Plugs							
9	134-0811●	0.73	0.70	0.64	0.52	0.48	0.45
15	134-0812●	1.02	0.95	0.80	0.72	0.65	0.61
25	134-0813●	1.48	1.37	1.19	1.09	0.99	0.90
37	134-0814●	2.31	2.18	1.89	1.72	1.59	1.40
Sockets							
9	121-0827●	0.84	0.77	0.67	0.62	0.58	0.49
15	134-0816●	1.23	1.17	1.02	0.91	0.86	0.78
25	107-5155●	1.67	1.55	1.40	1.22	1.13	1.03
37	107-5156●	2.88	2.70	2.39	2.15	1.99	1.75

TDE Series

Straight PCB D-Sub Connectors with Boardlocks

Tyco Electronics



A new range of economical D-Sub connectors with a high level of performance and standard features.

- Boardlocks as standard
- Gold plated contacts
- Choice of 4-40 Threaded inserts or 4-40 female screwlocks
- Front shell Tin plated steel
- UL Listed

Contact material - Plug Brass
Contact material - Socket Phosphor Bronze
Contact plating Gold
Insulation resistance 1000Mohm
Temperature range Dielectric withstand voltage Housing
°C-55°C105 To + 500V
Black Thermoplastic

338945

No. of Ways	Order Code	1+	25+	50+	250+
Plugs with boardlocks					
With Threaded Inserts					
9	508-1932●	0.91	0.84	0.79	0.72
15	508-1944●	1.12	1.04	1.00	0.93
25	508-1956●	1.51	1.39	1.33	1.23
With Female Screwlocks					
9	508-1970●	1.09	1.00	0.96	0.89
15	508-1981●	1.33	1.21	1.15	1.10
25	508-1993●	1.69	1.57	1.49	1.42
37	508-2006●	2.47	2.26	2.16	2.05
Sockets with Boardlocks					
With Threaded Inserts					
9	508-2018●	0.94	0.87	0.82	0.77
15	508-2020●	1.18	1.09	1.04	0.96
25	508-2031●	1.58	1.45	1.40	1.33
With Female Screwlocks					
9	508-2055●	1.14	1.06	1.02	0.94
15	508-2067●	1.39	1.28	1.21	1.15
25	508-2079●	1.77	1.62	1.56	1.49
37	508-2080●	2.68	2.47	2.36	2.24

TDE Series European Footprint

90° PCB D-Sub Connectors with Boardlocks

Tyco Electronics



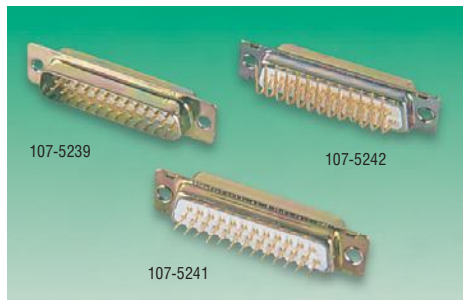
- European standard PCB footprint in accordance with DIN 41652 variant 2
- Choice of 4-40 threaded inserts or female screwlocks
- Board locks included as standard
- UL Recognised

Current Rating	5A	Contacts	Brass, Gold plated
Dielectric Strength	500V DC for 2 Min	Front Shell	Steel, Tin plated
Insulation Resistance	1000M Ω Min	Housing	Black Thermoplastic
Temperature Range	-55°C to +105°C	Flammability	UL94V-0

383301

Mfrs. List No.	No. of Ways	Order Code	1+	25+	50+	250+
Plugs with boardlocks						
With Threaded Inserts						
1-1634580-2	9	839-1246●	0.94	0.88	0.84	0.82
1-1634581-2	15	839-1254●	1.18	1.09	1.04	0.99
1-1634582-2	25	839-1262●	1.58	1.45	1.40	1.33
1-1634583-2	37	839-1270●	2.51	2.31	2.20	2.13
With Female Screwlocks						
3-1634580-2	9	839-1327●	1.14	1.06	1.00	0.95
3-1634581-2	15	839-1335●	1.11	1.02	0.97	0.94
3-1634582-2	25	839-1343●	1.78	1.64	1.57	1.50
3-1634583-2	37	839-1351●	2.70	2.50	2.39	2.30
Sockets with Boardlocks						
With Threaded Inserts						
1-1634584-2	9	839-1289●	0.99	0.92	0.89	0.86
1-1634585-2	15	839-1297●	0.92	0.85	0.81	0.78
1-1634586-2	25	839-1300●	1.60	1.47	1.42	1.36
1-1634587-2	37	839-1319●	2.62	2.42	2.32	2.21
With Female Screwlocks						
3-1634584-2	9	839-1360●	1.19	1.10	1.05	1.00
3-1634585-2	15	839-1378●	1.45	1.34	1.27	1.20
3-1634586-2	25	839-1386●	1.87	1.72	1.65	1.57
3-1634587-2	37	839-1394●	2.13	1.96	1.88	1.79

Turned Pin



Quality turned pin connectors at very competitive prices. Fully mateable and suitable for use with all the standard 'D' range connectors and accessories.

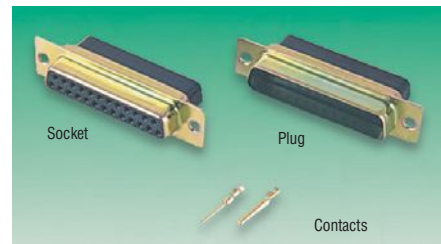
Contact rating	6.5A @ 70°C	Working voltage	500V dc/ac peak
Contact resistance	10m Ω max		

219862

No of Ways	Order Code	1+	50+	100+	250+	500+	1K+
Solder Bucket Plugs							
9	107-5224●	0.87	0.84	0.80	0.70	0.65	0.60
15	107-5225●	1.29	1.10	0.99	0.96	0.92	0.82
25	107-5239●	1.40	1.33	1.29	1.12	1.03	0.94
37	107-5227●	2.45	2.25	2.00	1.95	1.83	1.65
Solder Bucket Sockets							
9	107-5228●	1.22	1.06	0.94	0.92	0.87	0.79
15	107-5229●	1.83	1.66	1.41	1.39	1.32	1.17
25	107-5241●	2.03	1.95	1.86	1.62	1.51	1.39
37	107-5230●	3.24	3.17	2.61	2.56	2.41	2.18
90° PCB Plugs							
9	107-5232●	1.30	1.17	1.05	1.03	0.94	0.86
15	107-5233●	1.98	1.78	1.59	1.56	1.46	1.35
25	107-5150●	3.03	2.88	2.74	2.41	2.23	2.03
37	107-5234●	4.21	3.83	3.44	3.37	3.13	2.85
90° PCB Sockets							
9	107-5235●	1.48	1.18	1.12	1.10	1.06	0.97
15	107-5236●	2.41	2.20	1.96	1.91	1.78	1.62
25	107-5242●	3.62	3.43	3.32	2.91	2.67	2.44
37	107-5237●	5.30	5.14	4.32	4.22	3.96	3.60
Straight PCB Plugs							
9	107-1799●	0.84	0.75	0.68	0.66	0.62	0.57
15	107-1800●	1.16	1.06	0.94	0.92	0.87	0.79
25	107-1805●	1.55	1.26	1.18	1.16	1.11	1.02
37	107-1801●	2.44	2.19	1.99	1.94	1.83	1.65
Straight PCB Sockets							
9	107-1802●	1.23	1.12	1.00	0.97	0.91	0.83
15	107-1803●	1.81	1.55	1.47	1.44	1.34	1.20
25	147-972▲	2.54	2.43	2.33	1.85	1.65	1.43
37	105-698▲	3.83	3.41	3.09	3.04	2.83	2.58

Crimp 'D' (Formed Pin)

ITW McMurdo Connectors



- A range of crimp connectors with rear insert contacts
- Connectors and contacts are ordered separately
- Suitable for applications where partial loading is required.

Contact rating	4A @70 °C	Mating cycles	100
Contact resistance	10m Ω max	Housing	Steel yellow passive over zinc plating
Working voltage	500V dc/ac peak	Insulator	Black two piece thermoplastic, UL94V-0
Temperature range	-55°C to +105°C	Contacts	Formed Copper Alloy

Suitable wire sizes:
24/28AWG, 0.08-0.22², 7/0.2 or 10/0.1
/24AWG, 0.08-0.52², 7/0.2 or 16/0.2

Mfrs. List No.	DEC9P = 151-228, MP650-16 = 1206625 DBS25S = 151-234, MP649-06 = 1206623,	DAC15P = 151-229, DEC9S = 151-232, DCC37S = 151-235 MP648-16 = 1206624	DB25P = 151-230, DAC15S = 151-233, MP647-06 = 1206622,
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210010

No of Ways	Order Code	1+	50+	100+	250+	500+
Plug Housings						
9	107-5190●	0.99	0.78	0.63	0.58	0.49
15	151-229●	1.12	0.86	0.72	0.64	0.57
25	151-230●	1.19	0.91	0.73	0.68	0.61
37	107-5302●	1.39	1.05	0.84	0.77	0.67
Socket Housings						
9	107-5191●	1.08	0.81	0.69	0.61	0.55
15	151-233●	1.17	0.90	0.73	0.67	0.61
25	151-234●	1.22	0.96	0.79	0.71	0.64
37	151-235●	1.50	1.15	0.96	0.85	0.73
Crimp Contacts (50 Per Pack)						
		1+	5+	10+	50+	
24/28 AWG Pin	120-6622●	4.56	4.05	3.49	3.22	
20/24 AWG Pin	120-6623●	4.56	4.05	3.49	3.22	
24/28 AWG Socket	120-6624●	4.56	4.05	3.49	3.22	
20/24 AWG Socket	120-6625●	4.56	4.05	3.49	3.22	

Tooling for Crimp 'D'

ITW McMurdo Connectors



Mfrs. List No. MP600HD = 151-266

224273

Crimp Tool	Order Code	Price Each
	151-226	133.47

Turned Pin

ITW McMurdo Connectors



- McMurdo Basic 'D' is fully interchangeable with all standard 'D' range
- Suitable for use with all standard accessories.

Contact rating	6.5A @ 70°C	Mating cycles	300
Contact resistance	10mohm max.	Housing	Steel, Zinc plating
Working voltage	500V dc/ac peak	Insulator	Red two piece polyester, UL94V-0
Temperature range	-55°C to +105°C	Contacts	Turned Copper Alloy

210104

No. of Ways	Order Code	1+	25+	50+	100+	250+	500+
Solder Bucket plugs							
9	107-5307●	1.47	1.43	1.26	1.13	0.99	0.83
15	107-5308●	1.88	1.83	1.58	1.46	1.27	1.08
25	107-5309●	2.46	2.38	2.11	1.90	1.66	1.44
37	107-5310●	3.51	3.39	2.99	2.72	2.38	2.05



Commercial 'D' Range - continued

Turned Pin - continued

No. of Ways	Order Code	1+	25+	50+	100+	250+	500+
Solder Bucket Sockets							
9	107-5311●	1.95	1.88	1.65	1.49	1.32	1.11
15	107-5312●	2.55	2.45	2.18	1.98	1.71	1.49
25	107-1817●	3.63	3.57	3.14	2.85	2.50	2.16
37	107-5313●	4.13	4.00	3.53	3.19	2.80	2.41
Straight PCB Plugs							
25	107-5192●	3.72	3.63	3.21	2.92	2.51	2.19
Straight PCB Sockets							
25	107-5314●	3.97	3.85	3.41	3.10	2.70	2.34
90° PCB Plugs							
25	107-5315●	4.30	4.13	3.68	3.33	2.90	2.52
90° PCB Sockets							
25	107-5316●	5.06	4.91	4.33	3.93	3.43	2.96

Industrial 'D' Range

Amplimite PCB Mount Vertical

Industrial



- Intermateable with industry standard products
- PCB boardlocks

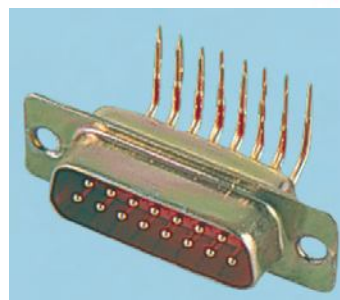
Current Rating 6A
Housing Glass Filled Polyester, Black, UL94V-0
Shell Steel, Tin plated
Contacts Phosphor Bronze, Gold plated

451150

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
Straight Plug with 4-40 Threaded Inserts						
9	1-338309-2	341-6847●	1.69	1.57	1.43	1.31
15	1-338310-2	341-6860●	2.21	2.03	1.97	1.89
37	1-338312-2	128-4327●	4.42	4.13	3.93	3.69
Straight Plug with 4-40 Female Screwlocks						
9	3-338309-2	341-6859●	1.67	1.53	1.41	1.38
15	3-338310-2	128-4328●	3.36	3.14	2.99	2.80
25	3-338311-2	341-6896●	2.41	2.18	1.99	1.80
37	3-338312-2	128-4329●	4.67	4.34	4.15	3.89
Straight Socket with 4-40 Threaded Inserts						
9	1-338313-2	341-6902●	1.98	1.79	1.66	1.63
15	1-338314-2	128-4330●	2.49	2.31	2.21	2.07
25	1-338315-2	341-6951●	2.36	2.11	1.97	1.86
37	1-338316-2	128-4331●	3.41	3.18	3.04	2.84
Straight Socket with 4-40 Female Screwlocks						
9	3-338313-2	341-6914●	2.05	1.93	1.78	1.68
15	3-338314-2	341-6938●	2.63	2.55	2.31	2.18
25	3-338315-2	341-6963●	2.41	2.18	2.12	2.02
37	3-338316-2	128-4333●	3.56	3.30	3.16	2.97

Turned Pin 90° PCB

ITW McMurdo Connectors

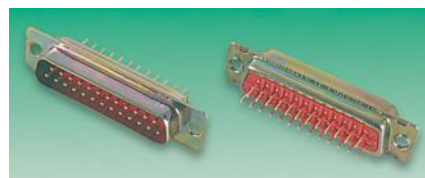


219868

No of Ways	Mfrs. List No.	Order Code	1+	25+	50+	100+	250+	500+
PCB Plugs								
9	DE9PN	107-5325●	4.41	4.04	3.58	3.15	2.77	2.39
15	DA15PN	107-5326●	6.30	5.71	5.08	4.47	3.96	3.38
25	DB25PN	107-1818●	8.87	8.09	7.19	6.34	5.58	4.76
37	DC37PN	107-5194●	9.62	8.78	7.79	6.85	6.05	5.19
PCB Sockets								
9	DE9SN	107-5327●	5.75	5.24	4.66	4.10	3.62	3.10
15	DA15SN	107-5328●	7.94	7.24	6.42	5.66	4.99	4.29
25	DB25SN	107-5195●	11.56	10.55	9.35	8.24	7.26	6.22
37	DC37SN	107-5331●	13.60	12.43	11.07	9.72	8.56	7.33

Turned Pin Straight PCB

ITW McMurdo Connectors



FOR SUITABLE EXTENDED SCREW LOCK & PCB SPACER SEE 109-9007 & 107-5200.

224274

No of Ways	Mfrs. List No.	Order Code	1+	25+	50+	100+	250+	500+
PCB Plugs								
9	DE9POL	107-5332●	5.15	4.27	3.81	3.33	2.96	2.52
15	DA15POL	107-5333●	6.02	4.99	4.42	3.92	3.44	2.95
25	DB25POL	107-5334●	8.94	7.44	6.62	5.80	5.08	4.36
37	DC37POL	107-5197●	11.95	10.00	8.85	7.78	6.85	5.88
PCB Sockets								
9	DE9SOL	107-5198●	5.85	4.83	4.32	3.81	3.34	2.87
15	DA15SOL	107-5199●	8.22	6.84	6.07	5.35	4.72	4.04
25	DB25SOL	315-734▲	12.01	9.98	8.88	7.84	6.88	5.92
37	DC37SOL	315-746▲	16.73	13.96	12.40	10.88	9.63	8.24

Turned Pin

ITW McMurdo Connectors



Note: 50 way plug and socket have white insulator

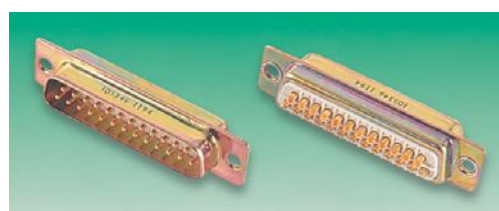
Contact rating 6.5A @70 °C
Contact resistance 5mΩmax
Working voltage 500V dc/ac peak
Breakdown voltage 2100V dc
Temperature range -55°C to +105°C
Environmental 55/105/21 plus industrial atmosphere specifications to BT023099A
Mating cycles 500

210105

No of Ways	Mfrs. List No.	Order Code	1+	25+	50+	100+	250+	500+
Solder Bucket Plugs								
9	DE9P	107-5318●	2.88	2.40	2.16	1.87	1.63	1.43
15	DA15P	107-5319●	4.51	3.75	3.35	2.93	2.58	2.21
25	DB25P	315-497●	7.01	5.83	5.27	4.57	4.01	3.45
37	DC37P	107-5320●	9.09	7.58	6.82	5.92	5.18	4.44
50	DD50P	120-6824●	12.56	10.45	9.43	8.18	7.19	6.16
Solder Bucket Sockets								
9	DE9S	107-5321●	4.69	3.84	3.51	3.00	2.61	2.24
15	DA15S	107-5322●	6.61	5.42	4.71	4.22	3.69	3.13
25	DB25S	107-5323●	9.85	8.14	7.36	6.34	5.54	4.72
37	DC37S	107-5193●	13.90	11.48	10.34	8.93	7.79	6.62
50	DD50S	107-5324●	18.33	15.16	13.68	11.79	10.31	8.74

Standard 'D' Range - Solder Bucket

LORLIN



- Available in five shell sizes 9, 15, 25, 37 and 50 contacts
- Solder bucket termination.

Contact rating 5A @60 °C
Contact resistance 5mΩmax
Working voltage 500V dc/ac peak
Breakdown voltage 1500V dc
Temperature range -55°C to +125°C
Mating cycles 500

209664

No of Ways	Mfrs. List No.	Order Code	1+	25+	100+	250+	500+
Plugs							
9	SDP9Z	113-2405●	2.05	1.84	1.63	1.30	1.14
15	SDP15Z	113-2406●	2.85	2.57	2.27	1.79	1.58
25	SDP25Z	113-2407●	3.62	3.25	2.88	2.26	2.01
37	SDP37Z	113-2408●	5.15	4.61	4.10	3.21	2.85
50	SDP50Z	113-2409●	7.91	7.12	6.31	4.93	4.44
Sockets							
9	SDS9Z	113-2410●	2.99	2.69	2.37	1.88	1.66
15	SDS15Z	113-2411●	4.44	3.99	3.54	2.77	2.47
25	SDS25Z	113-2412●	6.70	6.02	5.34	4.18	3.74
37	SDS37Z	113-2413●	9.35	8.37	7.42	5.84	5.21
50	SDS50Z	113-2414●	11.89	10.55	9.29	7.65	6.62

Original 'D' Solder Bucket



Mfrs. List No.	DE9P - A191 = 134-2705	DD50P-A191 = 134-2711	DC37S-A191 = 134-2692
	DA15P-A191 = 134-2706	DE9S-A191 = 134-2688	DD50S-A191 = 134-2693
	DB25P-A191 = 134-2707	DA15S-A191 = 134-2689	
	DC37P-A191 = 134-2709	DB25S-A191 = 134-2690	

210108

No of Ways	Order Code	1+	10+	25+	100+	250+	500+
Solder Bucket Plugs							
9	134-2705●	6.19	4.97	4.06	3.83	3.00	2.56
15	134-2706●	7.87	6.26	5.23	4.42	3.93	3.36
25	134-2707●	9.89	7.88	6.34	5.38	4.61	3.85
37	134-2709●	11.92	9.48	7.63	6.47	5.54	4.63
50	134-2711●	19.52	15.81	12.92	11.19	9.71	8.31
Solder Bucket Sockets							
9	134-2688●	6.92	5.50	4.45	3.76	3.20	2.68
15	134-2689●	8.49	6.75	5.43	4.61	3.95	3.30
25	134-2690●	12.23	9.73	7.82	6.65	5.69	4.75
37	134-2692●	17.59	13.95	11.32	9.68	8.35	6.55
50	134-2693●	23.22	18.62	15.03	12.86	11.05	9.35

D*A Range (Crimp Contacts)



- D range connectors with rear release crimp snap in contacts
- Connector housing supplied without contacts loaded
- Highly reliable socket contact, sleeveless, spring finger contact that is inserted/extracted from the rear of insulator
- Ideal for selective loaded contacts application

Contact rating	A5 5	Temperature range	-55°C to +120°C
Contact resistance	8mohm max	Mating cycles	500 (performance Class 2 DIN41652)
Working Voltage	350V	Housing	Steel
Breakdown Voltage	1500V dc	Insulator	Black, two piece ployester, UL94V-0

Plug Housings	Mfrs. List no.	Order Code	Socket Housings	Mfrs. List no.	Order Code
9 Pole	DEA9P-K87-F0	134-2694	9 Pole	DEA9S-A197-F0	134-2695
15 Pole	DAA15P-K87-F0	134-2696	15 Pole	DAA15S-A197-F0	134-2697
25 Pole	DBA25P-K87-F0	134-2698	25 Pole	DBA25S-A197-F0	134-2699
37 Pole	DCA37P-K87-F0	134-2701	37 Pole	DCA37S-A197-F0	134-2702
50 Pole	DDA50P-K87-F0	134-2703	50 Pole	DDA50S-A197-F0	134-2704

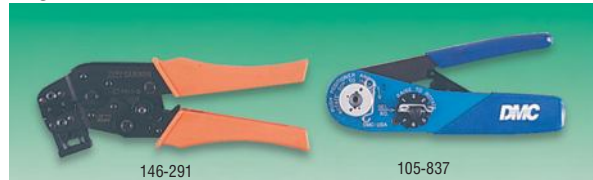
Open Crimps
Pin contact 0.08-0.22mm² (26-28 AWG)-pack of 100
Socket contact 0.08-0.22mm² (26-28 AWG)-pack of 100

Barrel Crimps
Pin crimp 0.6-0.22mm² (20-24AWG)-pack of 25
Socket crimp 0.6-0.23mm² (20-24AWG)-pack of 25

209665

No of Ways	Order Code	1+	10+	50+	100+	250+	500+
Plug Housings							
9	134-2694●	1.320	1.210	1.140	1.120	1.020	0.910
15	134-2696●	1.380	1.260	1.200	1.180	1.130	1.040
25	134-2698●	1.620	1.540	1.430	1.410	1.320	1.190
37	134-2701●	1.440	1.390	1.310	1.290	1.210	1.070
50	134-2703●	4.720	4.300	4.040	3.970	3.730	3.320
Socket Housings							
9	134-2695●	1.360	1.240	1.180	1.160	1.110	1.030
15	134-2697●	1.440	1.350	1.260	1.230	1.170	1.060
25	134-2699●	1.850	1.770	1.630	1.590	1.510	1.360
37	134-2702●	1.540	1.470	1.390	1.370	1.270	1.130
50	134-2704●	5.180	4.830	4.520	4.410	4.190	3.740
Open Crimp (100 Per Pack)							
Pin	156-0031●	0.075	0.070	0.064	0.057	--	--
Socket	156-0033●	0.086	0.081	0.074	0.065	--	--
Barrel Crimp (25 Per Pack)							
Pin	156-0032●	0.044	0.041	0.038	0.032	--	--
Socket	156-0034●	0.044	0.041	0.038	0.032	--	--

Tooling



Mfrs. List No. CCT-D*U5GB= 146-291, M22520-02-01= 105-837, CIET-20-HD= 146-292, L22520-HDL= 105-838, SK2/2= 561-447

Note: Order Codes 105-837 and 105-838 must be purchased as a pair to enable a crimp operation.

209666

	Order Code	1+	5+	10+
Open crimp tool	146-291	196.67	177.20	173.66
Insertion/Extraction tool	146-292	4.55	3.90	3.67
Barrel crimp tool	105-837	247.47	241.29	236.85
Locator plate	105-838	82.90	77.28	69.29
Crimp positioner	561-447	91.73	--	--

Mixed Signal 'D' Connectors

Mixed Power DW Series



- Developed for industrial and telecomms applications
- Solder contacts
- Solder bucket connectors supplied pre-loaded with signal contacts and holes for power or coax contacts
- Right angled PCB connectors supplied pre-loaded with signal and power contacts
- Right angled PCB coax contacts available
- 20A and 40A power contacts available

Shell	Tin Plate	Dielectric voltage	1 KV rms
Insulation	Thermoplastic, UL94V-0	Contact resistance	≤7.3Ω
Contacts	Copper Alloy, Tin and Gold over Nickel	Mating cycles	500min
Current rating	Signal contacts 7.5 power contacts 20A/40A		

210055

Pack Quantity=1	Order Code	1+	10+	50+	100+	250+
No. of Ways						
Mixed Power D Plug, Solder						
3	109-7930●	1.04	0.80	0.63	0.54	0.51
7	109-7931●	3.72	2.37	2.23	2.15	2.06
13	109-7932●	3.05	2.81	2.68	2.57	2.46
15	109-7934●	3.96	3.65	3.48	3.32	3.16
8	109-7935●	1.85	1.27	1.12	1.08	1.02
Mixed Power D Socket, Solder						
3	109-7937●	1.04	0.73	0.61	0.58	0.56
7	109-7938●	4.39	2.74	2.63	2.54	2.41
13	109-7939●	3.31	3.09	2.95	2.83	2.71
17	109-7940●	4.50	4.14	3.97	3.82	3.63
8	109-7941●	1.66	1.12	1.01	0.98	0.93
Power Contacts						
Pin12AWG	109-7943●	2.13	1.59	1.54	1.47	1.42
Socket12AWG	109-7944●	3.87	2.70	2.49	2.39	2.29
Pin8AWG	109-7946●	2.87	1.79	1.72	1.64	1.58
Socket8AWG	109-7947●	2.99	1.87	1.72	1.67	1.50

Mixed Signal D-Sub



Pushing Performance



13W3

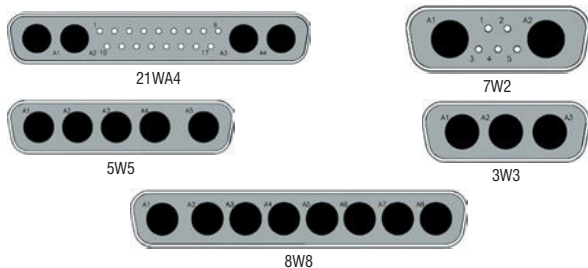


17W2



Mixed Signal 'D' Connectors - continued

Mixed Signal D-Sub - continued



HARTING's mixed D-Sub range brings the advantage of an industry standard I/O interconnect product with the possibility to customise for any application. The range is designed around the standard D-Sub shell sizes with the possibility to have a blend of contacts such as signals with coaxial, power or high voltage contacts. Due to its construction, the product is fully shielded and helps reducing the EMI/RFI leakage.

The structure of the connector's identification is so that the left side digits give the total number of contacts and the right side digits the number of special contacts which can be either power, coaxial or high voltage style. Example: 13W3 stands for 13 contacts in total with 10 signal contacts and 3 special contacts.

Housing Material	Steel
Insulation	Thermoplastic resin, glassfibre filled: UL94V-0
Contact Material	Copper Alloy, Gold Plated
Temperature Range	-55°C to +125°C
Current Rating:	5A (Signal Contacts); 20/30/40A (High Current Contacts); 2A (Coaxial Contacts)
Test Voltage (Coaxial Contacts)	750V
Contact Resistance	mΩ (High Current Contacts) 2.7mΩ (Coaxial Contacts)
Mating Cycles	≥500

333362

Connector Identification	Mfrs. List No.	Order Code	1+	Price Each 10+	50+
7-21 Way - solder bucket termination for signal contacts					
Plugs					
7W2	09 69 211 5072	120-7582●	3.63	3.15	2.84
13W3	09 69 311 5133	120-7584●	3.33	2.94	2.59
17W2	09 69 311 5172	120-7586●	4.17	3.67	3.25
21WA4	09 69 411 5214	120-7588●	4.90	4.33	3.81
Sockets					
7W2	09 69 201 5072	120-7583●	3.43	3.01	2.65
13W3	09 69 301 5133	120-7585●	4.41	3.92	3.48
17W2	09 69 301 5172	120-7587●	5.16	4.54	4.02
21WA4	09 69 401 5214	120-7589●	5.82	5.11	4.55
7-21 Way - 90° PCB mounted					
Plugs, with 40A High Current Contacts					
7W2	09692009049	120-0465●	6.64	5.86	5.16
13W3	09693009018	120-0467●	7.41	6.57	5.78
21WA4	09694009021	120-0472●	11.32	9.94	8.84
Sockets, with 40A High Current Contacts					
7W2	09692009050	120-0466●	8.02	7.02	6.22
21WA4	09694009022	120-0473●	15.25	13.46	11.91
3-8 Way Housings - without signal contacts					
Plug					
3W3	09 69 210 0033	120-7590●	1.42	1.26	1.14
5W5	09 69 310 0055	120-7592●	1.72	1.51	1.35
8W8	09 69 410 0088	120-7594●	1.78	1.59	1.38
Socket					
3W3	09 69 200 0033	120-7591●	1.42	1.26	1.14
5W5	09693000055	120-0474●	1.73	1.52	1.37
8W8	09 69 400 0088	120-7595●	1.81	1.62	1.43
High Current Contacts - solder termination					
Pin					
20A	09692817421	120-0475●	1.40	1.25	1.14
30A	09692817422	120-0477●	1.20	1.10	1.00
40A	09692817423	120-0479●	1.44	1.29	1.15
Socket					
20A	09691817421	120-0476●	1.77	1.51	1.36
30A	09691817422	120-0478●	1.55	1.33	1.22
40A	09691817423	120-0480●	1.77	1.51	1.36
Coaxial Contacts - crimp/solder termination					
Male					
RG174U, 188AU, 316U	09692817140	120-0482●	3.35	2.96	2.63
RG178BU, 196AU, 404U	09692817141	120-0485●	3.99	3.50	3.12
RG179BU, 187AU	09692817230	120-0487●	4.37	3.84	3.42
Female					
RG174U, 188AU, 316U	09691817140	120-0481●	3.59	3.13	2.76
RG178BU, 196AU, 404U	09691817141	120-0484●	3.99	3.50	3.12

Stackable 'D' Connectors

Stackable D Subs

90° PCB Mount



- Plug/plug, Socket/socket & plug/socket combinations
- 4-40 UNC threaded inserts
- Intermateable with other D-sub connectors
- 9, 15, 25 and 37 way versions available
- Housing: UL94V-0 rated thermoplastic
- Boardlock retention

446975

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each 10+	25+	50+
Stacked Plug / Plug						
2 x 9	1734279-3	122-5684●	4.34	4.04	3.77	3.47
Stacked Socket / Socket						
2 x 9	1734285-3	122-5689●	3.92	3.65	3.41	3.14
2 x 15	1-1734285-3	122-5690●	4.77	4.46	4.16	3.83
2 x 25	2-1734285-3	122-5691●	5.34	4.97	4.66	4.28
Stacked Plug / Socket						
2 x 9	1734282-3	122-5693●	3.73	3.50	3.25	2.99

Surface Mount 'D' Connectors

Surface Mount PCB D-Sub Connectors



The next generation of D-Sub connectors for surface mount assembly from Tyco Electronics. Utilising key design features to ensure efficient and reliable processing, surface mounting of this industry standard interface connector becomes a reality for

an increasingly wide range of applications. Available in 9-37 position plug and socket variants.

- Controlled centre of gravity for secure positioning during processing
- Large mounting bracket improves grounding and mechanical stability
- Mounting options are 4-40 UNC and M3 threaded inserts or screwlocks or 3mm plain hole
- UL recognised
- RoHS compliant

Contacts	Gold plated	Housing	Black Thermoplastic
Front Shell	Steel, Tin plated	Flammability	UL94V-0

417473

Mfrs. List No.	No. of Ways	Order Code	1+	Price Each 25+	50+	250+
Plugs						
With 3mm Plain Hole						
1740195-2	9	998-0253●	2.47	2.21	1.96	1.87
1740197-2	15	998-0288●	2.05	1.83	1.64	1.55
With Screwlocks						
3-1740195-2	9	998-0270●	3.00	2.81	2.67	2.55
3-1740197-2	15	998-0300●	2.99	2.79	2.66	2.55
3-1740199-2	25	132-4207●	2.14	2.05	1.94	1.88
3-1740201-2	37	132-4208●	2.68	2.57	2.43	2.38
With Threaded Insert						
1-1740195-2	9	998-0261●	2.60	2.43	2.32	2.21
1-1740199-2	25	132-4205●	2.83	2.70	2.55	2.42
1-1740201-2	37	132-4206●	2.54	2.43	2.39	2.30
Sockets						
With 3mm Plain Hole						
1740194-2	9	998-0318●	2.47	2.21	1.96	1.87
1740196-2	15	998-0342●	2.05	1.83	1.64	1.55
With Screwlocks						
3-1740194-2	9	998-0334●	3.00	2.81	2.67	2.55
3-1740196-2	15	998-0369●	2.99	2.79	2.66	2.55
3-1740198-2	25	132-4203●	2.14	2.05	1.94	1.88
3-1740200-2	37	132-4204●	2.68	2.57	2.43	2.38
With Threaded Inserts						
1-1740194-2	9	998-0326●	1.65	1.54	1.48	1.41
1-1740198-2	25	132-4200●	2.71	2.60	2.46	2.34
1-1740200-2	37	132-4201●	2.54	2.43	2.39	2.30

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Surface Mount D-Sub Connectors



- Controlled centre of gravity provides anti toppling properties
- "No insertion force" pegs for PCB positioning
- Provided with a flat area for use in vacuum pick and place equipment
- Mounting options are 4-40 UNC and M3 threaded inserts and screwlocks
- Performance level: PL3 & PL2
- RoHS compliant

Contacts Gold plated
Front Shell Steel, Nickel plated

Housing Black LCP
Flammability UL94V-0

462414

Mfrs. List No.	No. of Thread Ways	Type	Order Code	1+	25+	50+	250+
Plugs With Threaded Insert							
09551666811741	9	3mm	SMD 134-2292	2.19	2.05	1.89	1.69
09551666812741	9	4-40 UNC	SMD 134-2294	2.01	1.88	1.74	1.55
Plugs With Screwlock							
09551666833741	9	3mm	SMD 134-2293	2.18	2.02	1.90	1.67
09551666813741	9	4-40 UNC	SMD 134-2295	2.38	2.21	2.08	1.82
Sockets With Threaded Insert							
09551566611741	9	3mm	SMD 134-2296	2.18	2.02	1.90	1.67
09551566612741	9	4-40 UNC	SMD 134-2298	2.21	2.05	1.93	1.70
Sockets With Screwlock							
09551566633741	9	3mm	SMD 134-2297	2.51	2.34	2.18	1.94
09551566613741	9	4-40 UNC	SMD 134-2299	2.33	2.17	2.02	1.78

D-Sub Pin-in-Paste Connectors

Straight



FCI have extended their broad offering of D-subminiature connectors to include Pin-in-Paste (Through Hole Reflow) versions. Pin-in-Paste (PiP) technology allows the use of through hole product in SMT manufacturing process.

Benefits:-

- The D-Sub PiP connectors are moulded in high temperature plastic enabling them to withstand a peak temperature exposure of up to 260°C for 10 to 30 seconds in a convention infrared or vapour-phase reflow oven.

- PiP is a more stable process than wave soldering as it does not need constant adjustment once set up.
- No re-design of the PCB for PiP - Same layouts, same hole diameters for signal contacts.
- The termination length beyond the bottom of the PCB is shorter than traditional solder-to-board products. Thus the risk of pushing out the solder paste when setting the pin into the PCB hole is very much limited.
- Metal pegs significantly increase the connection robustness after soldering.

Mounting Options:-

- **RL:** Insert M3 + Metal peg + Electrical continuity
- **RX:** Insert UNC 4-40 + Metal peg + Electrical continuity
- **RV:** Female screw UNC 4-40 + Metal peg + Electrical continuity



Orientation	Footprint / Pitch	Termination Length	PCB Thickness	Contact Material	Contact Plating
Straight	6.0 / 2.84 mm	2.0 mm	1.6 mm	Copper Alloy	Gold over Nickel

Sockets

Mfrs. List No.	Mounting Option	No. of Ways	Order Code	1+	10+	25+	100+	250+
D09S24A6RV09LF	RV	9	154-0489	3.12	2.90	2.59	2.44	2.22
D15S24A6RV09LF	RV	15	154-0492	3.59	3.32	2.99	2.81	2.56
D25S24A6RV09LF	RV	25	154-0494	4.48	4.14	3.73	3.51	3.20
D09S24A6RX09LF	RX	9	154-0496	3.28	3.04	2.74	2.56	2.36
D15S24A6RX09LF	RX	15	154-0498	3.78	3.51	3.16	2.96	2.70
D25S24A6RX09LF	RX	25	154-0500	4.70	4.36	3.92	3.67	3.36
D09S24A6RL09LF	RL	9	154-0502	3.28	3.04	2.74	2.56	2.36
D15S24A6RL09LF	RL	15	154-0504	3.78	3.51	3.16	2.96	2.70
D25S24A6RL09LF	RL	25	154-0507	4.70	4.36	3.92	3.67	3.36
D37S24A6RV09LF	RV	37	154-0509	7.66	7.10	6.39	6.00	5.48
D50S24A6RV09LF	RV	50	154-0511	13.14	12.17	10.95	10.26	9.38
D37S24A6RX09LF	RX	37	154-0513	7.89	7.30	6.57	6.15	5.64
D50S24A6RX09LF	RX	50	154-0515	13.36	12.36	11.13	10.44	9.54
D37S24A6RL09LF	RL	37	154-0517	7.89	7.30	6.57	6.15	5.64
D50S24A6RL09LF	RL	50	154-0521	13.36	12.36	11.13	10.44	9.54

Plugs

515808

Mfrs. List No.	Mounting Option	No. of Ways	Order Code	1+	10+	25+	100+	250+
D09P24A6RV09LF	RV	9	154-0491	3.12	2.90	2.59	2.44	2.22
D15P24A6RV09LF	RV	15	154-0493	3.59	3.32	2.99	2.81	2.56
D25P24A6RV09LF	RV	25	154-0495	4.48	4.14	3.73	3.51	3.20
D09P24A6RX09LF	RX	9	154-0497	3.28	3.04	2.74	2.56	2.36
D15P24A6RX09LF	RX	15	154-0499	3.78	3.51	3.16	2.96	2.70
D25P24A6RX09LF	RX	25	154-0501	4.70	4.36	3.92	3.67	3.36
D09P24A6RL09LF	RL	9	154-0503	3.28	3.04	2.74	2.56	2.36
D15P24A6RL09LF	RL	15	154-0505	3.78	3.51	3.16	2.96	2.70
D25P24A6RL09LF	RL	25	154-0508	4.70	4.36	3.92	3.67	3.36
D37P24A6RV09LF	RV	37	154-0510	7.66	7.10	6.39	6.00	5.48
D50P24A6RV09LF	RV	50	154-0512	13.14	12.17	10.95	10.26	9.38
D37P24A6RX09LF	RX	37	154-0514	7.89	7.30	6.57	6.15	5.64
D50P24A6RX09LF	RX	50	154-0516	13.36	12.36	11.13	10.44	9.54
D37P24A6RL09LF	RL	37	154-0519	7.89	7.30	6.57	6.15	5.64
D50P24A6RL09LF	RL	50	154-0522	13.36	12.36	11.13	10.44	9.54

D-Sub Pin-in-Paste Connectors

Right Angle



FCI have extended their broad offering of D-subminiature connectors to include Pin-in-Paste (Through Hole Reflow) versions. Pin-in-Paste (PiP) technology allows the use of through hole product in SMT manufacturing process.

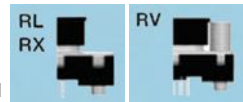
Benefits:-

- The D-Sub PiP connectors are moulded in high temperature plastic enabling them to withstand a peak temperature exposure of up to 260°C for 10 to 30 seconds in a convention infrared or vapour-phase reflow oven.

- PiP is a more stable process than wave soldering as it does not need constant adjustment once set up.
- No re-design of the PCB for PiP - Same layouts, same hole diameters for signal contacts.
- The termination length beyond the bottom of the PCB is shorter than traditional solder-to-board products. Thus the risk of pushing out the solder paste when setting the pin into the PCB hole is very much limited.
- Metal pegs significantly increase the connection robustness after soldering.

Mounting Options:-

- **RL:** Insert M3 + Metal peg + Electrical continuity
- **RX:** Insert UNC 4-40 + Metal peg + Electrical continuity
- **RV:** Female screw UNC 4-40 + Metal peg + Electrical continuity



Orientation	Footprint / Pitch	Termination Length	PCB Thickness	Contact Material	Contact Plating
Right Angle	10.4 / 2.54 mm	2.0 mm	1.6 mm	Copper Alloy	Gold over Nickel

Sockets

Mfrs. List No.	Mounting Option	No. of Ways	Order Code	1+	10+	25+	100+	250+
D09S13A6RV09LF	RV	9	154-0523	2.89	2.67	2.41	2.25	2.07
D09S13A6RL09LF	RL	9	154-0525	2.89	2.67	2.41	2.25	2.07
D09S13A6RX09LF	RX	9	154-0527	2.89	2.67	2.41	2.25	2.07
D15S13A6RV09LF	RV	15	154-0529	3.32	3.06	2.76	2.58	2.38
D15S13A6RL09LF	RL	15	154-0531	3.32	3.06	2.76	2.58	2.38
D15S13A6RX09LF	RX	15	154-0534	3.32	3.06	2.76	2.58	2.38
D25S13A6RV09LF	RV	25	154-0536	4.14	3.85	3.47	3.24	2.96
D25S13A6RL09LF	RL	25	154-0538	4.14	3.85	3.47	3.24	2.96
D25S13A6RX09LF	RX	25	154-0540	4.14	3.85	3.47	3.24	2.96

Plugs

Mfrs. List No.	Mounting Option	No. of Ways	Order Code	1+	10+	25+	100+	250+
D09P13A6RV09LF	RV	9	154-0524	2.89	2.67	2.41	2.25	2.07
D09P13A6RL09LF	RL	9	154-0526	2.89	2.67	2.41	2.25	2.07
D09P13A6RX09LF	RX	9	154-0528	2.89	2.67	2.41	2.25	2.07
D15P13A6RV09LF	RV	15	154-0530	3.32	3.06	2.76	2.58	2.38
D15P13A6RL09LF	RL	15	154-0533	3.32	3.06	2.76	2.58	2.38
D15P13A6RX09LF	RX	15	154-0535	3.32	3.06	2.76	2.58	2.38
D25P13A6RV09LF	RV	25	154-0537	4.14	3.85	3.47	3.24	2.96
D25P13A6RL09LF	RL	25	154-0539	4.14	3.85	3.47	3.24	2.96
D25P13A6RX09LF	RX	25	154-0541	4.14	3.85	3.47	3.24	2.96

515942

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Surface Mount 'D' Connectors - continued

D Sub Power Module Input Connectors

156-8390
156-8391156-8392
156-8393

156-8394

The shielded connectors are designed to fit the power module faceplate on the front side of a power module made in accordance with the MicroTCA specification. The board-mount connectors, available as a single port or dual-stacked configuration for redundant input feeds, have the most compact footprint on the market providing more space on the board for routing supplementary traces or additional components.

Features:

- FMLB (first mate last break) design for hot plugging
- Compact PCB footprint
- Solder-to-board and Pin-in-Paste (PIP) versions for through-hole reflow solder termination
- Cable connector is field repairable

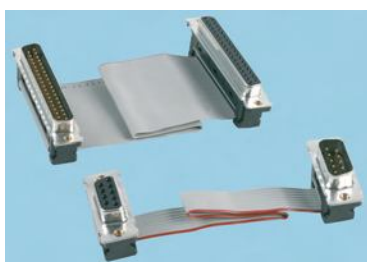
Shell Material	Contact Material	Contact Plating	Current Rating	Mating Cycles	Operating Temperature
Steel	Nickel	Gold over Nickel	24A	200	-55°C to 125°C

515246

Mfrs. List No.	Order Code	1+	5+	10+
10070158-00319XLF	156-8390●	11.92	10.38	9.73
10070158-00419XLF	156-8391●	12.15	10.57	9.93
10070158-00119XLF	156-8392●	21.20	18.44	17.31
10070158-00219XLF	156-8393●	25.42	22.10	20.75
10070165-00119ALF	156-8394●	5.96	5.18	4.87

'D' Connector Cable Assemblies

D-Sub Cable Assemblies



- Prefabricated D-Sub cable assemblies
- Female to male ribbon cable connector style
- Pin 1 to pin 1 termination
- 9, 15, 25 and 37 way versions available
- 152mm cable length

386345

No. of Ways	Mfrs. List No.	Order Code	1+	10+	25+	50+	100+
9	1537731-1	869-6411●	13.50	11.85	11.08	9.57	8.31
15	1537732-1	869-6420●	15.49	13.65	12.74	11.01	9.58
25	1537733-1	869-6438●	18.92	16.67	15.54	13.43	11.69
37	1537734-1	869-6446●	25.50	22.44	20.94	18.06	15.75

EMI/RFI Shielded 'D' Connectors

Solder Bucket (Formed Contacts)

Tin and Dimple 'D'



- Tin & Dimple Shells
- Nickel plated solder buckets
- Gold plated formed contacts
- Glass filled P.B.T insulators

Contact rating	5A @25 °C	Working resistance	250V rms
Contact resistance	15mΩ max	Breakdown voltage	V dc

209848

Order Multiple=5	No. of Ways	Order Code	5+	25+	100+	250+
Plugs						
9		109-9046●	0.36	0.34	0.33	0.29
15		109-9047●	0.48	0.46	0.44	0.38
25		109-9049●	0.61	0.58	0.52	0.44
37		109-9051●	1.52	1.49	1.47	1.36

Order Multiple=5				Price Each	
Sockets					
9	109-9052●	0.50	0.47	0.43	0.30
15	109-9053●	0.63	0.60	0.55	0.41
25	109-9054●	0.70	0.69	0.63	0.47
Order Multiple=1		1+	25+	100+	250+
37	109-9055●	1.40	1.38	1.33	1.17

Economy 'D' Tin and Dimple (Formed Pin)



- Available in solder bucket or right angled and straight PCB termination
- Tinned shells and featuring dimpled plugs for enhanced electrical continuity
- Ideal for EMI/RFI applications
- Solder bucket and 90° contacts are stamped and formed for extra economy
- 90° features a 2.54mm spacing between contact rows
- Available with screwlocks and/or barb action boardlocks

210084

Contact rating	3A @70°C	Housing	Steel, tin plating
Contact resistance	15mΩ max	Insulator	White or black two piece polyester
Working voltage	350V dc/ac peak	Contacts	Formed Copper Alloy
Temperature range	-55°C to +105°C	Terminations	Solder Bucket - Tinned
Mating cycles	100		PCB - gold plated

Solder Bucket



Mfrs. List No.	SDE9PTD = 150-726, SDD50PTD = 150-834, SDA15PTS = 150-727,	SDB25PTD = 150-728, SDE92ST = 150-730 SDD50ST = 150-835	SDC37PTD = 150-729, SDA15ST = 150-731, SDB25ST = 150-732,
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210085

No. of Ways	Order Code	5+	25+	100+	250+	500+	1K+
Plugs							
Order Multiple=5							
9	150-726●	0.36	0.35	0.33	0.32	0.30	0.27
15	150-727●	0.48	0.47	0.45	0.41	0.39	0.35
25	150-728●	0.63	0.62	0.52	0.47	0.44	0.41
Order Multiple=1		1+	25+	100+	250+	500+	1K+
37	150-729●	1.08	1.06	1.02	0.99	0.93	0.84
50	107-5189●	1.74	1.71	1.67	1.63	1.53	1.41
Sockets							
Order Multiple=5		5+	25+	100+	250+	500+	1K+
9	150-730●	0.50	0.49	0.43	0.33	0.31	0.27
15	150-731▲	0.63	0.62	0.56	0.43	0.40	0.36
25	129-7953●	0.70	0.69	0.64	0.51	0.47	0.42
Order Multiple=1		1+	25+	100+	250+	500+	1K+
37	150-733▲	1.40	1.36	1.30	1.24	1.10	0.94
50	150-835▲	2.28	2.23	2.16	2.11	1.97	1.83

90° D-Sub Connectors

PCB Mount



A range of 90° D-Sub connectors with metal front shell, screwlocks and boardlocks

Contact material	Brass	Temperature range	°C-55°C105 To +
Contact plating	Gold Flash over Nickel	Dielectric withstand voltage	1000V
Contact resistance	15mohm	Insulator material	PBT & glass fibre reinforced UL94V-0
Insulation resistance	5000Mohm		

239319

Order Multiple=5	No. of Ways	Order Code	5+	50+	100+	500+
Plugs						
9		109-9289●	0.35	0.33	0.29	0.28
15		109-9290●	0.38	0.35	0.34	0.31
25		109-9291●	0.49	0.44	0.43	0.37
37		109-9293●	0.65	0.61	0.55	0.50
Sockets						
9		109-9294●	0.35	0.33	0.29	0.28
15		109-9295●	0.38	0.35	0.34	0.31
25		109-9296●	0.48	0.44	0.42	0.38
37		109-9297●	0.61	0.54	0.52	0.47



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90° PCB - with Screwlocks and Boardlocks

ITW **McMurdo**
Connectors

Mfrs. List No. SDEX9PNTD = 107-1806 SDBX25PNTD = 107-5267
SDCX37PNTD = 107-5268 SDCX9SNT = 107-5161 SDBX15SNT = 107-5269
SDBX25SNT = 107-5270 SDCX37SNT = 107-5271

210086

No. of Ways	Order Code	1+	25+	100+	250+	500+	1K+
Plugs							
9	107-1806●	1.43	1.39	1.36	1.34	1.29	1.15
15	107-5266●	1.79	1.75	1.68	1.65	1.58	1.47
25	107-5267●	2.14	2.10	2.05	2.01	1.90	1.72
37	107-5268●	3.47	3.31	3.11	2.93	2.71	2.48
Sockets							
9	107-5161●	1.52	1.48	1.45	1.41	1.39	1.27
15	107-5269●	2.00	1.92	1.86	1.83	1.72	1.58
25	107-5270●	2.67	2.57	2.45	2.37	2.18	2.00
37	107-5271●	4.24	4.08	3.92	3.83	3.71	3.41

90° PCB -
Available with or without ScrewlocksITW **McMurdo**
Connectors

With threaded rivets

With screwlocks

Mfrs. List No. SDE9PNTD = 107-5252 SDA15PNTD = 107-5253 SDB25PNTD = 107-5254
SDC37PNTD = 107-5255 SDE9SNT = 107-5256 SDA15SNT = 107-5257
SDB25SNT = 107-5258 SDC37SNT = 107-5259 SDES9PNTD = 107-5260
SDA15PNTD = 107-5261 SDBS25PNTD = 107-5262 SDCS37PNTD = 107-5264
SDA15SNT = 107-5265 SDBS25SNT = 107-5157 SDCS37SNT = 107-5158

210087

No. of Ways	Order Code	1+	25+	100+	250+	500+	1K+
Without Screwlocks							
Plugs							
9	107-5252●	1.23	1.19	1.10	1.05	0.94	0.86
15	107-5253●	1.64	1.57	1.47	1.38	1.27	1.09
25	107-5254●	2.01	1.95	1.75	1.53	1.47	1.37
37	107-5255●	2.86	2.79	2.64	2.43	2.21	2.00
Sockets							
9	107-5256●	1.39	1.35	1.26	1.02	0.93	0.83
15	107-5257●	1.75	1.70	1.55	1.38	1.30	1.18
25	107-5258●	2.21	2.16	1.99	1.75	1.63	1.51
37	107-5259●	3.82	3.65	3.31	2.98	2.79	2.59
With Screwlocks							
Plugs							
9	107-5260●	1.35	1.31	1.17	1.13	1.03	0.94
15	107-5261●	1.75	1.70	1.55	1.38	1.30	1.18
25	107-5262●	2.08	2.02	1.85	1.62	1.52	1.43
37	150-745	2.92	2.85	2.70	2.48	2.27	2.04
37	107-5264●	2.98	2.93	2.76	2.54	2.33	2.09
Sockets							
9	150-746▲	1.50	1.46	1.34	1.11	1.03	0.90
15	107-5265●	1.86	1.79	1.64	1.45	1.37	1.27
25	107-5157●	2.36	2.26	2.09	1.86	1.72	1.58
37	107-5158●	3.18	3.05	2.77	2.50	2.33	2.15

Straight PCB (Turned Pin)

ITW **McMurdo**
Connectors

Mfrs. List No. SDB25POLTD = 150-783
SDA15SOLT = 150-786

210088



No. of Ways	Order Code	1+	25+	100+	250+	500+	1K+
Plugs							
9	107-5272●	0.71	0.68	0.61	0.51	0.48	0.44
15	107-5273●	0.93	0.90	0.75	0.67	0.62	0.56
25	107-5274●	1.39	1.32	1.14	1.05	0.93	0.84
37	107-5276●	2.16	2.07	1.75	1.62	1.51	1.36
Sockets							
9	107-5277●	0.78	0.71	0.63	0.57	0.52	0.46
15	107-5278●	1.11	1.05	0.91	0.84	0.80	0.67
25	107-5279●	1.57	1.46	1.32	1.16	1.08	0.96
37	107-5280●	2.59	2.49	2.14	1.96	1.81	1.58

HDP-20 Solder Cup

Tyco Electronics



- Preloaded, duplex plated solder cup contacts
- Full EMI shielding
- Tin plated shell finish
- Plug has grounding indents

209980

No. of Ways	Mfrs. List No.	Order Code	1+	100+	250+	500+	1K+
Plugs							
9	5-747904-2	113-8240●	1.33	1.29	1.24	1.22	1.19
15	5-747908-2	113-4839●	3.52	3.42	3.30	3.14	3.01
25	5-0747912-2	113-4842●	3.85	3.66	3.49	3.40	3.23
37	5-747916-2	113-8241●	7.51	7.26	7.03	6.71	6.49
Sockets							
9	5-747905-2	113-4837●	2.78	2.67	2.56	2.43	2.35
15	5-747909-2	113-4841●	4.98	4.78	4.59	4.44	4.20
25	5-747913-2	113-4843●	4.26	4.04	3.88	3.75	3.52
37	5-747917-2	158-0098●	7.27	6.87	6.68	6.52	6.04

AMPLIMITE '2000'

Tyco Electronics

90° PCB - with boardlock and threaded inserts (4-40)



105-6111

105-6113

- An economy subminiature 'D' connector
- Circuit board footprint 0.318 [8.08]
- Front metal shell design, compatible with full metal shell connectors
- Flame retardant housing **UL94V-0**
- **UL** Recognised and **CSA** Approved

209937

No. of Ways	Mfrs. List No.	Order Code	1+	100+	500+	1K+
Plugs						
9	1734352-1	126-2138●	1.07	0.98	0.93	0.87
Sockets						
9	1734348-1	122-8088●	1.04	0.95	0.91	0.77
15	1734355-1	126-2139●	1.28	1.22	1.15	1.09
25	1734350-1	126-2140●	1.43	1.31	1.27	1.21

Bargain 'D' Tin and Dimple (Formed Pin)

Pushing Performance


- A quality range of tin and dimple 'D' connectors offering
- Excellent EMI/RFI screening via shell continuity dimples
- The pins and sockets are formed contact style.

Contact rating 6.5A @70°C Housing Steel, tin plating
Contact resistance 10mΩmax Insulator Black, two piece thermoplastic **UL94V-0**
Working voltage 125V ac Contacts Formed Copper Alloy
Temperature range -55°C to +125°C
Mating cycles 50

Mfrs. list no. Plug 0967-2xx-5604 Socket 0967-2xx-4704 where xx=No of ways

EMI/RFI Shielded 'D' Connectors - continued

Bargain 'D' Tin and Dimple (Formed Pin) - continued

210089

No. of Ways	Order Code	1+	10+	Price Each	50+	100+	500+
Solder Bucket Plugs							
9	109-6858●	1.25	1.20	1.12	0.91	0.87	
15	109-6859●	1.44	1.33	1.27	1.10	1.01	
25	109-6860●	1.52	1.45	1.34	1.16	1.11	
37	109-6861●	2.33	2.21	2.05	1.76	1.70	
Solder Bucket Sockets							
9	109-6863●	1.24	1.18	1.09	0.92	0.91	
15	109-6864●	1.45	1.35	1.26	1.07	0.99	
25	109-6865●	1.82	1.71	1.57	1.38	1.31	
37	109-6866●	2.64	2.50	2.29	2.01	1.92	

D-Sub PCB Connectors

Straight and 90° - Formed Pin



A range of High Performance D-sub connectors with stamped pins

- UL Recognised
- Class II performance - DIN 41652
- 4-40 UNC threaded insert flange and grounding boardlocks for improved continuity and mechanical strength
- Tinned and dimpled shells for excellent EMI shielding

Current rating	6.5A Max	Current rating	6.5A Max
Contact material	Copper Alloy	Contact material	Copper Alloy
Contact plating	Gold	Contact plating	Gold
Temp range	-55°C to +125°C	Contact resistance	≤10mΩ
Ins material	PBTP	Insulation resistance	≥10 ¹⁰ Ω
Shell material	Tinned Steel	Mating cycles	≥200

238807

No. of Ways	Order Code	1+	10+	Price Each	50+	100+	500+
Straight Plugs							
9	109-7056●	1.42	1.27	1.23	1.13	1.05	
15	109-7057●	1.66	1.48	1.43	1.34	1.25	
25	109-7058●	2.21	1.96	1.91	1.76	1.63	
37	109-7059●	2.92	2.63	2.54	2.34	2.19	
Straight Sockets							
9	109-7060●	1.66	1.48	1.43	1.34	1.25	
15	110-6813●	2.18	1.96	1.91	1.76	1.63	
25	109-7061●	2.84	2.55	2.42	2.29	2.13	
37	109-7062●	4.45	4.02	3.88	3.59	3.36	
90° Plugs							
9	109-7063●	1.63	1.47	1.41	1.32	1.21	
15	109-7065●	1.87	1.67	1.62	1.49	1.38	
25	109-7066●	2.78	2.48	2.36	2.23	2.08	
37	109-7067●	3.28	2.96	2.85	2.64	2.45	
90° Sockets							
9	109-7068●	2.15	1.91	1.87	1.71	1.58	
15	109-7069●	3.01	2.72	2.63	2.41	2.27	
25	109-7070●	3.85	3.45	3.34	3.08	2.89	
37	109-7071●	5.39	4.85	4.64	4.33	4.06	

Solder Bucket - with Shielding Lugs



- Tin and dimple 'D' connectors with solder lugs attached to the shell
- Improved cable shield termination and EMI/RFI shielding
- The pins and sockets are formed contact style with solder bucket terminations.

Contact rating	5A @ 20°C	Housing	Steel, tin plating
Contact resistance	10mΩ max	Insulator	Green thermoplastic UL94V-0
Working voltage	350V dc/ac peak	Contacts	Formed Copper Alloy, Gold over Nickel Plating
Temperature range	-55°C to +105°C	Terminations	Tinned
Mating cycles	100		

Mfrs. List No. = 110-3968DB25P064HTXLF 110-3968 = DB25P064HTXLF 110-3968 = DB25P064HTXLF
 = 110-3973DA15S064HTLF 110-3973 = DA15S064HTLF 110-3973 = DA15S064HTLF
 = 110-3975DC37S064HTLF 110-3975 = DC37S064HTLF

209783

No. of Ways	Order Code	1+	10+	Price Each	25+	100+	250+
Plugs							
9	110-3966●	1.93	1.80	1.69	1.64	1.53	
15	110-3967●	2.04	1.91	1.79	1.69	1.61	
25	110-3968●	2.45	2.21	2.15	2.02	1.93	
37	110-3971●	2.57	2.36	2.26	2.12	2.02	

No. of Ways	Order Code	1+	10+	Price Each	25+	100+	250+
Sockets							
9	110-3972●	1.96	1.82	1.70	1.65	1.54	
15	110-3973●	2.57	2.36	2.25	2.11	2.03	
25	110-3974●	2.76	2.54	2.43	2.26	2.14	
37	110-3975●	3.81	3.49	3.34	3.13	2.97	

Delta 'D' - with Boardlocks



- Straight PCB mounted tin & dimple
- Female screwlocks and locking lugs

Contact rating	5A max	Housing	Steel, bright tin plated
Working voltage	350V dc/ac peak	Insulator	Glass Filled Thermoplastic UL94V-0
Contact resistance	≥10mΩ max	Contacts	Phosphor Bronze, Gold Flash Over Nickel
Temperature range	-55°C to +125°C		
Mating cycles	300	Termination	Bright Tin - Lead over Nickel

D09P24A4GV00LF=110-3907 D15P24A4GV00LF=110-3909 D25P24A4GV00LF=110-3911
 D37P24A4GV00LF=110-3912 D09S24A4GV00LF=110-3913 D37S24A4GV00LF=110-3915
 D15S24A4GV00LF=110-3914 D25S24A4GV00LF=110-3915 D37S24A4GV00LF=110-3916

209996

No. of Ways	Order Code	1+	10+	Price Each	25+	100+	250+
Plugs							
9	110-3907●	3.49	3.18	3.02	2.85	2.69	
15	110-3909●	3.87	3.51	3.37	3.16	3.01	
25	110-3911●	4.11	3.75	3.57	3.35	3.20	
37	110-3912●	6.69	6.09	5.80	5.45	5.17	
Sockets							
9	110-3913●	3.30	2.98	2.84	2.65	2.54	
15	110-3914●	3.76	3.46	3.31	3.08	2.92	
25	110-3915●	4.54	4.15	3.97	3.72	3.54	
37	110-3916●	6.65	6.09	5.80	5.44	5.17	

Turned Pin Solder Bucket



- Gold plated machined contacts giving a minimum of 300 mating cycles.

Contact rating	6.5A @ 60°C	Housing	Steel, tin plating
Contact resistance	10mΩ max	Insulator	Black, two piece polyester UL94V-0
Working voltage	500V dc/ac peak	Contacts	Turned Copper Alloy
Insulation resistance	100MΩ	Terminations	Tinned
Temperature range	-55°C to +105°C		
Mating cycles	300		

Mfrs. List No.
 DE9PBD = 107-5335, DA15PBD = 107-5336, DB25PBD = 107-5337, DC37PBD = 107-5338,
 DE9SBD = 107-5339, DA15SBD = 107-5340, DB25SBD = 107-5341,

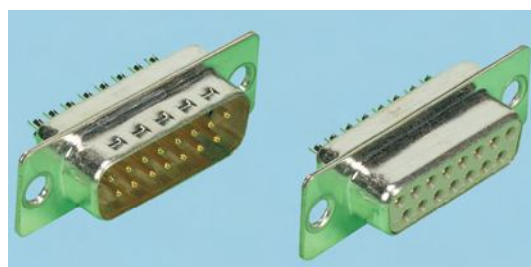
209787

5 Per Pack	No. of Ways	Order Code	1+	5+	Price Per Pack	20+	50+	100+	200+
Plugs									
	9	107-5335●	4.11	3.73	3.34	3.27	3.07	2.77	
	15	107-5336●	6.16	5.61	5.00	4.90	4.57	4.17	
	25	107-5337●	8.96	8.15	7.26	7.13	6.63	6.07	
	37	107-5338●	10.46	9.50	8.50	8.33	7.74	7.06	
Sockets									
	9	107-5339●	5.83	5.29	4.73	4.64	4.29	3.97	
	15	107-5340●	8.59	7.81	6.97	6.84	6.36	5.79	
	25	107-5341●	13.33	12.12	10.82	10.60	9.88	9.02	

Turned Pin 'D' Tin and Dimple



Pushing Performance



Contact rating	5A @ 60°C	Housing	Steel, tin plating
Contact resistance	10mΩ max	Insulator	Black, two piece thermoplastic, UL94V-0
Temperature range	-55°C to +125°C	Contacts	Turned Copper Alloy
Working voltage	125V dc/ac peak	Terminations	Tinned
Mating cycles	50		

Mfrs. List No. Plugs 0967-0xx-5604 Sockets 0967-0xx-4704 where xx = no of ways

210091

No. of Ways	Order Code	1+	10+	50+	100+	250+	500+
Solder Bucket Plugs							
9	109-6848 ●	4.38	3.81	3.25	2.68	2.40	2.21
15	109-6851 ●	5.19	4.46	3.80	3.13	2.87	2.58
25	109-6852 ●	6.93	5.99	5.13	4.23	3.87	3.46
37	109-6853 ●	9.16	7.90	6.79	5.55	5.09	4.56
Solder Bucket Sockets							
9	109-6854 ●	4.05	3.47	2.98	2.48	2.24	2.04
15	109-6855 ●	4.79	4.10	3.49	2.88	2.64	2.39
25	109-6856 ●	6.68	5.78	4.92	4.04	3.71	3.33
37	109-6857 ●	8.45	7.29	6.25	5.13	4.67	4.23

HDP-20 Crimp Snap-in contacts



- Lower cost commercial version of the military approved series
- Tin plated shells with grounding indents
- Low cost, high performance, precision formed crimp contacts
- Allows selective loading of contacts

Contact rating	7.5A	Housing	Steel, tin plating
Contact resistance	15mΩ max	Insulator	Black, thermoplastic UL94V-0
Dielectric withstand voltage	1KV ac min	Contacts: Pin	Phosphor Bronze
Temperature range	-55°C to +105°C	Socket	

Mfrs. List No. 66507-9 = 593-205, 1-66507-0 = 177-6435, 66506-9 = 593-217,
1-66506-0 = 593-242, 66505-9 = 593-229, 1-66505-0 = 177-6447,
66504-9 = 593-230, 1-66504-0 = 593-25

No. of Ways	Mfrs. List No.	Order Code	1+	100+	250+	500+	1K+
Pin Housing							
9	205204-4	134-5138 ●	1.18	1.09	1.04	0.99	0.96
15	205206-3	134-5151 ●	1.23	1.14	1.10	1.05	1.02
25	207464-2	134-5175 ●	1.34	1.25	1.19	1.13	1.09
37	205210-3	134-5199 ●	2.29	2.21	2.17	2.03	1.95
Socket Housing							
9	205203-3	134-5230 ●	1.15	1.07	1.03	0.98	0.95
15	205205-2	134-5254 ●	1.14	1.06	1.02	0.97	0.94
25	207463-1	134-5278 ●	1.11	1.03	0.97	0.91	0.87
37	205209-2	105-5990 ●	1.68	1.63	1.59	1.51	1.43

209978

Order Multiple=10	Order Code	10+	50+	100+	250+	500+	1K+
Crimp Pins							
28-24 AWG, 0.08-0.2mm ² (Sel. Gold)	593-205 ●	0.250	0.230	0.210	0.198	0.183	0.166
28-24 AWG, 0.08-0.2mm ² (Gold Flash)	177-6435 ●	0.080	0.071	0.063	0.056	0.048	0.040
24-20 AWG, 0.2-0.52mm ² (Sel. Gold)	593-217 ●	0.290	0.230	0.220	0.197	0.183	0.165
24-20 AWG, 0.2-0.52mm ² (Gold Flash)	593-242 ●	0.119	0.107	0.103	0.099	0.095	0.092
Crimp Sockets							
28-24 AWG, 0.08-0.2mm ² (Sel. Gold)	593-229 ●	0.400	0.350	0.310	0.260	0.210	0.166
28-24 AWG, 0.08-0.2mm ² (Gold Flash)	177-6447 ●	0.066	0.059	0.058	0.057	0.056	0.055
24-20 AWG, 0.2-0.52mm ² (Sel. Gold)	593-230 ●	0.230	0.220	0.197	0.183	0.166	0.148
24-20 AWG, 0.2-0.52mm ² (Gold Flash)	593-254 ●	0.119	0.107	0.102	0.097	0.093	0.088

Tooling for HDP-20 Crimp 'D'



Mfrs. List No. 58448-2 = 134-5497, 91067-2 = 593-266,

209977

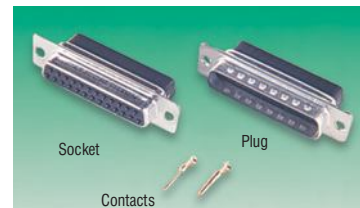
Pro-Crimper
Insertion/Extraction tool (24-20 AWG)

Order Code
134-5497
593-266●

Price Each
134.22
7.44



Crimp 'D' Tin and Dimple (Formed Pin)



- A range of crimp connectors with rear insert contacts
- The connectors have tinned shells, plugs dimpled for improved electrical continuity.
- The connector and contacts are ordered separately
- Suitable for applications where partial loading is required.

Contact rating	4A @ 70°C	Housing	Steel, tin plating
Contact resistance	10mΩ max	Insulator	Black, two piece thermoplastic UL94V-0
Temperature range	-55°C to +85°C	Contacts	Copper Alloy
Working voltage	500V dc/ac peak		
Mating cycles	100		

Suitable wire sizes:
24/28 AWG, 0.08-0.22mm² 7/0.2 or 10/0.1
20/24 AWG, 0.20-0.52mm² 7/0.2 or 16/0.2

Mfrs. List Nos:	DEC9PTD = 151-241 ,	DAC15PTD = 151-242 ,	DBC25PTD = 151-243
	DCC37PTD = 151-244 ,	DEC9ST = 151-245 ,	DAC15ST = 151-246
	DBC25ST = 151-247 ,	DCC37ST = 151-248	

210092

No. of Ways	Order Code	1+	50+	100+	500+	250+
Plug Housings						
9	151-241 ●	1.04	0.97	0.90	0.85	0.79
15	151-242 ●	1.11	1.04	0.97	0.91	0.83
25	151-243 ●	1.12	1.04	0.92	0.90	0.82
37	151-244 ●	1.45	1.31	1.18	1.11	1.03
Socket Housings						
9	151-245 ●	1.03	0.96	0.88	0.85	0.79
15	151-246 ●	1.10	1.02	0.93	0.88	0.82
25	151-247 ●	1.12	1.05	0.93	0.91	0.83
37	151-248 ●	1.44	1.33	1.20	1.14	1.05

Crimp 'D' Tin and Dimple (Formed Pin)



Pushing Performance



- A range of Tin and Dimple D connectors with rear insert snap in contacts
- The connector housing is supplied without contacts (contacts ordered separately)
- The connectors are suitable for applications requiring less than the full population of pins or sockets.

Contact rating	4A @ 70°C	Housing	Steel, tin plating
Contact resistance	10mΩ max	Insulator	two piece thermoplastic, UL94V-0
Working voltage	V dc/ac peak		
Temperature range	-55°C to +125°C		
Mating cycles	50		

Plug Housings	Mfrs. List No.	Order Code	Socket Housings	Mfrs. List No.	Order Code
9 way	0967 009 5601	109-6840	9 way	0967 009 4701	109-6843
15 way	0967 015 5601	109-6841	15 way	0967 015 4701	109-6844
25 way	0967 025 5601	109-6842	25 way	0967 025 4701	109-6845
			37 way	0967 037 4701	109-6846

Open Crimp					
Pin contact 0.25-0.56mm ² (24-20 AWG)- strip of 10				0967-000-8167	109-6876
Socket contact 0.25-0.56mm ² (24-20 AWG)- strip of 10				0967-000-8267	109-6877



EMI/RFI Shielded 'D' Connectors - continued

Crimp 'D' Tin and Dimple (Formed Pin) - continued

210094

No. of Ways	Order Code	1+	10+	50+	100+	250+	500+
Plug Housings							
9	109-6840●	1.54	1.35	1.14	0.92	0.85	0.76
15	109-6841●	1.67	1.47	1.24	1.03	0.93	0.85
25	109-6842●	1.59	1.36	1.19	0.95	0.89	0.79
37	120-7630●	1.65	1.44	1.19	0.97	—	—
Socket Housings							
9	109-6843●	1.54	1.35	1.14	0.92	0.85	0.76
15	109-6844●	1.71	1.50	1.27	1.05	0.96	0.87
25	109-6845●	1.59	1.36	1.19	0.95	0.89	0.79
37	109-6846●	1.89	1.62	1.40	1.16	1.04	0.94
Crimp Contacts (10 Per Strip)							
Pin	109-6876●	1.92	1.45	1.21	1.00	0.99	0.95
Socket	109-6877●	2.05	1.53	1.30	1.07	1.06	1.02

Tooling for Crimp 'D'



Pushing Performance



Mfrs. List No. 0999-000-0175 = 150-171, 0999-000-0171 = 150-172

210095

	Order Code	Price Each
	1+	
Crimp tool	150-171	234.46
Insertion/extraction tool	150-172	12.04

HDP-20 kits

Crimp Version



Metal cover: Steel over nickel, galvanized
 Insulation body: Polyamide UL94V-0
 Shielding plate: Steel, galvanized
 Covering cap: Polyester, black
 Lifting screws: Steel, galvanized

- HDP-20 male and female connector with metal cover, shielding plates, plastic covering cap, integral, jack screws
- Each kit contains:
 - 1 HDP20 plug connector
 - Empty housing for crimped contacts
 - 1 inner and 1 outer shielding plate
 - 1 plastic covering cap
 - 2 jack screws
- Note: The crimping sleeve and crimping contacts must be ordered separately (see: 'crimping sleeves')

243423

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each	10+	50+
Crimped Version/Male Connector						
9	0-01658655-1	116-2471●	2.500	2.040	1.960	
15	0-01658657-1	116-2472●	3.710	3.050	2.890	
25	0-01658659-1	116-2473●	4.170	3.410	3.260	
Crimped Version/Female Connector						
9	0-01658654-1	116-2474●	3.270	2.670	2.550	
15	0-01658656-1	116-2475●	3.890	3.190	3.050	
25	0-01658658-1	116-2476●	4.080	3.360	3.180	
Crimp Contacts						
Male			10+	50+	100+	
24 - 28 AWG	166294-1	341-6823	0.062	0.051	0.041	
Female						
24 - 20 AWG	166291-1	341-6770●	0.130	0.116	0.104	
Tooling						
Crimp Tool	0-0169341-1	421-8127	173.150			
Insertion/Extraction Tool	91067-2	593-266●	7.440			

HD-20 Solder Cup kits

Solder Version



- Connector has preloaded contacts
- One-piece 94V-0 rated plastic insert
- Intermateable with other subminiature D connectors
- UL recognised and CSA approved

Metal cover: Steel tin plated
 Insulation body: Black thermoplastic UL94V-0
 Shielding plate: Steel, tin plated

Enclosure: Polyester, black
 Jack screws: Brass, zinc coated

419434

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each	10+	50+
Plug Kit						
9	0-01571650-4	955-2634●	5.19	4.83	4.61	
15	0-01571651-5	955-2642●	6.70	6.23	5.97	
25	0-01571652-6	955-2650●	6.96	6.18	5.56	
Receptacle kit						
9	0-01571654-4	955-2669●	5.54	5.15	4.94	
15	0-01571655-5	955-2677●	7.04	6.55	6.25	

Solder connectors in packs



Pushing Performance



- Supplied in blister packs of 5
- Packs include Connectors with hoods and 4/40 UNC thumbscrews

Rating 6.5A
 Temperature range -55°C to +125°C
 Contact resistance <10mΩ
 Insulation resistance >10000

210074

No. of Ways	Mfrs. List No.	Order Code	1+	Price Per Pack	10+
Plugs					
9	6667009910390	110-6791●	17.40	16.17	
25	6667025910390	110-6793●	19.60	17.65	
Socket					
9	6667009910290	110-6789●	17.65	16.01	

Harsh Environment



- Special plated shell guarantees electrical grounding up to 25 years

Mating cycles: 500
 Contacts: Copper Alloy
 Insulator: GF polyester
 Shell: Steel, special nickel plating

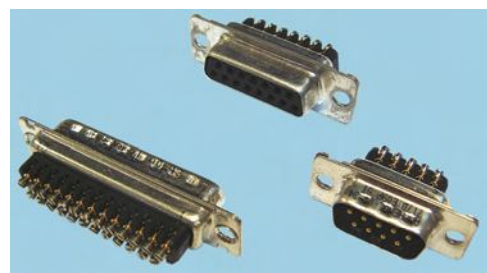
Current rating: 5A
 Working voltage: 750Vac peak
 Proof voltage: 2.5KV ac peak
 Temperature range: -55°C to +125°C

210057

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each	5+	20+	50+
Sockets, solder							
9	DE-9ST-0-LF	111-4100●	2.48	2.09	1.93	1.73	
Sockets (PCB) straight							
9	DE-9ST-0-LF	111-4101●	4.59	3.89	3.58	3.19	

Rewireable 'D' Connectors

Screw Termination D-Sub Series



- Easily wired without any specific tool - only a standard screwdriver is required
- Compatible with all standard hoods and accessories

Shells	Steel, Tin plated	Withstanding Voltage	1000V
Insulator	Glass Filled Thermoplastic, UL94V-0	Insulation Resistance	5000Mohm
Contacts	Brass, Gold over Nickel plating	Contact Resistance	5mohm
Current Rating	7.5A	Operating Temperature	-55°C to 85°C
Voltage Rating	300V	Mating Cycles	100

45155

No. of Ways	Mfrs. List No.	Order Code	1+	10+	25+	50+
Plug						
9	L717DE09PST	130-6750●	3.86	3.64	3.50	3.31
15	L717DA15PST	130-6751●	5.59	5.22	5.00	4.70
25	L717DB25PST	130-6752●	8.67	8.07	7.72	7.28
Socket						
9	L77DE09SST	130-6754●	4.32	4.03	3.83	3.63
15	L77DA15SST	130-6755●	6.28	5.85	5.60	5.28
25	L77DB25SST	130-6756●	9.93	9.23	8.85	8.34

Screw Termination D-Sub Series

Plastic Hood Kits



Kit includes connector and plastic hood.

Amphenol

451524

No. of Ways	Mfrs. List No.	Order Code	1+	10+	25+	50+
Plug + Straight Cable Entry Hood Kit						
9	L717DE09PST1	130-6757●	6.36	5.91	5.65	5.34
15	L717DA15PST1	130-6758●	7.68	7.22	6.91	6.62
25	L717DB25PST1	130-6759●	10.68	10.06	9.64	9.20
Socket + Straight Cable Entry Hood Kit						
9	L77DE09SST1	130-6760●	6.74	6.27	5.93	5.61
15	L77DA15SST1	130-6761●	8.40	7.90	7.58	7.23
25	L77DB25SST1	130-6762●	12.01	11.30	10.82	10.34
Plug + 90° Cable Entry Hood Kit						
9	L717DE09PST2	130-6763●	6.31	5.88	5.62	5.31
15	L717DA15PST2	130-6764●	6.92	6.50	6.21	5.96
25	L717DB25PST2	130-6766●	9.01	8.48	8.12	7.76
Socket + 90° Cable Entry Hood Kit						
9	L77DE09SST2	130-6767●	6.71	6.24	5.99	5.64
15	L77DA15SST2	130-6768●	7.56	7.11	6.82	6.51
25	L77DB25SST2	130-6769●	10.80	10.17	9.74	9.31

Screw Termination D-Sub Series

Metallic Hood Kits



Kit includes connector and metallic hood.

Amphenol

451527

No. of Ways	Mfrs. List No.	Order Code	1+	10+	25+	50+
Plug + Straight Cable Entry Hood Kit						
9	L717DE09PST3	130-6770●	7.16	6.66	6.38	6.02
15	L717DA15PST3	130-6771●	8.50	7.99	7.66	7.32
25	L717DB25PST3	130-6772●	11.64	10.96	10.48	10.03
Socket + Straight Cable Entry Hood Kit						
9	L77DE09SST3	130-6773●	7.57	7.04	6.73	6.36
15	L77DA15SST3	130-6774●	9.46	8.91	8.52	8.16
25	L77DB25SST3	130-6775●	13.20	12.42	11.90	11.36
Plug + 45° Cable Entry Hood Kit						
9	L717DE09PST4	130-6776●	7.12	6.62	6.34	5.99
15	L717DA15PST4	130-6778●	7.54	7.09	6.78	6.50
25	L717DB25PST4	130-6779●	11.64	10.96	10.49	10.03
Socket + 45° Cable Entry Hood Kit						
9	L77DE09SST4	130-6780●	6.00	5.59	5.36	5.04

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Re-Wireable D Connectors

Single Cable Entry



- Cable entry 45° from left or right
- Ideal for R&D, Prototyping, Multiple re-use
- Contacts clearly numbered
- Knurled fixing screws
- Integral cable clamp
- Shielded backshell accept 4mm to 10mm cable

Supplied complete with marking labels and instructions

Maximum Voltage	60V AC/DC	Cable Dia Max/Min	10mm to 4mm
Current Rating	1A	Wire Size AWG	26 to 16 AWG
Temperature Range	-20°C to +75°C	Housing	ABS-VO, metal-plated
Mating Cycles	≥50		

244041

No. Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
Plugs						
9	2761509	121-6700●	21.39	20.96	19.95	18.37
15	2761606	121-6702●	23.07	22.61	21.95	20.13
25	2761622	121-6706●	28.30	25.69	23.81	21.92
Sockets						
9	2761499	121-6699●	21.39	20.96	19.95	18.37
15	2761596	121-6701●	23.07	22.36	21.52	19.93
25	2761619	121-6704●	29.01	25.69	23.81	21.92

BUS 'D' Connectors

Profibus Connector

Subcon Profibus



The Sub-D Series SUBCON Profibus is designed in particular for use in Profibus systems at up to 12 Mbits/s. It allows convenient and rapid connection of the incoming and outgoing bus cable in field conditions.

- Angled or axial quick-action connector
- With or without programming interface
- Connection via spring force terminal
- Terminating impedance can be connected
- Connector housing screened
- Max. cable diameter 8 mm
- cULus recognized (File No. E123528 Vol.5 Sec.3)

No. of ways:	9	Wire size:	0.12-0.5mm ²
Voltage, rated max.:	60V AC/DC		28-20 AWG
Current, rated:	1A	Material, hoods:	ABS, metallized
Temperature range:	-20°C to +75°C	Protection class:	IP40
Mating cycles:	≥200	Fixing screws:	UNC4-40
Cable-Ø max.:	8.0mm		

405887

Version	Mfrs. List No.	Order Code	1+	5+	10+
90°	2744348.	940-1326	20.43	19.34	18.63
90° + Programming-interface	2744403.				
axial	2744377.	940-1334	25.34	24.11	23.07
		940-1342	20.43	19.34	18.63

Bus Connector for CAN Systems

Subcon CANbus



The SUBCON-CANbus connector can be used in accordance with ISO/DIN 11 898 for CAN bus systems up to 1 Mbit/s and SAFETY-P.

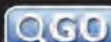
- Angled connector for CAN systems
- Connection via screw terminals
- Terminating impedance can be connected
- Screened connector housing
- Max. cable diameter 10 mm

No. of ways:	9	Wire size:	0.14-1.5mm ² solid 0.14-1.0mm ² stranded
Voltage, rated max.:	60V AC/DC		26-16AWG
Current, rated:	1A	Material, hoods:	ABS, metallized
Temperature range:	-20°C to +75°C	Protection class:	IP44
Mating cycles:	≥200	Fixing screws:	UNC4-40
Cable-Ø max.:	6/10mm		

405896

Version	Mfrs. List No.	Order Code	1+	5+	10+
Angled	2744694.	940-1350	20.43	19.34	18.63

Over 480,000 products online



Waterproof 'D' Connectors

Waterproof D Type Connectors

IP 67



Cable Mount Plug



Panel Plug - Solder type (Rear view)

- Panel versions with solder bucket or PCB options
- Straight or right angle options
- Cable mounted plugs and sockets
- Formed pin contacts
- Tin and dimple housing
- Screw lock / thread lock, fixings included

Contact resistance	mΩ	Temperature range	°C to +°C
Voltage Rating	350V	Current Rating	5A

272877-343004

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
Panel Socket - Solder						
9	LTWDB-09PFFS-SL7001	117-0070●	6.26	5.75	5.11	4.79
15	LTWDB-15PFFS-SL7001	117-0071●	6.95	6.39	5.68	5.33
Panel Socket - PCB Straight						
9	LTWDB-09PFFP-SL7001	117-0072●	6.26	5.75	5.11	4.79
15	LTWDB-15PFFP-SL7001	117-0073●	6.95	6.39	5.68	5.33
25	LTWDB-25PFFP-SL7001	117-0074●	8.87	8.13	7.24	6.78
Panel Plug - Solder						
9	LTWDB-09PMMS-SL7001	117-0075●	6.26	5.75	5.11	4.79
15	LTWDB-15PMMS-SL7001	117-0076●	6.95	6.39	5.68	5.33
25	LTWDB-25PMMS-SL7001	117-0078●	8.87	8.13	7.24	6.78
Panel Plug - PCB Straight						
9	LTWDB-09PMMP-SL7001	117-0079●	6.26	5.75	5.11	4.79
25	LTWDB-25PMMP-SL7001	117-0081●	8.87	8.13	7.24	6.78
Cable Socket						
9	LTWDB-09BFFA-SL7001	117-0082●	6.26	5.75	5.11	4.79
15	LTWDB-15BFFA-SL7001	117-0083●	7.23	6.65	5.90	5.55
25	LTWDB-25BFFA-SL7001	117-0084●	7.99	7.32	6.52	6.12
Cable Plug						
9	LTWDB-09BMMA-SL7001	117-0085●	6.26	5.75	5.11	4.79
15	LTWDB-15BMMA-SL7001	117-0086●	7.23	6.65	5.90	5.55
25	LTWDB-25BMMA-SL7001	117-0087●	7.67	7.04	6.25	5.86

Gender Changers

Low Profile Gender Changers



- Gender changers are available in 9, 15 and 25 way
- Fully Shielded
- Gold plated over nickel contacts
- 0.7" deep at thickest part

Current Rating	3 A
Dielectric Strength	1000 V for one minute
Operating Temperature	-55°C to 105°C
Insulator	PBT Glass Fibre Reinforced

Low profile design is ideal when space is a prime consideration in a permanent installation.

491371

No. of Ways	Order Code	1+	50+	100+
9 male-male	142-7691●	2.20	1.65	1.31
15 male-male	142-7692●	2.44	1.82	1.46
15 female-female	142-7694●	2.51	1.87	1.52
25 male-male	142-7695●	2.67	2.01	1.60
25 female-female	142-7698●	2.75	2.06	1.65
Port Savers				
9 male-female	142-7690●	2.44	1.82	1.46
15 male-female	142-7693●	2.67	2.01	1.60
25 male-female	142-7697●	2.91	2.18	1.74

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Miniature Gender Changers

9, 15, 15HD, 25, 37, Centronics

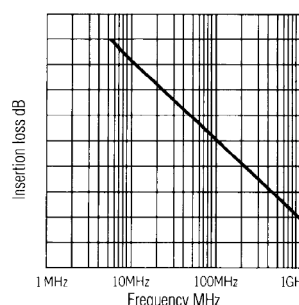


- A range of miniature low cost gender changers featuring pin to pin wiring and housed in a compact metal enclosure, which provides RFI/EMI shielding
- Gender changers are available in 9, 15, 25, 37 way and Centronics versions and are supplied with screw locks.

221631

No. of Ways	Order Code	1+	10+	50+
Standard D Types				
9 male - male	152-5738●	5.56	4.93	4.03
9 female - female	152-5739●	5.56	4.93	4.03
15 male - male	152-5740●	7.64	6.43	5.32
15 female - female	152-5741●	7.64	6.43	5.32
25 male - male	152-5742●	5.79	5.16	4.22
25 female - female	152-5743●	5.79	5.16	4.22
37 male - male	118-3332	6.98	6.12	4.91
37 female - female	118-3334	6.98	6.12	4.91
High Density				
15 (SVGA) male - male	118-3337	5.60	4.89	4.11
15 (SVGA) female - female	118-3338	6.00	5.23	4.41
Centronics				
36 female - female	118-3336	6.74	5.88	4.65

Filtered 'D'



- Filtered tin and dimple 'D' connectors with turned pin contacts
- Designed to make equipment compatible with BS, VDE, FCC and FTZ regulations in respect of EMI/RFI emissions
- Filtering is achieved by means of a 1nF feed through ceramic capacitor on each contact which is fully encapsulated within the connector shell for maximum resistance to hazardous environments
- Soldering instructions included

Typical performance relates to 50Ω system Mil Std 220 Capacitance - 1nF nominal 1KHz 0.1rms

Contact rating	5A @60°C	Housing	Steel, Tin plating
Contact resistance	5mΩmax	Insulator	Grey polyester UL94V-0
Insulation resistance	5000MΩmin	Rear encapsulation	Blue epoxy resin
Working voltage	200V dc/ac peak	Contacts	Turned Copper Alloy
Capacitance	1nF @ 1KHz 0.1 rms		Gold over Nickel
Temperature range	-55°C to +85°C	Earthing strap (90°PCB)	Steel, Tin plating
Mating cycles	100	Riv-nut (90°PCB)	4-40 NC Thread

209778

Filtered Solder Bucket 'D'



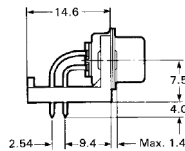
Mfrs. List No.	= FDE-9PTI2/1-LF111-4110	Mfrs. List No.	= FDE-9PTI2/1-LF111-4110
	= FDA-15PTI2/1-LF111-4111		= FDA-15ST2/1-LF111-4114
	= FDB-25PTI2/1-LF111-4112		= FDB-25ST2/1-LF111-4115
	= FDE-9ST2/1-LF111-4113		

209781



No. of Ways	Order Code	1+	10+	Price Each			
				25+	50+	100+	250+
Plugs							
9	111-4110●	6.21	5.78	5.59	5.28	5.22	5.10
15	111-4111●	8.23	7.73	7.54	6.96	6.76	6.43
25	111-4112●	13.39	12.48	12.18	11.51	11.39	11.13
Sockets							
9	111-4113●	6.77	6.27	6.07	5.73	5.61	5.49
15	111-4114●	9.38	8.79	8.42	7.91	7.78	7.63
25	111-4115●	15.99	14.86	14.38	13.50	13.37	13.21
37	111-4117●	18.78	17.73	17.05	16.08	15.91	15.70

Filtered 90° PCB 'D' Earthing Strap and Riv-Nuts



Mfrs. List No. FDEB-9P1AENT12/1-LF= 111-4127,
FDBB-25P1AENT12/1-LF= 111-4132,
FDEB-9S1AENT12/1-LF= 111-4134,
FDBB-25S1AENT12/1-LF= 111-4136,

FDAB-15P1AENT12/1-LF= 111-4131,
FDCB-37P1AENT12/1-LF= 111-4133,
FDAB-15S1AENT12/1-LF= 111-4135,
FDCB-37S1AENT12/1-LF= 111-4137

209782

No. of Ways	Order Code	1+	10+	Price Each			
				25+	50+	100+	250+
Plugs							
9	111-4127●	9.16	8.44	8.10	7.65	7.48	6.94
15	111-4131●	9.53	8.87	8.53	8.03	7.96	7.88
25	111-4132●	12.80	12.18	11.68	11.04	10.93	10.83
37	111-4133●	21.63	20.53	20.02	19.33	18.89	18.23
Sockets							
9	111-4134●	10.18	9.19	9.00	8.55	8.35	7.68
15	111-4135●	10.77	10.03	9.61	9.11	9.01	8.92
25	111-4136●	14.04	13.29	12.76	12.03	11.90	11.64
37	111-4137●	22.69	21.19	20.76	19.61	19.42	18.30

Filtered Straight PCB 'D'



Mfrs. List Nos: FDE-9POL2T12/1-LF = 111-4118
FDA-15POL2T12/1 = 429-053
FDA-15POL2T12/1-LF = 111-4119
FDB-25POL2T12/1-LF = 111-4120
FDC-37POL2T12/1-LF = 111-4121

FDE-9SOL2T12/1-LF = 111-4122
FDA-15SOL2T12/1-LF = 111-4123
FDB-25SOL2T12/1-LF = 111-4124
FDC-37SOL2T12/1-LF = 111-4126

209779

No. of Ways	Order Code	1+	10+	Price Each			
				25+	50+	100+	250+
Plugs							
9	111-4118●	6.66	6.00	5.73	5.49	4.91	4.70
15	111-4119●	9.15	8.24	7.86	7.53	6.74	6.46
25	111-4120●	12.52	11.37	10.89	10.44	9.23	8.84
37	111-4121●	19.63	18.04	17.39	15.47	14.90	13.95
Sockets							
9	111-4122●	6.98	6.29	6.02	5.76	5.15	4.93
15	111-4123●	8.95	8.06	7.69	7.36	6.59	6.31
25	111-4124●	13.51	12.27	11.75	11.25	9.95	9.53
37	111-4126●	17.72	16.09	15.39	14.73	13.06	12.49

Filtered Straight PCB 'D', 4-40 Threaded Stand offs



- 7mm high stand offs
- Snap in board lock
- Full shielding for EMI/RFI
- Potted construction, provides resistance to hazardous environments
- Complies with BS9523, MIL-C-24308 or HE501

Contact Rating 5A
Contact Resistance 5mΩ
Insulation Resistance 5000MΩ min
Working voltage 200V dc/ac peak
Capacitance 1nF @ 1kHz 0.1 rms
Temperature Range -55°C to +85°C

Mating Cycles 250
Housing (front) Steel, tin plated
Housing (rear) Steel, nickel plated
Insulator High impact epoxy & GF polyester
Stand offs 4-40NC threaded

209841

No. of Ways	Mfrs. List No.	Order Code	1+	10+	Price Each		
					25+	100+	250+
Plugs							
9	FDE-9PBL2T12/1-LF	111-4156●	8.70	8.27	8.05	7.00	6.46
15	FDA-15PBL2T12/1-LF	111-4157●	8.28	7.86	7.67	6.65	6.16
25	FDB-25PBL2T12/1-LF	111-4158●	15.54	14.76	14.41	12.48	11.53
37	FDC-37PBL2T12/1-LF	NEW 155-4820●	19.74	18.66	17.08	15.67	14.41
Sockets							
9	FDE-9SBL2T12/1-LF	111-4159●	9.39	8.93	8.72	7.55	6.99
15	FDA-15SBL2T12/1-LF	111-4160●	12.08	11.48	11.22	9.70	8.98
25	FDB-25SBL2T12/1-LF	111-4161●	16.65	15.81	15.45	13.40	12.37
37	FDC-37SBL2T12/1-LF	111-4162●	20.98	19.89	19.47	16.85	15.56

Filtered 'D' Adapters



- Converts standard 'D' to filtered 'D'
- Full shielding integrity for protection against RFI/EMI
- 'Feed through' technology enhances rejection levels in VHF and UHF bands

Contact Material Copper Alloy, Gold over nickel
Current Rating Insulator Material High impact epoxy glass filled polyester
Temperature Range -40 to +125°C
Working voltage 200V dc/ac peak
Contact Resistance 5x10⁻³Ω max
Insulation Resistance >5x10⁹Ω
Shell material Front Housing Steel, bright tin finish
Back Steel, electrolytic nickel
Body Aluminium alloy, nickel plated
Mating Cycles 250

227390

No. of Ways	Mfrs. List No.	Order Code	1+	10+	25+
9	FA-9PS/1-LF	111-4106●	25.39	24.12	23.06
15	FA-15PS/1-LF	111-4107●	26.81	25.47	24.33
25	FA-25PS/1-LF	111-4108●	32.98	31.35	27.73
37	FA-37PS/1-LF	111-4109●	42.44	40.33	34.57

Filtered D Sub Adapters



Pushing Performance



- Male to Female Filtered D Sub Adapter
- 9, 15, 25 and 37 way available
- 3 Filter Values 47pF, 1000pF and 3900 pF for effective electronic noise reduction
- Ideal for easy EMI corrections in existing applications or quick filter tests during design phase
- Provided with 2 Jack screws 4-40 UNC not pre-mounted to allow flexibility of use

Contact Rating 6.5A
Working voltage 100V
Temperature Range to +

503084

No. of Ways	Capacitance PF	Mfrs. List No.	Order Code	1+	5+	10+
9	47	09641007210	155-4604●	21.42	19.27	17.52
9	1000	09641007230	155-4605●	21.18	19.06	17.33
9	3900	09641007240	155-4606●	21.80	19.62	17.85
15	47	09642007210	155-4607●	24.36	21.93	19.94
15	1000	09642007230	155-4609●	23.88	21.49	19.54
15	3900	09642007240	155-4611●	24.99	22.47	20.44
25	47	09643007210	155-4612●	32.56	29.31	26.65
25	1000	09643007230	155-4613●	30.39	27.35	24.87
25	3900	09643007240	155-4614●	34.01	30.61	27.83
37	47	09644007210	155-4615●	38.89	35.00	31.82
37	1000	09644007230	155-4616●	36.77	33.09	30.09
37	3900	09644007240	155-4617●	43.12	38.80	35.27

Filtered "D" Sub Connectors
Plugs and Sockets

Pushing Performance



- The filtering element incorporates a multi-layer printed circuit board and surface mount components
- The right angled versions are supplied with board locks and clinch nut with a 4-40 UNC thread
- Suitable for military, aerospace, industrial, medical, telecom and computer applications
- Reflow solder compatible
- Allows user to use the same layout as a standard D-Sub (or mixed D-Sub) but provides more space on the PCB board by having the filter in the connector

Current Rating 7.5A
Contact Resistance 10mΩ max
Withstand voltage 250V
Temperature Range -55°C to +125°C
Housing Steel
Insulator PCT Re-inforced Glass fibre, UL94V-0
Contacts Copper Alloy, Selective Gold



Filtered 'D' - continued

Filtered "D" Sub Connectors - continued

Plugs and Sockets - continued

	Filter Capacitance - Application	
	1000 pF	47 pF
Photocopiers	Networks	Video
LF Audio Equipment	Industrial Applications	High Speed Networks
Robotics	Audio / Data	
Computer / Switch Mode PSU	PC Applications	
Power Control Electronics	Printers	
5 MHz	-	1 GHz

Straight PCB - with Turned Solder Pins

No. of Ways	Mfrs. List No.	Filter Type	Order Code	1+	10+	25+	50+
Plugs							
9	09641227210	47pF	134-1499●	6.96	6.30	6.06	5.74
15	09642227210	47pF	134-1500●	9.57	8.62	8.30	7.85
25	09643227210	47pF	134-1501●	13.39	12.03	11.60	10.96
37	09644227210	47pF	134-1502●	13.30	11.98	11.53	10.90
9	09641227230	1000pF	116-8717●	7.18	6.49	6.23	5.90
15	09642227230	1000pF	116-8718●	9.84	8.88	8.55	8.08
25	09643227230	1000pF	116-8719●	10.20	9.18	8.83	8.35
37	09644227230	1000pF	116-8720●	12.85	11.58	11.15	10.54
9	09641227240	3900pF	134-1526●	5.66	5.08	4.90	4.63
15	09642227240	3900pF	134-1527●	7.11	6.40	6.15	5.82
25	09643227240	3900pF	134-1528●	12.61	11.35	10.91	10.32
37	09644227240	3900pF	134-1529●	17.38	15.63	15.03	14.22
Sockets							
9	09641127210	47pF	134-1503●	6.68	6.02	5.79	5.47
15	09642127210	47pF	134-1504●	7.69	6.94	6.67	6.31
25	09643127210	47pF	134-1505●	11.03	9.93	9.56	9.02
37	09644127210	47pF	134-1506●	19.19	17.29	16.62	15.71
9	09641127230	1000pF	116-8722●	7.51	6.77	6.52	6.15
15	09642127230	1000pF	116-8723●	10.05	9.06	8.71	8.25
25	09643127230	1000pF	116-8724●	11.38	10.24	9.85	9.32
9	09641127240	3900pF	134-1530●	6.86	6.17	5.95	5.61
15	09642127240	3900pF	134-1531●	9.21	8.28	7.97	7.54
25	09643127240	3900pF	134-1532●	11.37	10.22	9.83	9.30
37	09644127240	3900pF	134-1533●	14.47	13.01	12.53	11.85

90° PCB Turned Solder Pin - Board Locks and Clinch Nut - 4-40 UNC

No. of Ways	Mfrs. List No.	Filter Type	Order Code	1+	10+	25+	50+
Plugs							
9	09641247212	47pF	134-1507●	7.950000	7.040000	6.820000	6.430000
15	09642247212	47pF	134-1508●	10.045203	9.017132	7.299270	6.687844
25	09643247212	47pF	134-1511●	12.090000	10.880000	10.470000	9.900000
37	09644247212	47pF	134-1512●	14.260000	12.820000	12.340000	11.670000
9	09641247232	1000pF	116-8726●	8.960000	8.060000	7.780000	7.350000
15	09642247232	1000pF	116-8727●	8.160000	7.350000	7.070000	6.680000
9	09641247242	3900pF	134-1535●	6.440000	5.790000	5.580000	5.270000
15	09642247242	3900pF	134-1536●	8.430000	7.600000	7.310000	6.910000
25	09643247242	3900pF	134-1537●	11.950000	10.750000	10.340000	9.770000
Sockets							
9	09641147212	47pF	134-1513●	8.170000	7.350000	7.080000	6.690000
15	09642147212	47pF	134-1514●	9.260000	8.320000	8.020000	7.570000
25	09643147212	47pF	134-1515●	12.370000	11.150000	10.710000	10.140000
37	09644147212	47pF	134-1516●	17.040000	15.320000	14.740000	13.930000
9	09641147232	1000pF	116-8730●	9.220000	8.290000	7.960000	7.530000
15	09642147232	1000pF	116-8731●	7.060000	6.360000	6.110000	5.790000
25	09643147232	1000pF	116-8732●	11.750000	10.580000	10.180000	9.630000
9	09641147242	3900pF	134-1539●	9.210000	8.280000	7.960000	7.520000
15	09642147242	3900pF	134-1540●	10.860000	9.790000	9.410000	8.900000
25	09643147242	3900pF	134-1541●	15.560000	14.000000	13.480000	12.730000

Solder Bucket

430008

No. of Ways	Mfrs. List No.	Filter Type	Order Code	1+	10+	25+	50+
Plugs							
9	09641217210	47pF	134-1517●	5.83	5.24	5.06	4.77
15	09642217210	47pF	134-1518●	7.91	7.09	6.84	6.47
25	09643217210	47pF	134-1519●	12.54	11.28	10.85	10.27
37	09644217210	47pF	134-1520●	18.53	16.68	16.04	15.17
9	09641217230	1000pF	116-8735●	6.02	5.41	5.21	4.94
15	09642217230	1000pF	116-8736●	8.13	7.34	7.06	6.68
25	09643217230	1000pF	116-8737●	12.97	11.66	11.22	10.59
9	09641217240	3900pF	134-1543●	5.51	4.95	4.76	4.51
15	09642217240	3900pF	134-1544●	7.95	7.15	6.87	6.51
25	09643217240	3900pF	134-1545●	10.19	9.16	8.81	8.33
37	09644217240	3900pF	134-1547●	19.10	17.18	16.52	15.63
Sockets							
9	09641117210	47pF	134-1521●	6.36	5.72	5.51	5.19
15	09642117210	47pF	134-1523●	8.82	7.94	7.63	7.23
25	09643117210	47pF	134-1524●	15.41	13.87	13.33	12.60
37	09644117210	47pF	134-1525●	17.61	15.86	15.26	14.43
9	09641117230	1000pF	116-8739●	6.56	5.92	5.68	5.37
15	09642117230	1000pF	116-8740●	9.10	8.21	7.88	7.46
25	09643117230	1000pF	116-8741●	15.90	14.31	13.78	13.03
9	09641117240	3900pF	134-1548●	5.99	5.38	5.18	4.90
15	09642117240	3900pF	134-1549●	9.08	8.17	7.87	7.43
25	09643117240	3900pF	134-1550●	12.51	11.26	10.83	10.24
37	09644117240	3900pF	134-1551●	18.13	16.31	15.69	14.83

Series 400 Ferrite

Filtered 'D' Sub Connectors



Contact Rating
Dielectric withstand voltage
Insulation Resistance
Impedance
Temperature Range
Housing
Shell
Contacts

- Optimum filtering performance 10-300MHz
- Provides pin to pin and pin to ground filtering
- Interchangeable with standard PCB mount 'D' sub connectors
- Effective in meeting FCC, VDE, EN55022 and VCCI requirements
- 4-40UNC locking inserts and boardlocks

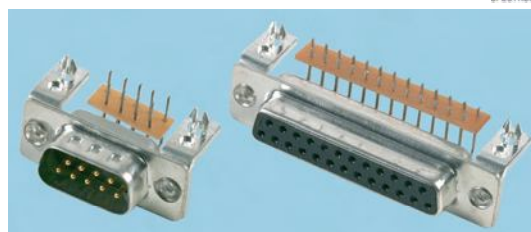
5A
1000Vrms (1 minute)
1000MΩ @ 500V dc
30Ω @ 25MHz/50Ω @ 100MHz
-40°C to +105
PBT +30% GF UL94V-0
Steel (tin plated)
Gold flash phosphor bronze

209982

No. of Ways	Mfrs. List No.	Order Code	1+	25+	50+	100+
Plugs						
9	56F402-001	118-6300●	3.91	3.61	3.32	2.41
15	56F412-001	118-6301●	4.56	3.71	3.49	2.71
25	56F422-001	118-6302●	6.43	5.96	5.48	4.24
Sockets						
9	56F404-001	118-6303●	2.83	2.31	2.10	1.69
15	56F414-001	118-6304●	3.66	3.00	2.84	2.19
25	56F424-001	118-6305●	5.71	4.65	3.94	2.88

Spectrum Chip-on-board

Filtered 'D' Sub Connectors



- Capacitive array
- Effective and simple method of EMC/RFI protection
- Drop-in replacement for non-filtered PCB mount 'D' sub connectors
- UL and CSA approved

Contact Rating
Dielectric withstand voltage
Insulation Resistance
Capacitance
Insertion loss
Temperature Range
Housing
Shell
Contacts

5A
1000Vac (1 minute)
500MΩ
820pF
4dB @ 10MHz/30dB @ 100MHz
-40°C to +105°C
Thermoplastic UL94V-0
Steel (tin plated)
Nickel plated brass, Gold on contact area

224275

No. of Ways	Mfrs. List No.	Order Code	1+	25+	50+	100+
Plugs						
9	56F102-005-3-GL	118-6306●	9.96	8.91	8.26	6.85
25	56F122-005-3-GL	118-6307●	24.06	21.53	19.99	16.57
Sockets						
9	56F104-005-3-GL	118-6308●	12.90	11.51	10.70	8.86
15	56-114-005	151-993▲	4.29	--	--	--
25	56F124-005-3-GL	118-6311●	19.63	17.57	16.31	13.52

Filtered D Sub connectors

High Density



- Specially designed for commercial applications where space is critical
- Encapsulation of filter elements is made with Epoxy for maximum resistance to hazardous environments
- Accepts standard Cinch D sub accessories
- Bright Tin and Nickel finish

Current Rating
Contact Resistance
Temperature range

5A
5 x 10⁻³ Ω Max
-25°C to +125°C

Insulation Resistance
Contacts
Working Voltage

5 x 10⁹ Ω Min
Copper Alloy Bright Tin plated
200 V

484610

No. of Ways	Order Code	1+	10+	50+	100+
Plugs 1000 pF					
15	143-9684●	21.69	20.28	19.04	17.94
26	143-9687●	27.22	25.46	23.90	22.52
44	143-9689●	38.69	36.17	33.96	31.99
62	143-9691●	46.01	43.02	40.37	38.04
Plugs 300 pF					
15	143-9693●	21.64	20.24	19.00	17.90
26	143-9695●	27.26	25.48	23.92	22.54
44	143-9697●	38.69	36.17	33.96	31.99
62	143-9700●	46.03	43.04	40.39	38.06
Sockets 1000 pF					
15	143-9685●	22.30	20.84	19.57	18.44
26	143-9688●	28.12	26.29	24.67	23.26
44	143-9690●	44.73	41.81	39.24	36.98
62	143-9692●	49.70	46.46	43.62	41.12
Sockets 300 pF					
15	143-9694●	22.28	20.82	19.54	18.41
26	143-9696●	28.12	26.29	24.67	23.26
44	143-9699●	44.73	41.81	39.24	36.98
62	143-9701●	49.70	46.46	43.62	41.12

High Density D Sub

HDP-22 Crimp Snap-in
Contact Connectors
Formed Pins

- Approximately 65% higher density than HD-20 connectors
- Low cost, high performance, precision formed contacts
- Tin plated shells with grounding indents

Contact Rating	5A	Temperature Range	-55°C to +105°C
Contact Resistance	15mΩ max	Housing	Steel, Tin plating
Dielectric withstand voltage	1kV ac min	Insulator	Black Thermoplastic UL94V-0
Mfrs. List No:	748364-1 = 182-4867	1658681-1 = 109-8429	1658684-1 = 109-8432
	1658671-1 = 109-8427	1658682-1 = 109-8430	1658670-2 = 109-8472
	1658672-1 = 109-8428	1658683-1 = 109-8431	1658670-4 = 109-8434
	1658673-1 = 109-8468		

209975

No. of Ways	Mfrs. List No.	Order Code	1+	50+	100+	500+	1K+
Plug Housing							
15	748364-1	182-4867●	2.090	1.940	1.830	1.740	1.650
26	1658671-1	109-8427●	2.060	1.900	1.820	1.720	1.650
44	1658672-1	109-8428●	4.720	4.300	4.110	3.910	3.730
62	1658673-1	109-8468●	8.050	7.340	7.020	6.710	6.420
Socket Housing							
15	1658681-1	109-8429●	1.860	1.720	1.640	1.560	1.490
26	1658682-1	109-8430●	2.130	1.990	1.890	1.790	1.700
44	1658683-1	109-8431●	4.680	4.300	4.130	3.950	3.780
62	1658684-1	109-8432●	7.320	6.750	6.450	6.170	5.900
Order Multiple=10							
		Order Code	10+	50+	100+	500+	1K+
Pin Contacts							
28-22 AWG, 0.08-0.4mm ² (Gold)		109-8472●	0.189	0.172	0.166	0.159	0.153
28-22 AWG, 0.08-0.4mm ² (Gold Flash)		109-8434●	0.161	0.146	0.141	0.138	0.133
Socket Contacts							
28-22 AWG, 0.08-0.4mm ² (Gold)		109-8424●	0.210	0.193	0.186	0.179	0.172
28-22 AWG, 0.08-0.4mm ² (Gold Flash)		109-8425●	0.181	0.165	0.156	0.148	0.141

Crimp Tool for HDP-22



9629408



Mfrs. List Nos: 90800-1 = 215-6659 91520-1 = 962-9408

209976

Crimp tool	Order Code	Price Each
Crimp tool	215-6659	145.60
	962-9408	302.81

Over 480,000 products online

RoHS ● Compliant
▲ Non-compliant

08447 11 11 11

Fax: 08447 11 11 12 1875

High Density D Sub Crimp Connectors



Plug



Socket

- Pitch - 2.29mm, Pitch Row - 1.98mm
- Crimp type
- Shell material - steel with tin plating
- Retention springs - stainless steel
- Operating temperature -55°C to 105°C
- Flammability rating - UL 94V-0

New

524620

Mfrs. List No.	No. of Ways	Order Code	1+	25+	50+
Plugs					
SPC15431	15	156-4229●	0.80	0.63	0.52
SPC15255	26	156-4231●	1.37	1.26	1.14
SPC15297	44	156-4233●	2.23	2.13	2.04
SPC15155	62	156-4235●	2.51	2.40	2.29
SPC15213	78	156-4238●	4.69	4.58	4.47
Sockets					
SPC15367	15	156-4230●	0.86	0.68	0.57
SPC15252	26	156-4232●	1.44	1.31	1.20
SPC15235	44	156-4234●	2.29	2.19	2.10
SPC15244	62	156-4236●	2.64	2.51	2.40
SPC15247	78	156-4239●	5.04	4.87	4.75
Crimp Socket					
SPC15384	20-24AWG	156-4240●	4.58	4.01	3.43
Crimp Pin					
SPC15398	20-24AWG	146-2670●	4.58	4.01	3.43

SDE Die and Tooling options available see Page 1625

HD-22, 90° PCB Metal Shell
Screwlocks and Threaded Inserts

- Ideal for robotic and high temperature application
 - Integral boardlocks
 - 4.40 threaded inserts and female screwlocks
- | | | | |
|--------------------|-----------------|-----------|-------------------------------------|
| Contact Rating | 2A | Housing | Steel, Tin plated |
| Contact Resistance | 20mΩ max | Insulator | Black Thermoplastic |
| Withstand voltage | 1kV ac min | Contacts | Phosphor Bronze, Gold on mating end |
| Temperature Range | -55°C to +125°C | | |

209974

No. of Ways	Mfrs. List No.	Order Code	1+	50+	100+	500+	1K+
4-40 Threaded Inserts							
15	1-1734530-3	105-6020●	4.97	4.55	4.33	4.15	3.95
44	5748482-5	109-8452●	11.12	10.13	9.70	9.28	8.87
62	5748394-5	109-8423●	14.58	13.42	12.84	12.27	11.74
4-40 Female Screwlocks							
15	1734530-3	105-6018●	5.50	5.03	4.80	4.59	4.38
26	5748481-6	109-8420●	7.33	6.75	6.47	6.19	5.92

High Density D Sub DIP Connectors



Plug



Socket

- Pitch - 2.29mm, Pitch Row - 1.98mm
- DIP type
- Shell material - steel with tin plating

New

Insulator Material	Contact Material	Contact Plating	Withstanding Voltage	Current Rating
PBT + 30% Fibre Glass	Brass	Gold	500VAC for 1 min.	5A

High Density D Sub - continued

High Density D Sub DIP Connectors - continued

524627

Mfrs. List No.	No. of Ways	Order Code	1+	Price Each 25+	50+
Plugs					
SPC15402	15	156-4241●	1.50	1.29	0.89
SPC15353	26	156-4242●	2.32	2.01	1.36
SPC15326	44	156-4243●	4.13	3.57	2.42
SPC15240	62	146-2669●	5.61	4.85	3.30
SPC15386	78	156-4244●	8.22	7.09	4.83
Sockets					
SPC15408	15	156-4245●	1.26	1.09	0.74
SPC15300	26	156-4246●	2.64	2.28	1.55
SPC15399	44	156-4247●	4.12	3.55	2.41
SPC15169	62	156-4248●	5.69	4.91	3.34
SPC15351	78	156-4251●	8.05	6.93	4.71

High Density D Sub R/A PCB Connectors



Socket



Plug

- Pitch - 2.29mm, Pitch Row - 1.98mm
- Orientation - Right Angle
- Shell material - steel, nickel plated over copper
- Contact resistance - 20 mOhm
- Insulation resistance - 5000 Mohm at 500Vdc
- Operating temperature - -55°C to 105°C

New

Insulator Material	Contact Material	Contact Plating	Withstanding Voltage	Current Rating
PBT +30% Fibre Glass	Copper Alloy	Gold	1000VAC for 1 min.	2A

524633

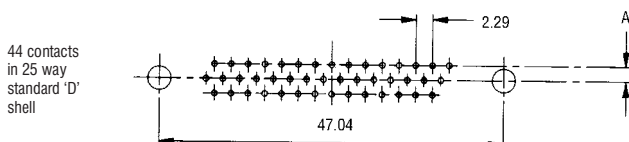
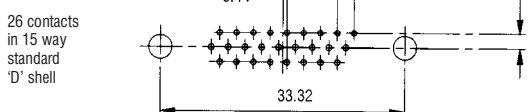
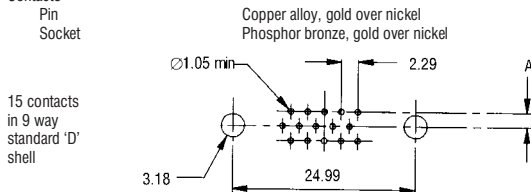
Mfrs. List No.	No. of Ways	Order Code	1+	Price Each 25+	50+
Sockets					
SPC15430	15	156-4252●	1.87	1.63	1.11
SPC15293	26	156-4253●	5.32	4.60	2.67
SPC15324	44	156-4254●	9.76	4.97	3.38
SPC15436	78	156-4255●	9.82	9.16	8.79
Plugs					
SPC15254	15	156-4256●	1.90	1.65	1.14
SPC15237	26	156-4257●	5.33	4.61	2.69
SPC15140	44	156-4258●	5.78	4.99	3.40
SPC15370	78	156-4259●	13.85	13.16	11.71
HD D Sub Crimp Tool					
CTT8424-01		156-4260	108.72		



18

The High Density 'D' connector is well suited to a wide range of applications where a larger than normal number of contacts is required in a standard 'D' subminiature shell. Available with solder bucket or crimp contacts - both male and female, straight pcb termination (male only) and right angled pcb termination (female only)

Contact Rating	3A @ 70°C
Contact Resistance	15mΩ max
Working voltage	300V dc/ac peak
Temperature Range	-55°C to +105°C
Mating cycles	50
Housing	Steel, Tin over Nickel plating
Insulator	Black polyester
Contacts	Copper alloy, gold over nickel
Pin	Phosphor bronze, gold over nickel
Socket	



Dimension A, straight pcb = 1.98, 90° pcb = 2.54

210096

Solder Bucket (Formed Pin)



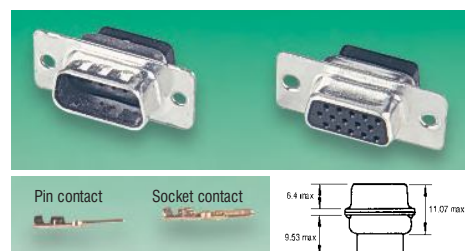
Mfrs. List Nos:	HDE15PTD = 107-1808	HDE15ST = 107-1811	HDB44ST = 107-1813
	HDA26PTD = 107-1809	HDA26ST = 107-1812	

209765

No. of Ways	Order Code	1+	25+	Price Each 50+	100+	250+
Plugs						
15	107-1808●	2.25	2.07	1.83	1.66	1.51
26	107-1809●	3.94	3.60	3.19	2.92	2.64
44	107-1810●	5.68	5.20	4.62	4.22	3.82
Sockets						
15	107-1811●	2.37	2.17	1.92	1.77	1.57
26	107-1812●	4.22	3.91	3.48	3.18	2.86
44	107-1813●	6.20	5.70	5.03	4.63	4.17

Crimp Housings

Formed Contacts and Tooling



Open crimp conductor diameters

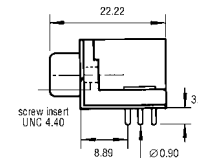
24/28 AWG, 0.08-0.22mm², 7/0.2 or 10/0.1

Mfrs. List Nos:	HDEC15PTD = 107-1807	HDAC26ST = 107-5293	MP643-16 = 107-5300
	HDAC26PTD = 107-5290	MP642-06 = 107-5297	MP643-15 = 107-5301
	HDBC44PTD = 107-5291	MP642-05 = 107-5298	MP-600-HD = 151-226
	HDEC15ST = 107-5292		

210097

No. of Ways	Order Code	1+	25+	Price Each 50+	100+	250+
Plug Housing						
15	107-1807●	1.73	1.59	1.51	1.44	1.20
26	107-5290●	1.70	1.58	1.47	1.42	1.20
44	107-5291●	4.08	3.67	3.40	3.24	2.82
Socket Housing						
15	107-5292●	1.73	1.59	1.51	1.44	1.20
26	107-5293●	1.75	1.63	1.51	1.46	1.26
Price Per Pack						
Number of Insertions						
Pin Contacts (100 Per Pack)						
50	107-5297●	9.34		8.86		
200	107-5298●	11.69		8.47		
Socket Contacts (100 Per Pack)						
50	107-5300●	10.53		9.94		
200	107-5301●	12.95		9.45		
Ratchet Crimp Tool						
151-226				133.47		

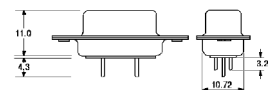
90° PCB Sockets - With Boardlocks and Screwlocks



210098

No. of Ways	Order Code	1+	25+	Price Each 50+	100+	250+
15	107-5303●	4.17	3.91	3.75	3.67	3.49
26	107-5304●	6.11	5.67	5.32	5.17	4.73
44	107-5306●	11.04	9.96	9.19	8.78	7.67

Straight PCB Plugs (Turned Pin)



Mfrs. List Nos: HDA26POLTD = 107-5295

210099

No. of Ways	Order Code	1+	25+	50+	100+	250+
26	107-5295●	6.14	5.54	5.09	4.88	4.23

Plastic 'D'

Plastic 90° PCB

ELCO



Contact Rating	1A
Contact Resistance	5mΩ max
Working voltage	350V dc/ac peak
Temperature Range	-55°C to +105°C
Mating cycles	50
Housing	Glass Filled Thermoplastic Polyester,
Contacts	Phosphor Bronze, Gold over Nickel

209972

No. of Ways	Mfrs. List No.	Order Code	1+	25+	50+	100+	250+
Plugs							
9	108343009012001	637-531●	7.84	7.22	7.08	5.92	5.42
25	108343025012001	637-555●	12.46	11.38	11.16	9.34	8.50
Sockets							
9	208343009012001	637-579●	7.30	6.68	6.52	5.46	4.88
25	208343025012001	637-592●	11.02	10.14	9.88	8.26	7.48

Micro Miniature 'D' Connectors

Commercial Micro-D
1.27mm Pitch

molex



- Suitable for commercial applications
- Metal interface and grounding tabs improve mechanical and electrical shielding properties

Current Rating	1A	Material, Insulator	PPS Polyphenylene Sulfide
Approval Bodies	CSA, UL Recognised	Material, Contact	Beryllium Copper, Gold Plated
Insulation Resistance	5000Mohm	Temperature Range	-55°C to +125°C
Housing	Nickel Plated	Voltage, Working	350V

449945

No of Ways	Mfrs. List No.	Order Code	1+	Price Each 10+	25+
Plug - PCB Mount - Vertical					
9	83611-9023	126-3554●	4.39	4.08	3.73
15	83612-9024	126-3555●	4.69	4.38	4.01
25	83614-9016	126-3556●	6.05	5.65	5.16
Plug - PCB Mount - Right Angle					
9	0836119006	126-3551●	4.69	4.38	4.01
15	0836129020	126-3552●	5.52	5.15	4.70
25	0836149012	126-3553●	6.66	6.19	5.67
Plug - PCB Mount - Right Angle - Dual Stack					
9 x 2	83619-9003	126-3557●	15.64	14.55	13.31
Cable Assembly					
9	83421-9044	126-3562●	15.13	14.07	12.88
15	83422-9018	126-3563●	17.21	16.00	14.64
25	83424-9021	126-3564●	22.43	20.87	19.09

Microdot
PCB Connectors

Tyco Electronics



Lead Assemblies



- Designed for both military and commercial applications
- Current Rating - 3 amps per contact
- Leads, 18" Long (457mm)

Housing Mat	Metal Aluminium Alloy	Plastic Polyphenylene Sulfide MIL-M-24519
Housing Plating	Nickel	
Insulator Material	Ryton R4	Polyester GF MIL-M-24519
Pitch	1.27mm	
Contact Material	Copper Alloy	
Contact Plating	Gold over Copper MIL-G-45204 Type 2	
Contact Resistance	25mV at 3A 25°C	
Current Rating	3A	
Mating Cycles	≥500	
Temperature Range	-55°C to 125°C	
Insulation Resistance	≥5000MΩ	
Withstand Voltage	600V RMS	
Wire Range	30 AWG to 24 AWG	

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each 10+	50+
Metal Shell - Plug					
9	MCKN1-B-9P6A1-18.0	388-0047●	55.43	47.83	46.75
15	MCKN1-B-15P6A1-18.0	388-0059●	82.05	70.81	68.68
25	MCKN1-B-25P6A1-18.0	388-0060●	140.59	121.31	117.81
Metal Shell - Socket					
9	MCKN1-B-9S6A1-18.0	388-0096●	67.09	57.89	55.43
15	MCKN1-B-15S6A1-18.0	388-0102●	96.97	83.68	71.01
25	MCKN1-B-25S6A1-18.0	388-0114●	147.05	126.88	107.67
Plastic Shell - Plug					
9	MCDR3-B-9P6A1-18.0	388-0140●	36.31	33.01	30.01
Plastic Shell - Socket					
9	MCDR3-B-9S6A1-18.0	388-0187●	44.16	40.10	36.50
15	MCDR3-B-15S6A1-18.0	388-0199●	51.35	46.69	42.43
Hardware					
Jackpost Assembly (Jackpost, nut and washer)					
	1466016-1	388-0023●	5.72	5.18	4.72
Jackscrew Assembly (Jackscrew and circlip)					
	1466008-1	388-0035●	7.15	6.51	5.23

PCB Connectors

232223

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each 10+	50+
Metal Shell - RA PCB Plug					
9	MCKN1-P-9PRT1	388-0229●	105.38	90.92	87.10
15	MCKN1-P-15PRT1	388-0230●	125.57	108.33	103.76
25	MCKN1-P-25PRT1	388-0242●	170.13	146.81	140.63
Metal Shell - RA PCB Socket					
9	MCKN1-P-9SRT1	388-0278●	111.37	96.09	92.05

Metal and Plastic Shell

CINCH

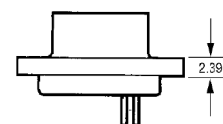
- A high quality, high density range of environmental connectors
- Lightweight, durable shell
- Twisted pin contact
- Ideal for industrial application where size and mateability are important
- Metal and plastic body version, complete with dust cover

Contact Rating	3A	Housing (metal body)	Aluminium alloy
Working voltage	200V dc/ac peak	(plastic body)	Electroless Nickel
Proof voltage	600V dc/ac peak		Thermoplastic polyester
Contact Resistance	≤8mΩ max		G.F
Insulation Resistance	5000MΩ	Insulator	Diallyl phthalate G.R
Temperature Range	-55°C to +125°C	Contact material	Copper Alloy, 50μ Gold plated
Mating cycles	500		

227503

Metal Shell - Flying Leads

CINCH



- 450mm colour coded PTFE flying leads

209836

No. of Ways	Mfrs. List No.	Order Code	1+	10+	Price Each 25+	100+	250+
Plug							
9	DCCM-9P6E518.0B-LF	111-4163●	22.92	20.44	19.76	18.24	17.78
15	DCCM-15P6E518.0B-LF	111-4164●	32.00	28.54	27.61	25.47	23.66
37	DCCM-37P6E518.0B-LF	111-4167●	69.10	62.20	60.20	55.50	51.59
51	DCCM-51P6E518.0B-LF	111-4168●	84.80	76.37	73.88	68.13	63.48
Socket							
9	DCCM-9S6E518.0B-LF	111-4169●	28.33	25.27	24.44	22.53	20.95
15	DCCM-15S6E518.0B-LF	111-4170●	35.15	31.34	30.34	27.98	26.06
25	DCCM-25S6E518.0B-LF	111-4171●	52.49	47.24	45.73	42.17	39.20
37	DCCM-37S6E518.0B-LF	111-4172●	70.58	63.54	61.49	56.72	52.80
51	DCCM-51S6E518.0B-LF	111-4173●	79.66	71.75	69.41	64.04	59.62

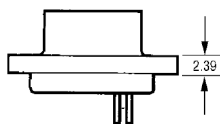
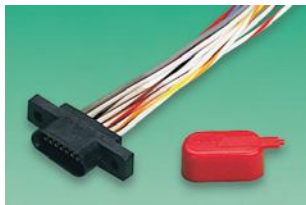


Micro Miniature 'D' Connectors - continued

Metal Shell - Flying Leads - continued

No. of 2 Per Pack			1+	10+	Price Per Pack 25+	100+	250+
Jack posts							
M83513/5.07-LF	111-4186●	4.69	4.19	3.85	3.60	3.42	
Jack screws							
M83513/5.05-LF	111-4187●	6.15	5.58	5.23	4.82	4.59	

Plastic Shell - Flying Leads



● 450mm Colour coded PTFE flying leads



219842

No. of Ways Mfrs. List No.	Order Code	1+	10+	Price Each 25+	100+	250+
Plug						
9 DCDA-9P6E518.0B-LF	111-4174●	19.26	17.18	16.85	16.32	12.85
15 DCDA-15P6E518.0B-LF	111-4175●	26.22	23.43	22.96	22.20	17.56
25 DCDA-25P6E518.0B-LF	111-4178●	40.62	36.59	35.87	34.71	27.43
37 DCDA-37P6E518.0B-LF	111-4179●	45.70	41.14	40.31	39.02	36.37
Socket						
9 DCDA-9S6E518.0B-LF	111-4181●	21.09	18.78	18.28	17.37	13.70
15 DCDA-15S6E518.0B-LF	111-4182●	25.88	23.09	22.62	21.91	20.73
25 DCDA-25S6E518.0B-LF	111-4183●	37.42	33.68	33.01	31.97	31.18
37 DCDA-37S6E518.0B-LF	111-4184●	49.21	44.27	43.39	42.02	40.74

Metal and Plastic Shell

Solder Bucket Contacts



- Rugged reliable contacts
- High working voltage
- Solder bucket contacts

Current Rating	3A	Contact Material	Copper Alloy
Withstand voltage	600V ac @ sea level	Metal Shell Material	Aluminium Alloy
Contact Resistance	8mohm	Plastic Shell Material	Glass Reinforced Thermoplastic
Operating Temperature	-55 to +135°C		

450835

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each 10+	25+	50+
Metal Plugs						
9 DCDM-9PSBN-LF	128-2138●	20.66	19.30	18.44	17.43	
15 DCDM-15PSBN-LF	128-2139●	28.71	26.77	25.59	24.18	
25 DCDM-25PSBN-LF	128-2140●	37.34	34.84	33.38	31.51	
37 DCDM-37PSBN-LF	128-2142●	52.36	48.71	46.58	43.92	
51 DCDM-51PSBN-LF	128-2143●	60.29	56.00	53.61	50.59	
Metal Sockets						
9 DCDM-9SSBN-LF	128-2144●	25.77	23.94	22.95	21.70	
15 DCDM-15SSBN-LF	128-2145●	30.58	28.42	27.24	25.70	
25 DCDM-25SSBN-LF	128-2146●	37.56	34.90	33.47	31.51	
37 DCDM-37SSBN-LF	128-2147●	48.87	45.48	43.49	41.10	
51 DCDM-51SSBN-LF	128-2148●	60.10	55.93	53.56	52.98	
Plastic Plugs						
9 DCDA-9PSBN-LF	128-2149●	18.43	17.28	16.59	15.96	
15 DCDA-15PSBN-LF	128-2151●	22.83	21.41	20.55	19.76	
25 DCDA-25PSBN-LF	128-2152●	23.67	22.19	21.30	20.49	
37 DCDA-37PSBN-LF	128-2154●	33.35	31.28	30.02	28.87	
Plastic Sockets						
9 DCDA-9SSBN-LF	128-2156●	16.33	15.31	14.69	14.12	
15 DCDA-15SSBN-LF	128-2157●	20.13	18.88	18.11	17.43	
25 DCDA-25SSBN-LF	128-2158●	23.58	22.10	21.21	20.40	
37 DCDA-37SSBN-LF	128-2159●	26.40	24.75	23.76	22.85	

Backshell

EMC Screened



- EMC screened backshells
- 18" pre-terminated braid attachment on back-shell
- Supplied with hex head jackscrews & retaining clips

Back Shells with 450mm (18") Pre-terminated Braid

Mfrs. List No.	
MMBST0908N18	= 128-2161
MMBST1508N18	= 128-2163
MMBST2508N18	= 128-2164
MMBST3708N18	= 128-2166
MMBST5112N18	= 128-2167

450981

No. of Ways	Braid Entry Size, Max	Order Code	1+	Price Each 10+	25+	50+
9	6.4mm	128-2161●	48.61	45.40	42.79	41.72
15	6.4mm	128-2163●	52.16	49.19	45.76	43.27
25	6.4mm	128-2164●	56.90	52.39	48.63	46.23
37	7.1mm	128-2166●	59.28	55.12	52.27	50.03
51	7.9mm	128-2167●	65.19	60.43	56.66	54.05

Standard 'D' Shells

Economy D Hoods

Plastic, Snap or screw together D-Hoods



A range of economy top entry snap together and screw together plastic D-Hoods

- Black or grey plastic
- Long or short screws available

Snap together	Width	Length	Screw together		
9 Way	30.5	39.2	9 Way	31.4	40.2
15 Way	40.1	39.6	15 Way	39.6	35.8
25 Way	53.6	42.1	25 Way	55.0	42.0

238494

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each 10+	50+	100+
Snap Together - Black						
9 MHCCOV-9SN-BK	393-7926●	0.500	0.440	0.370	0.330	
15 MHCCOV-15SN-BK	393-7938●	0.580	0.490	0.410	0.350	
25 MHCCOV-25SN-BK	393-7940●	0.670	0.540	0.440	0.370	
Snap Together - Grey						
9 MHCCOV-9SN-LG	393-7951●	0.500	0.440	0.370	0.330	
15 MHCCOV-15SN-LG	393-7963●	0.300	0.250	0.200	0.173	
25 MHCCOV-25SN-LG	393-7975●	0.340	0.280	0.210	0.185	
Screw Together - Black - Short Screw						
9 MHCCOV-9SC-BK	393-7987●	0.500	0.440	0.370	0.330	
15 MHCCOV-15SC-BK	393-7999●	0.580	0.490	0.410	0.350	
25 MHCCOV-25SC-BK	393-8001●	0.670	0.540	0.440	0.370	
Screw Together - Grey - Short Screw						
9 MHCCOV-9SC-LG	393-8013●	0.500	0.440	0.370	0.330	
15 MHCCOV-15SC-LG	393-8025●	0.300	0.250	0.200	0.173	
25 MHCCOV-25SC-LG	393-8037●	0.670	0.540	0.440	0.370	
Screw Together - Black - Long Screw						
9 MHCCOV-9SCL-BK	393-8049●	0.600	0.530	0.480	0.450	
15 MHCCOV-15SCL-BK	393-8050●	0.680	0.580	0.510	0.470	
25 MHCCOV-25SCL-BK	393-8062●	0.790	0.660	0.540	0.490	
Screw Together - Grey - Long Screw						
9 MHCCOV-9SCL-LG	393-8074●	0.600	0.530	0.480	0.450	
15 MHCCOV-15SCL-LG	393-8086●	0.680	0.580	0.510	0.470	
25 MHCCOV-25SCL-LG	393-8098●	0.430	0.370	0.300	0.280	

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Colour Coded



- 8 different colours
- One piece hinged nylon, **UL94V-2**
- Quick snap locking assembly
- Captive steel jack screws (48mm)
- Nickel plated for coloured shells
- Black for black shells
- Reversible cable clamp with self tapping screws
- Lip height = 3.5

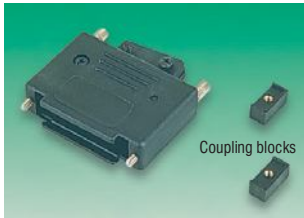
No. of Ways	H	W	D	Cable Entry Max. Dia
9	34	33	15	11.5
15	34	41	15	11.5
25	40	54.5	15	12
37	40	71	17	14

Mfrs. List No: DPPKxxxy, where xx = No. of ways and y = colour

209788

Colour	Order Code	1+	25+	100+	250+	500+	1K+
9 way							
Black	469-889●	1.13	1.08	0.95	0.93	0.88	0.84
Red	469-890●	1.13	1.08	0.95	0.93	0.88	0.84
Blue	469-907●	1.13	1.08	0.95	0.93	0.88	0.84
Yellow	469-919●	1.13	1.08	0.95	0.93	0.88	0.84
Green	469-920●	1.23	1.17	1.13	1.05	0.92	0.71
Light Grey	469-944●	1.13	1.08	0.95	0.93	0.88	0.84
Computer Grey (ivory)	469-956●	1.13	1.08	0.95	0.93	0.88	0.84
15 way							
Black	469-968●	1.14	1.10	1.08	1.06	0.96	0.79
Red	469-970●	1.14	1.10	1.08	1.06	0.96	0.79
Blue	469-981●	1.14	1.10	1.08	1.06	0.96	0.79
Yellow	469-993●	1.14	1.10	1.08	1.06	0.96	0.79
Green	470-004●	0.62	0.59	0.58	0.54	0.48	0.40
Light Grey	470-028●	1.14	1.09	1.01	0.97	0.91	0.86
Computer grey	470-030●	0.58	0.55	0.51	0.50	0.46	0.43
25 way							
Black	470-041●	1.14	1.09	1.02	0.99	0.92	0.87
Red	470-053●	1.14	1.09	1.02	0.99	0.92	0.87
Blue	470-065●	1.14	1.09	1.02	0.99	0.92	0.87
Yellow	470-077●	1.14	1.09	1.02	0.99	0.92	0.87
Green	470-089●	1.24	1.17	1.15	1.07	0.96	0.79
Light Grey	470-107●	1.14	1.09	1.02	0.99	0.92	0.87
Computer Grey (ivory)	470-119●	1.14	1.09	1.02	0.99	0.92	0.87
37 way							
Black	470-120●	1.30	1.20	1.13	1.11	1.04	0.96

Plastic



A low cost screw together 'D' shell with captive metal jackscrews and external strain relief available in 9, 15, 25 and 37 ways. The body design provides valuable extra space for wiring. Line to line applications are catered for with coupling blocks which enable two in-line shells to be screwed together.

H = 49, W = 33 (9 way), 42 (15 way), 55 (25 way), 71 (37 way), D = 16

Housing Black Thermoplastic,

MDJ9 = 107-5162
MDJ15 = 107-5163

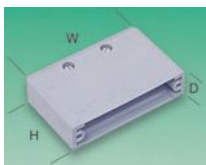
MDJ25 = 107-5164
MDJ37 = 107-5165

MCB = 107-5166

210060

No. of Ways	Order Code	1+	25+	100+	250+	500+	1K+
Screw Together Cover							
9	107-5162●	1.51	1.34	1.23	1.17	1.05	0.93
15	107-5163●	1.53	1.38	1.27	1.20	1.09	0.95
25	107-5164●	1.58	1.40	1.29	1.22	1.10	0.97
37	107-5165●	1.27	1.13	1.02	0.97	0.89	0.78
2 Per Pack							
Coupling blocks	107-5166●	0.69	0.65	0.56	0.54	0.50	0.44

Low Profile Plastic



No. of Ways	H	W	D
9	23	31	12.8
15	28	39.4	12.8
25	34	53.3	12.8
37	37	69.7	12.8



- The hoods provide a very compact package where space is at a premium

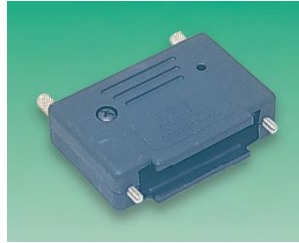
Housing Grey Thermoplastic

Mfrs. List No: 09670xxD411 where xx = No. of ways

210071

No. of Ways	Order Code	1+	10+	50+	100+	250+
25	110-6719●	2.44	2.10	1.78	1.49	1.35
37	110-6720●	2.71	2.29	2.00	1.60	1.50

Plastic



- A screw together 'D' shell with slotted and knurled steel jack screws
- Adjustable strain relief.

Housing Black Thermoplastic,

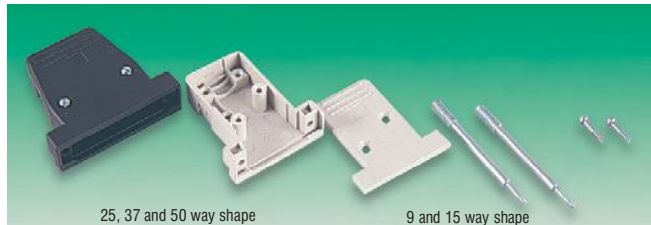


No. of Ways	H	W	D	Mfrs. List No.	Order Code
9	36	33	16	DE77762-9	121-5629
15	36	42	16	DA77762-15	121-5630
25	36	55	16	DB77762-25	121-5631
37	36	71	16	DC77762-37	121-5633

210077

No. of Ways	Order Code	1+	10+	50+	100+	250+	500+
9	121-5629●	2.04	1.62	1.42	1.22	1.10	0.97
15	121-5630●	1.88	1.68	1.48	1.33	1.21	1.05
25	121-5631●	2.44	1.97	1.68	1.45	1.32	1.16
37	121-5633●	2.63	2.12	1.80	1.58	1.39	1.25

Top or Side Entry



- Top or side knockout cable entry
- Two long finger jack screws (59mm)
- Two short jack screws (13mm)
- 4/40 UNC jack screw thread
- Side cable entry only suitable with short jack screws
- Flame retardant **UL94V-0** ABS
- Nickel plated steel screws and clamp
- Two countersunk fixing screws
- Wide cable clamp range
- Lip height = 1.0

No. of Ways	H	W	D	Cable Entry Max.
9	41	35	17	6 x 5.5
15	48	43	17	9 x 5
25	48	57	17	9 x 6
37	54	74	17	13 x 6
50	54	70	20	13 x 9

209786

No. of ways	Order Code	1+	20+	100+	200+	1K+
5 per pack						
Light Grey						
9	955-4343●	9.01	8.26	7.05	6.10	5.06
15	955-4351●	7.30	6.68	5.69	4.85	4.11
25	955-4360●	3.61	3.30	2.81	2.39	2.03
Black						
9	955-4378●	8.38	7.22	6.56	5.97	5.76
15	955-4386●	6.82	5.81	5.24	4.86	4.66
25	955-4394●	9.17	7.79	7.04	6.56	6.30
37	955-4408●	9.94	8.54	7.62	7.13	6.87
50	955-4416●	10.88	9.39	8.37	7.98	7.69

Plastic or Metallised Plastic



Snap together - Top or side entry D hoods



A range of plastic and metallised plastic D connector hoods

- Metallised Plastic provides excellent EMI shielding
- Suitable for all popular D-sub connectors
- Highly durable
- Quick snap together action - no screws needed
- Top and side entry options in one hood

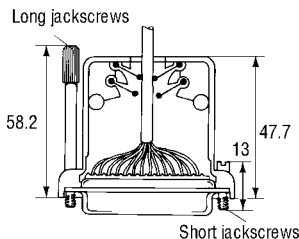
No. of ways	Width	Height	Depth
9	31.5	40.0	15.0
15	40.0	40.0	15.0
25	53.5	40.0	15.0
37	71.3	40.0	15.0

238493

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
Plastic - Black						
9	MHDSSK-P-9-L-K	393-7847●	0.87	0.75	0.63	0.58
15	MHDSSK-P-15-L-K	393-7859●	0.76	0.67	0.58	0.54
25	MHDSSK-P-25-L-K	393-7860●	1.06	0.92	0.81	0.75
37	MHDSSK-P-37-L-K	393-7872●	1.14	1.03	0.89	0.83
Plastic - Metallised						
9	MHDSSK-M-9-L-K	393-7884●	1.55	1.43	1.32	1.22
15	MHDSSK-M-15-L-K	393-7896●	1.73	1.59	1.50	1.41
25	MHDSSK-M-25-L-K	393-7902●	1.86	1.69	1.60	1.51
37	MHDSSK-M-37-L-K	393-7914●	1.99	1.86	1.74	1.62



Standard 'D' Shells - continued

Quick Fit Cleat Clamp
Short or Long Jackscrews

H = 47.7, W = 34.8 (9 way), 42.5 (15 way), 56.3 (25 way), D = 16.87

- A screw together cover with a unique cleat action cable grip
- Available with short or long jackscrews, which are captive in the shell.

Housing Black Thermoplastic,

Mfrs. List Nos: MDL9L = 107-5182 MDL25L = 107-5185 MDL15S = 107-5187
MDL15L = 107-5183 MDL9S = 107-5186 MDL25S = 107-5188

210078

No. of Ways	Order Code	1+	25+	100+	250+	500+	1K+
'D' Shell with Long Jackscrews							
MDL9L 9	107-5182●	1.55	1.39	1.29	1.22	1.07	0.96
MDL15L 15	107-5183●	1.62	1.43	1.31	1.26	1.14	0.99
MDL25L 25	107-5185●	1.81	1.58	1.45	1.39	1.26	1.13
'D' Shell with Short Jackscrews							
MDL9S 9	107-5186●	1.16	1.04	0.94	0.91	0.83	0.73
MDL15S 15	107-5187●	1.22	1.11	0.99	0.95	0.87	0.79
MDL25S 25	107-5188●	1.40	1.19	1.11	1.08	0.97	0.85

MHTRI Series - Plastic
3 Way Entry

- All sizes feature 3-way entry solution
- UNC4-40 thumbscrews
- Hood supplied with 2 blanking plates and 2 strain relief plates
- Side / Top / Side cable entry

No. of Ways	H	W	D
9	45.2	31	15
15	45.2	40.3	15
25	45.2	53.5	15
37	45.2	70	15

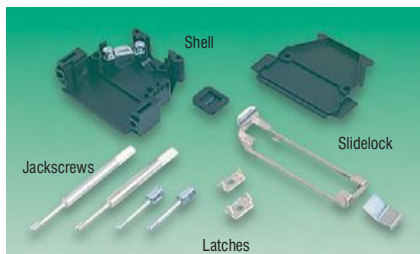
Mfr: MHTRI-P xx, xx = No. of Ways

431724

No. of Ways	Order Code	1+	25+	100+	250+	500+
9	112-2279●	1.86	1.56	1.52	1.43	1.09
15	112-2280●	1.91	1.62	1.57	1.52	1.14
25	112-2281●	2.12	1.94	1.90	1.84	1.48
37	112-2282●	2.66	2.40	2.12	2.04	1.68

Universal Shell

Available with Screw or Slidlock



H = 45.2, W = 31 (9 way), 40 (15 way), 53.5 (25 way), 70 (37 way), D = 15

A screw together 'D' shell with internal strain relief, top cable entry on the 9 way and top or side cable entry on the 15, 25 and 37 way options. It caters for all types of locking requirements and it can be fitted with a slidlock assembly or jackscrews (either short or long). Latches are available for the connector mating to the slidlock version.

Mfrs. List No: MDM9 = 107-5168 MDM37 = 107-5171 M15SL = 107-5178 MJS = 107-5180
MDM15 = 107-5169 M9SL = 107-5177 M25SL = 150-799 MJL = 107-5181
MDM25 = 107-5170 M15SL = 150-798 ML110 = 107-5167

Housing Black Glass Filled Polycarbonate,

227391

No. of Ways	Order Code	1+	25+	100+	250+	500+	1K+
D Shell 9	107-5168●	1.92	1.71	1.67	1.64	1.52	1.11

No. of Ways	Order Code	1+	25+	100+	250+	500+	1K+
D Shell							
15	107-5169●	2.01	1.79	1.72	1.69	1.59	1.16
25	107-5170●	2.31	2.11	2.07	2.02	1.86	1.27
37	107-5171●	2.29	2.02	1.86	1.78	1.60	1.46
Slidlocks (includes locking spring)							
9	107-5177●	0.73	0.69	0.63	0.60	0.55	0.51
15	150-798	0.47	0.42	0.40	0.38	0.36	0.33
15	107-5178●	0.82	0.72	0.68	0.65	0.61	0.55
25	150-799	0.47	0.43	0.39	0.37	0.35	0.34
Latches (5 Pairs Per Pack)							
	107-5167●	1.22	1.12	0.97	0.85		
Jack Screws (2 Per Pack)							
Short, 26.7mm	107-5180●	0.66	0.60	0.55	0.52	0.48	0.45
Long, 60mm	107-5181●	0.83	0.75	0.73	0.72	0.69	0.56

Straight and 45° Cable Entry



- Low profile 45° design
- Turned, full metal 4-40 thumb screws
- Plastics strain relief inserts for cable sizes 3.5mm to 13mm
- Flame retardant black ABS UL94V-0

Mfrs. List No: MHD45PPKx-K = 45° Hood MHDTPPKx-K = Top Entry Hood, Where x = No. of ways

210007

No. of Ways	Top Entry Order Code	45° Entry Order Code	1+	10+	50+	100+	250+
9	358-228●	358-083●	1.12	1.07	0.95	0.93	0.87
15	358-332●	358-101●	1.12	1.07	0.95	0.93	0.87
25	358-381●	358-125●	1.12	1.07	0.95	0.93	0.87
37	358-393●	358-198●	1.29	1.18	1.12	1.10	1.03

Plastic

Box and Lid Straight / 45° exit



- Unshielded cable clamps for HDP20 crimp snap in connectors

Housing Black Thermoplastic
Gates Black Thermoplastic
Screws Black zinc plated steel

210032

No. of Ways	Mfrs. List No.	Order Code	1+	100+	250+	500+
9	207467-1	134-5576●	2.13	1.97	1.89	1.80
15	207470-1	134-5588●	2.60	2.42	2.32	2.21
25	207345-1	105-5992●	2.13	1.97	1.89	1.81
37	207473-1	134-5606●	2.24	2.16	2.11	1.99

Plastic

Clam Shell Straight / 45° exit
Unshielded Cable Clamps

- Unshielded cable clamps for HDP20 crimp snap in connectors
- Includes hardware

Housing Black Thermoplastic

210028

No. of Ways	Mfrs. List No.	Order Code	1+	100+	250+	500+
9	5205729-1	109-8368●	1.09	1.05	1.02	0.96
15	5205730-1	109-8369●	2.50	2.45	2.37	2.26
25	5205718-1	109-8362●	1.31	1.27	1.22	1.15

Metal - Deep Cover



- Top entry metal junction shells
- Deep housing with cable clamp

Mfrs. List No: DE24657 = 118-6661 DB24659 = 118-6662



209672

No. of Ways	Order Code	1+	10+	50+	100+	250+	500+
9	118-6661●	6.14	5.25	4.80	4.02	3.72	3.30
25	118-6662●	5.81	5.19	4.69	4.28	3.94	3.64

EMI/RFI Shielded 'D' Shells

Black Plastic 3
Plastic Shield Hoods

- For HDP20 and HDE20 metal shell connectors

Housing Black Thermoplastic
4-40 Screws Steel, zinc plated
Jackscrews Steel, zinc plated clear chromate

No. of Ways	Mfrs. List No.	Order Code	1+	100+	250+	500+
9	5748678-1	109-8407●	3.01	2.88	2.80	2.66
15	5748678-2	109-8409●	4.60	4.42	4.28	4.11
25	5748678-3	109-8411●	3.82	3.52	3.04	2.82
37	5748678-4	109-8412●	2.88	2.74	2.67	2.54

210026

Metallised Plastic
Snap together Top entry

A range of Top entry snap together metallised plastic hoods

- Metallised for excellent EMI shielding
- Suitable for all popular D-sub connectors
- Snap together action, No screws
- Manufactured in self extinguishing material
- Highly durable

Order Code	No of ways	Width mm	Height mm	Depth mm
3937800	9	32.5	38.0	15.0
3937811	15	41.0	38.0	15.0
3937823	25	54.5	40.0	15.0
3937835	37	71.0	40.0	15.0

238492

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
9	MHDPPK-M-9-K	393-7800●	1.35	1.20	1.04	0.95
15	MHDPPK-M-15-K	393-7811●	1.55	1.41	1.27	1.17
25	MHDPPK-M-25-K	393-7823●	1.64	1.54	1.34	1.24
37	MHDPPK-M-37-K	393-7835●	1.81	1.64	1.60	1.51

Metallised Plastic



9 and 15 Way

25 and 37 Way

- Nickel plated ABS shell
- Enhanced shielding of cables from RFI/EMI
- Knockout for top or side cable entry
- Supplied with two 59mm and two 13mm jackscrews

No. of Ways	H	W	D	Max. Cable Entry	No. of Ways	H	W	D	Max. Cable Entry
9	41	35	17	6 x 5.5	25	48	57	17	9 x 6
15	48	43	17	9 x 5	37	54	74	17	13 x 6

209826

No. of Ways	Order Code	1+	25+	50+	100+	250+
9	955-4424●	2.01	1.84	1.71	1.60	1.43
15	955-4432●	2.30	2.08	1.97	1.85	1.73
25	955-4440●	1.87	1.70	1.58	1.49	1.41
37	955-4459●	2.42	2.22	2.04	1.93	1.81

MHTRI Series - Metalised Plastic



3 Way Entry - Shielded



- All sizes feature 3-way entry solution
- UNC4-40 thumbscrews
- Hood supplied with 2 blanking plates and 2 strain relief plates
- Side / Top / Side cable entry

No. of Ways	H	W	D
9	45.2	31	15
15	45.2	40.3	15
25	45.2	53.5	15
37	45.2	70	15

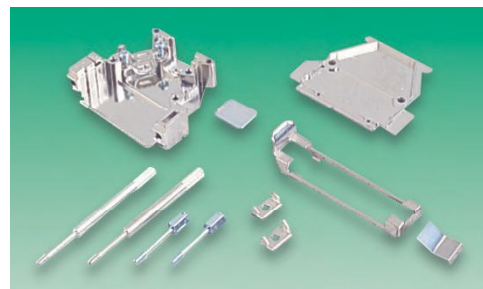
Mfr: MHTRI-M xx, xx = No. of Ways

431727

No. of Ways	Order Code	1+	25+	100+	250+	500+
9	112-2283●	2.25	2.07	1.98	1.91	1.73
15	112-2284●	2.45	2.24	2.12	1.96	1.86
25	112-2285●	2.66	2.42	2.29	2.18	2.01
37	112-2286●	2.88	2.63	2.50	2.40	2.35

Multicable Entry Metallised

Available with Screw or Slidlock



H = 45.2, W = 31 (9 way), 40 (15 way), 53.5 (25 way), 70 (37 way), D = 15

- A screw together 'D' shell with internal strain relief
- Top entry on the 9 way and top and side cable entry on the 15, 25 and 37 way options
- Caters for all types of locking requirements
- Can be fitted with a slidlock assembly or jackscrews (either short or long)
- Latches are available for the connector mating to the slidlock version

Mfrs. List No:	MDM9M = 107-5173	MDM37M = 107-5176	ML110 = 107-5167
	MDM15M = 107-5174	M9SL = 107-5177	MJS = 107-5180
	MDM25M = 107-5175	M15SL = 107-5178	MJL = 107-5181

227392

No. of Ways	Order Code	1+	25+	Price Each			
				100+	250+	500+	1K+
Metallised 'D' Shells							
9	107-5173●	2.54	2.25	2.05	1.98	1.78	1.62
15	107-5174●	2.92	2.58	2.38	2.26	2.04	1.87
25	107-5175●	3.35	2.99	2.72	2.60	2.37	2.16
37	107-5176●	5.05	4.44	4.07	3.94	3.54	3.24
Slidlocks (includes locking spring)							
9	107-5177●	0.73	0.69	0.63	0.60	0.55	0.51
15	107-5178●	0.82	0.72	0.68	0.65	0.61	0.55
			Price Per Pack				
			1+	10+	25+	50+	
Latches (5 Pairs Per Pack)							
	107-5167●	1.22	1.12	0.97	0.85		
Jack Screws (2 Per Pack)							
		1+	25+	100+	250+	500+	1K+
Short, 26.7mm	107-5180●	0.66	0.60	0.55	0.52	0.48	0.45
Long, 60mm	107-5181●	0.83	0.75	0.73	0.72	0.69	0.56

Black and Metallised Plastic



Pushing Performance



Top entry hoods with 4.40 UNC locking screws

9 way 2.5-7mmØ
15-50 way 4.5-11mmØ

239230

Mfrs. List No.	No. of Ways	Order Code	1+	10+	50+	100+	500+
Black							
0967 009 0442	9	109-6964●	2.41	2.07	1.97	1.73	1.56
0967 015 0442	15	109-6966●	2.84	2.50	2.33	2.08	1.91
0967 025 0442	25	109-6967●	2.97	2.76	2.43	2.23	1.98
0967 037 0442	37	109-6968●	3.50	3.09	2.89	2.64	2.32



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EMI/RFI Shielded 'D' Shells - continued

Black and Metallised Plastic - continued

Mfrs. List No.	No. of Ways	Order Code	1+	10+	50+	100+	500+
Metallised							
0967 009 0443	9	109-6969●	4.79	4.17	3.92	3.45	3.17
0967 015 0443	15	109-6970●	4.79	4.26	3.93	3.54	3.13
0967 025 0443	25	109-6971●	4.84	4.24	3.91	3.48	3.25
0967 037 0443	37	110-6830●	6.18	5.58	5.20	4.64	4.16
0967 050 0443	50	109-6972●	7.26	5.76	5.34	4.78	4.33

Metallised Plastic



The shell consists of two halves which easily snap together. The metallised finish gives protection from EMI/RFI interference.

Housing	ABS Polymer	Coating	Nickel over copper
Mfrs. List No:		Top Entry	50° Entry
	9 way	DE-121073-	154
	15 way	DA-121073-	150
	25 way	DB-121073-	151
	37 way	DC-121073-	152
	50 way	DD0121073-	53

210102

No. of Ways	Order Code	1+	10+	50+	100+	250+	500+
Top Entry							
9	118-8164●	7.310	5.800	4.690	3.980	3.630	3.200
15	118-8166●	7.610	6.660	5.390	4.110	3.760	3.210
25	118-8167●	7.850	6.840	5.560	4.220	3.880	3.320
37	118-8168●	8.570	7.430	6.070	4.590	4.220	3.610
50° Entry							
9	118-8169●	7.920	6.920	5.620	4.280	3.910	3.380
15	118-8170●	7.920	6.920	5.590	4.250	3.900	3.370
25	118-8171●	7.850	6.840	5.560	4.220	3.880	3.320
37	118-8172●	8.700	7.600	6.190	4.680	4.290	3.680
50	118-8312●	8.840	7.970	6.420	5.610	5.150	4.510
Male Screwlock							
Recessed slotted	118-8177●	0.270	0.240	0.192	0.148	0.136	0.122
Finger jackscrew	118-8176●	1.360	1.200	0.950	0.730	0.670	0.590

18

Metallised Plastic
Straight and 45° Cable Entry

- ABS with nickel over copper plating
- EMC/RFI shielding braid/foil folded back over suitable size strain relief bush
- Range of 5 strain relief bushes per hood
- Accepts foil, lap or braided cable
- No tooling required for shield termination

Shell Dimensions	H	H	W	D	Cable Entry
	Straight	45°	Both	Both	via 5 Bushes
9 way	35.5	37.2	31.1	16.3	5 - 7.5
15 way	38.8	40.6	39.1	16.3	5 - 8
25 way	42	44.1	53.1	18	5 - 8
37 way	46.5	47.5	69.3	23	8 - 15

209845

No. of Ways	Straight Entry Order Code	45° Entry Order Code	1+	10+	50+	100+	250+
9	746-058●	746-060	2.25	2.16	2.03	1.86	1.63
15	746-071●	746-083	2.38	2.28	2.15	1.94	1.73
25	746-095●	746-101	2.62	2.50	2.39	2.14	1.92
37	746-113●	746-125	3.63	3.48	3.28	2.96	2.65

Metallised Plastic
Metal Plated Plastic Shield Hoods

- For HDP20 and HDE20 metal shell connectors

Housing	Thermoplastic nickel plated over copper
4-40 screws	Steel, zinc plated
Jackscrews	Steel, zinc plated clear chromate

219866

No. of Ways	Mfrs. List No.	Order Code	1+	100+	250+	500+
9	5748677-1	109-8416●	5.66	5.43	5.27	5.03
15	5748677-2	109-8417●	4.11	3.87	3.68	3.54
25	5748677-3	109-8418●	4.03	3.79	3.60	3.48

Metallised Plastic
Straight and 45° Cable Entry

- Low profile 45° design
- Turned, full metal 4-40 thumb screws
- Plastic strain relief inserts for cable sizes 3.5mm to 13mm
- ABS with nickel over copper plating
- No tooling required for shielded termination

Mfrs. List No: MHD45PKx-K = 45° Hood MHDTPKx-K = Top Entry Hood, Where x = No. of ways

210011

No. of Ways	45° Entry Order Code	Top Entry Order Code	1+	10+	50+	100+	250+
9	357-649●	357-728●	1.69	1.60	1.52	1.47	1.31
15	357-662●	357-765●	1.63	1.54	1.47	1.39	1.24
25	357-698●	357-911●	1.69	1.60	1.52	1.47	1.31
37	357-704●	357-984●	2.00	1.90	1.84	1.75	1.59

Metallised Plastic EMI Junction Shell



- Easy assemble
- Lightweight, compact design
- Supplied with hardware on 4-40 UNC thread, 2 x Jackscrews, 2 x Saddle washers and 2 nuts
- No tooling required for shielding

Material	ABS Thermoplastic
Plating	Nickel Over Copper

210033

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+	300+	500+
9	3357-6509-1C	111-6700●	3.91	3.48	3.33	2.79	2.55	2.37
15	3357-6515-1C	111-6701●	4.07	3.79	3.62	3.22	3.04	2.79
25	3357-6525-1C	111-6703●	4.29	3.99	3.82	3.46	3.22	2.97
37	3357-6537-1C	111-6704●	5.37	4.99	4.78	4.24	3.99	3.78

D Sub EMI Junction Shell
Metallised Plastic

- Protection from EMI / ESD
- Easy assembly reduces time and labour for low cost
- Light weight and a compact design
- Strain Relief compensates for multiple cable diameters
- Jack screws provide positive retention
- RoHS compliant

Specifications:-
Shell Material
Operating Temp.

ABS
0°C to 75°C

Shell Plating
Flammability Rating

Nickel over Copper
UL 94HB

527681



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No. of Ways	Mfrs. Part No.	Order Code	Price Each			
			1+	10+	50+	100+
9	3357-6209-1C	167-2004●	3.91	3.48	3.33	2.79
15	3357-6215-1C	167-2005●	4.29	3.99	3.81	3.40
25	3357-6225-1C	167-2006●	4.53	4.21	4.03	3.65
37	3357-6237-1C	167-2007●	5.18	4.85	4.55	4.29
50	3357-6250-1C	167-2008●	6.64	6.25	5.91	5.61

Plastic with Folded Tin Inner Shell 45° Cable Entry



- Insulated outer casing
- Substantial cable clamp/ground contact
- Plastic head finger jack screws (sold separately)
- Click together hood

Note: Jack screws must be fitted to lower hood before final assembly

No. of Ways	H	W	D	Cable Entry Max.
9	38.05	31.3	15	8
15	42.05	39.62	15	9
25	42.05	39.62	15	9
37	42.05	53.52	15	11
50	42.05	69.8	19	11

209847

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+	250+
9	0967 009 0573	109-6954●	6.03	4.60	4.10	3.40	3.28
15	0967 015 0573	110-6825●	11.10	9.71	8.58	7.14	6.55
25	0967 025 0573	109-6955●	6.68	5.82	5.16	4.29	3.93
37	0967 037 0573	110-6826●	11.82	10.30	9.13	7.59	6.95
Jack Screws							
	0967 000 9971	120-7571●	0.81	0.66	0.58	0.49	0.44

Diecast Rapid Assembly



- Nickel plated die cast covers
- High quality plastic capped UNC440 jackscrews
- Rapid assembly strain relief insert
- 360° shielding
- Fully tapped screw holes
- Phillips headed screws

No. of Ways	H	W	D
9	39.9	31.2	15.0
15	41.5	39.5	15.3
25	48.6	53.4	15.5
37	53.6	69.7	15.5

335206.343014

No. of Ways	Order Code	1+	10+	50+	100+	250+
Nickel						
9	486-1693●	1.71	1.61	1.53	1.48	1.34
15	486-1700●	2.15	2.01	1.93	1.85	1.63
25	486-1711●	2.02	1.82	1.68	1.63	1.47
37	486-1723●	2.67	2.37	2.13	2.09	1.97

Diecast Rapid Assembly Hi-Grade



- Nickel plated die cast covers
- High quality plastic capped UNC440 jackscrews
- Rapid assembly strain relief insert
- 360° Metallised shielding
- Metallised shielding greatly enhances the performance of the hood
- Fully tapped screw holes
- Phillips headed screws

No. of Ways	H	W	D
9	39.9	31.2	15.0
15	41.5	39.5	15.3
25	48.6	53.4	15.5
37	53.6	69.7	15.5

335207.343016

No. of Ways	Order Code	1+	10+	50+	100+	250+
Nickel						
9	486-1735●	1.89	1.79	1.68	1.63	1.50
15	486-1747●	2.33	2.18	1.98	1.94	1.82
25	486-1759●	2.19	1.97	1.87	1.82	1.61
37	486-1760●	3.01	2.68	2.46	2.42	2.29

Die Cast Sub D Hood System



A range of Die-Cast hoods for sub D connectors to suit all applications with one adaptable product range. This high grade system gives exceptional RF/EMI shielding and conforms to European and US standards when used as part of an approved system.

Standard Assembly D Hoods - MHDM Series



- Designed with the cable assembler in mind
- Allows fast assembly
- Metallised plastic insert gives 360 degree shielding in cable entry area
- Simple removal of inserts allows reworking or maintenance

MHDM Series

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
9	MHDM-9-K	430-3430●	1.47	1.32	1.27	1.24
15	MHDM-15-K	430-3441●	1.65	1.48	1.44	1.40
25	MHDM-25-K	430-3453●	1.67	1.49	1.45	1.42
37	MHDM-37-K	430-3465●	2.58	2.30	2.23	2.18

Cone Style D Hoods - MHEE Series



- Well proven shielding system using metallised cone insert
- 360 Degree shielding
- Cone insert can be cut to suit cable size
- Cone easily cut with knife

MHEE Series

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
9	MHEE-9-K	430-3477●	1.48	1.32	1.29	1.26
15	MHEE-15-K	430-3489●	1.65	1.48	1.44	1.40
25	MHEE-25-K	430-3490●	1.67	1.50	1.46	1.43
37	MHEE-37-K	430-3507●	2.58	2.30	2.23	2.18

Crimp Style D Hoods - MHC Series



- For use where braided cable is used for a stronger permanent earth path
- Allows pre assembly of the earth connection before assembling the connector and backshell
- Select appropriate ferrule and die size for cable diameter

MHC Series

249078

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
9	MHC-9-K	430-3520●	1.22	1.09	1.05	1.03
15	MHC-15-K	430-3532●	1.42	1.24	1.20	1.18
25	MHC-25-K	430-3544●	1.44	1.27	1.23	1.20
37	MHC-37-K	430-3556●	2.35	2.07	2.01	1.97
Ferrule Kits						
8.6mm	MHC8.6	430-3600●	0.34	0.31		

Double Clamp Backshells



DTZI Series



The DTZI series is supplied complete with two internal Cable Clamps, which make it suitable for heavy duty applications.

The double Cable Clamp provides strong and secure strain relief which will withstand heavy pull forces.

Key Features:-

- Excellent EMI Shielding
- Re-openable
- Available in sizes 9, 15, 25, 37, 50 way
- RoHS Compliant

Specifications:-

Current Rating	Zinc, Nickel plated	Voltage Rating	-30°C to 90°C
Cable Entry	Top	Thumb screws	UNC 4-40 (standard)

528695

No. of Ways	Mfrs. List No.	Order Code	1+	10+	25+	50+	100+
9	MHDTZI-09-K	168-8932●	2.96	2.77	2.59	2.37	2.18
15	MHDTZI-15-K	168-8933●	3.21	3.00	2.81	2.57	2.37
25	MHDTZI-25-K	168-8934●	3.79	3.53	3.31	3.03	2.79
37	MHDTZI-37-K	168-8936●	4.29	4.00	3.75	3.43	3.16
50	MHDTZI-50-K	168-8937●	4.54	4.23	3.97	3.63	3.34

Over 480,000 products online



EMI/RFI Shielded 'D' Shells - continued

Diecast MMulti 35° Hood Series



Assembly



Front profile

No. of Ways	H	W	D
9	41.3	32.2	15.4
15	43.3	40.6	15.4
25	49.5	54.5	15.4
37	54.3	70.7	15.4

- 35° Cable Entry
- Nickel plated die cast covers
- High quality plastic capped UNC440 jackscrews
- Rapid assembly strain relief insert
- 360° Metallised shielding
- Metallised shielding greatly enhances the performance of the hood
- Fully tapped screw holes
- Phillips headed screws
- Crimp Hood uses ferrule kits from MH Die cast Hood System

335210.343025

No. of Ways	Order Code	1+	10+	50+	100+
Standard Hood					
9	486-1802 ●	1.44	1.27	1.23	1.20
15	486-1814 ●	1.61	1.44	1.40	1.36
25	486-1826 ●	1.63	1.46	1.42	1.39
37	486-1838 ●	2.54	2.25	2.19	2.14

Diecast Zinc - Metal Right Angle Ultra Low Profile Covers



4861772



4861784



4861796

- Low profile and Ultra-Slim design allows for use in confined spaces
- Tapped through-holes ensures easy and rapid assembly
- Rugged Die-Cast Zinc covers provide excellent protection against EMI/RFI
- Available in 9 and 25 position with captive screws and unique 9 position ETHERNET style that is less than 1 inch in height

No. of Ways	H	W	D
9	44.55	19.81	15.09
25	50.80	24.38	15.09
25	72.14	30.23	14.99

Order Code 4861772 will require Slide Lock Accessories.
Lock Posts 148704 and Lock Plate 148644

335208.343022

No. of Ways	Order Code	1+	10+	50+	100+	250+
Nickel						
9	486-1772 ●	3.24	3.15	3.06	3.00	2.81
9 Ethernet	486-1784 ●	3.24	3.15	3.06	3.00	2.81
25	486-1796 ●	4.20	3.99	3.90	3.82	3.59

Economy Metplas and Die cast D-Hoods



Top Entry



A range of Economy Top entry Metallised and die cast D connector Hoods

MHCCOV-9SC-MP	3938140	MHCCOV-15ME	3938165
MHCCOV-15SC-MP	3938116	MHCCOV-25ME	3938177
MHCCOV-25SC-MP	3938128	MHCCOV-9MEL	3938189
MHCCOV-37SC-MP	3938130	MHCCOV-15MEL	3938190
MHCCOV-50SC-MP	3938141	MHCCOV-25MEL	3938207
MHCCOV-9ME	3938153		

238496

No. of Ways	Order Code	1+	10+	50+	100+
Metallised Plastic - Short Screws					
9	393-8104 ●	0.70	0.64	0.55	0.53
15	393-8116 ●	0.81	0.71	0.65	0.63
25	393-8128 ●	0.84	0.77	0.68	0.65
37	393-8130 ●	1.23	1.13	1.06	1.01
50	393-8141 ●	1.68	1.55	1.46	1.36

No. of Ways	Order Code	1+	10+	50+	100+
Die Cast - Short Screws					
9	393-8153 ●	0.93	0.82	0.69	0.61
15	393-8165 ●	1.29	1.14	1.04	0.94
25	393-8177 ●	1.45	1.31	1.19	1.09
Die Cast - Long Screws					
9	393-8189 ●	0.93	0.81	0.69	0.57
15	393-8190 ●	1.29	1.14	1.04	0.94
25	393-8207 ●	1.45	1.31	1.19	1.09

Die-Cast Backshells

For D-Subminiature connectors



Suitable for high integrity data links in computer peripheral, medical and instrumentation applications

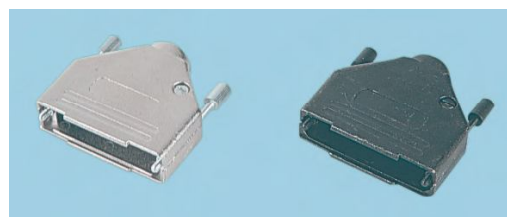
- Straight or 45° cable entry
- Excellent EMI/RFI Shielding
- Lightweight and cost effective
- Supplied with standard cable grommet
- High performance cable grommet available for 360° screening
- Tooling and dies required for high performance grommet

Contact material	Phosphor Bronze	Contact material	Phosphor Bronze
Contact plating	Gold Plated	Insulator material	PBT UL94V-0
Temperature range	-40°C/120°C to	Shell	Zinc Die Cast

239070

No. of Ways	Mftrs. List No.	Order Code	1+	100+	250+
Top Entry Backshells					
9 way	0-1478762-9	412-9696 ●	2.49	2.24	2.03
15 way	1-1478762-5	412-9702 ●	2.59	2.37	2.13
25 way	2-1478762-5	412-9714 ●	2.46	2.24	2.01
37 way	3-1478762-7	412-9726 ●	2.97	2.69	2.44
45° Angled entry Backshells					
9 way	0-1478763-9	412-9738 ●	2.47	2.22	2.01
15 way	1-1478763-5	412-9740 ●	2.47	2.25	2.02
25 way	2-1478763-5	412-9751 ●	2.58	2.35	2.10
37 way	3-1478763-7	412-9763 ●	3.18	2.90	2.62
High Performance Screened Cable Grommet					
6.0 mm	0-1478764-1	412-9775 ●	1.01	0.90	0.81
7.5mm	0-1478764-2	412-9787 ●	1.13	0.99	0.92
8.5mm	0-1478764-3	412-9799 ●	1.17	1.04	0.93
9.5mm	0-1478764-4	412-9805 ●	1.21	1.10	0.97
Crimp Tool and Dies for Screened Cable Grommet					
Crimp Tool	6-1419172-9	412-9817	113.97		

Diecast



- Lightweight alloy body
- Bright nickel or resilient black chromate finishes
- Spring shielding clamp
- Screening conforms to **VDE 0871, FCC 20780** and EC EMC directive when part of an approved system
- Attenuation >40dB over 30MHz to 1GHz
- Accepts foil or braided cables
- Steel jackscrews (48mm)
- Nickel plated for nickel shells
- Black for black chromate shells
- Instructions supplied
- Wide cable variation, 3.5-13
- Lip height = 1.3

No. of Ways	H	W	D	No. of Ways	H	W	D	Mftrs. List No.	DTZK-xx = Nickel	DTZK-xxB = Black
9	40	31	15	25	48.6	53.4	15			
15	41.5	39.5	15	37	54	70	15			

209789

No. of Ways	Order Code	1+	10+	50+	100+	250+
Nickel						
9	463-012 ●	1.83	1.68	1.63	1.58	1.40
15	463-024 ●	2.16	1.97	1.95	1.90	1.71
25	463-036 ●	2.17	1.98	1.91	1.89	1.60
37	463-048 ●	3.82	3.48	3.44	3.30	3.02
Black Chromate						
9	463-050 ●	2.51	2.30	2.25	2.17	1.99
15	463-061 ●	2.62	2.40	2.35	2.30	2.10
25	463-073 ●	2.68	2.45	2.43	2.37	2.15
37	463-085 ●	3.57	3.25	3.20	3.11	2.85

Diecast**Single or Dual Cable Entry**

- Single or dual cable entry
- Steel, zinc plated screws and cable clamp

335227.343465

No. of Ways	Mfrs. List No.	Order Code	1+	100+	250+	500+
9	1534805-1	105-6338●	3.28	2.96	2.81	2.65
15	1534807-1	105-6339●	3.41	3.07	2.90	2.74
25	1534809-1	105-6340●	3.79	3.42	3.23	3.03
37	1534811-1	105-6341●	5.07	4.58	4.33	3.99

Diecast**Diecast Zinc Alloy Shield Hoods**

- For HDP20 and HDE20 metal shell connectors

Housing Zinc alloy, Plated Bright Nickel over Bright Copper
4-40 screws Steel, Zinc Plated

227510

No. of Ways	Mfrs. List No.	Order Code	1+	100+	250+	500+
9	5748676-1	109-8419●	4.46	4.19	4.09	3.88
15	5748676-2	109-8413●	3.86	3.68	3.54	3.38
25	5748676-3	109-8414●	8.48	8.05	7.72	7.38
37	5748676-4	109-8415●	12.32	11.81	11.31	10.77

Diecast**90° Exit**

- For HDP20 and HDE20 metal shell connectors
- For jacketed cable (two piece)

Housing Zinc alloy, Plated Nickel Over Copper
4-40 screws Steel, Zinc Plated
Jackscrews Stainless Steel

219865

No. of Ways	Cable dia (max)	Mfrs. List No.	Order Code	1+	100+	250+	500+
15	6.09mm	5745652-2	109-8385●	17.64	16.70	15.98	15.24
25	10.92mm	5745653-3	109-8386●	17.17	16.45	15.97	15.26

45° Cable Entry

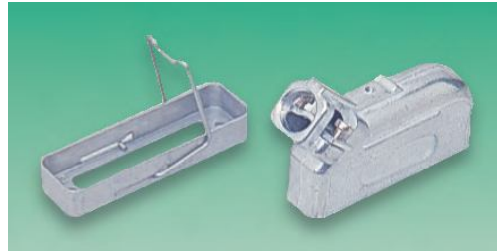
- Lightweight zinc diecast shell, nickel plating over copper
- Low profile design
- Turned, full metal 4-40 UNC thumb screws

No. of Ways	Dimension (mm)			No. of Ways	Dimension (mm)		
	A	B	C		A	B	C
9	36.3	31	14.5	25	40.3	53.2	14.5
15	40.3	39.5	14.5	37	40.3	69.7	14.5

Mfrs. List No: D45ZK-xx = Nickel D45ZK-xxb = Black, where xx = No. of ways

209981

No. of Ways	Order Code	1+	10+	50+	100+	250+
Nickel						
9	633-847●	1.79	1.68	1.59	1.54	1.39
15	633-859●	2.23	2.10	2.01	1.92	1.69
25	633-860●	2.10	1.89	1.74	1.69	1.52
37	633-872●	4.64	4.14	3.94	3.78	3.37
Black Chromate						
9	633-884●	3.09	2.93	2.77	2.60	2.38
15	633-896●	3.56	3.35	3.22	2.99	2.73
25	633-902●	3.50	3.08	2.95	2.73	2.51
37	633-914●	4.10	3.87	3.71	3.48	3.15

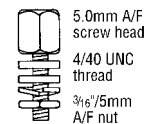
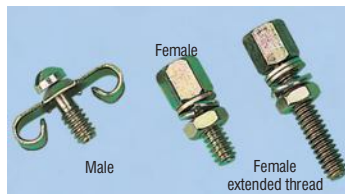
Diecast Shells and Retainers

- Heavy duty die cast shells complete with cable clamp
- Fixing screws and die cast base retainer
- Manufactured from zinc alloy with a polished finish.

No. of Ways	Shell Dimensions				Mfrs. List No.	Order Code
	H	W	D	max dia.		
9	33.5	40.4	16	9.5	RK000250000AL00	111-4093
15	33.5	48.4	16	9.5	RK000260000AL00	111-4095
25	39.5	60	16	9.5	RK000270000AL00	111-4096
37	39.5	76.4	16	9.5	RK000280000AL00	111-4097
50	39.9	74.9	18.8	12.7	RK000290000AL00	111-4099

210103

No. of Ways	Order Code	1+	10+	50+	100+	250+
9	111-4093●	4.58	4.32	4.09	3.87	3.72
15	111-4095●	3.81	3.59	3.35	3.17	3.00
25	111-4096●	4.80	4.55	4.31	4.10	3.91
37	111-4097●	5.20	4.91	4.65	4.43	4.21
50	111-4099●	5.51	4.96	4.86	4.69	4.49

'D' Accessories**Screw Lock Accessories**

Male Type D20419, 'D' Flange Th = 0.99 Type D20419-16, 'D' Flange Th = 1.37 Shell width = 13.9
Female Thread length = 8 Type D20418-2
Female extended thread Thread length = 14.5 Type D20418-2145

Available in a pale Yellow chromate on zinc plating finish, designed to match the standard 'D' connectors, or a bright tin plating suitable for EMV/RFI shielded 'D' connectors. The base of the female screwlocks have chamfered corners to prevent scratching of surface during assembly.

210082

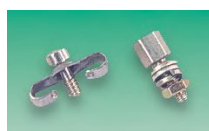
2 Per Pack		Price Per Pack					
	Order Code	1+	25+	100+	250+	500+	1K+
Zinc Plated							
Male (Th = 0.99)	120-6634●	0.93	0.78	0.75	0.71	0.67	0.60
Female	109-9006●	1.43	1.27	1.22	1.13	1.10	1.05
Extended female	109-9007●	1.49	1.46	1.44	1.36	1.30	1.21
Bright Tin							
Female	109-9010●	0.97	0.93	0.87	0.80	0.67	0.59
Extended female	109-9011●	1.18	1.13	1.10	0.99	0.85	0.80

Slide Lock Accessories

Lock Posts 107-5154 Lock Plate 107-5153

210083

No. of Ways	Order Code	1+	25+	100+	250+	500+
Lock Plates						
9	107-5151●	1.65	1.52	1.45	1.41	1.29
15	107-5152●	1.34	1.20	1.15	1.13	1.02
25	107-5153●	1.94	1.78	1.67	1.64	1.55
Lockpost						
	107-5154	1.31	0.95	0.93	0.91	0.87

Screw Lock Accessories

Male for DA, DE plug or socket; DB, DC socket
Female

Mfrs. List No. D20419 Order Code 121-5323
D20418-2 121-5641

D20419 Male D20418-2 Female



'D' Accessories - continued

Screw Lock Accessories - continued

209673

2 Per Pack	Order Code	1+	10+	50+	100+	250+	500+
Male	121-5323 ●	3.68	2.94	1.81	1.48	1.18	0.91
Female	121-5641 ●	5.95	4.77	3.06	2.52	1.28	1.07

D-sub accessories

Screw/bolt kits



Screw locking kits for HDP20 and HDP20 Sub-D connectors.

Kit comprises 2 bolts with nuts, washers and spring washers

	Mfrs. List No.	Order Code
Threaded bolt kit (7.9 mm UNC4-40 / UNC4-40)	167501-2	121-7993
Threaded bolt kit (7.9 mm M3 / M3)	215073-2	122-1120
Threaded bolt kit (14.2 mm UNC4-40 / UNC4-40)	215072-2	122-5969
(Bolt length, internal, external thread)	215072-2	122-5969

Screw locks, female for HD series

Supply quantity: individual items

	Mfrs. List No.	Order Code
Threaded bolt (14.2 mm UNC4-40 / M3 bolt)	1-0829261-6	120-6767
Threaded bolt (7.9 mm UNC4-40 / M3 bolt)	829261-6	421-8061
Threaded bolt (5.0 mm M3 / M3 bolt)	829068-1	118-7870

Screw holding kits, steel, galvanized

Comprises: 2 locking screws, 2 holding clips

	Mfrs. List No.	Order Code
Screw kit, metal housing (5.8 mm M3)	0-0166541-2	421-8115

243391

Mfrs. List No.	Order Code	1+	50+	100+	500+
167501-2	121-7993 ●	1.080	0.990	0.910	0.870
215073-2	122-1120 ●	2.190	1.990	1.830	1.670
215072-2	122-5969 ●	1.700	1.520	1.420	1.300
1-0829261-6	120-6767 ●	0.310	0.290	0.280	0.260
829261-6	421-8061 ●	0.640	0.530	0.490	0.450
828102-1	118-7870 ●	0.136	0.124	0.112	0.102
829068-1	118-7871 ●	0.137	0.125	0.112	0.100
0-0166541-2	421-8115 ●	0.710	0.650	0.580	0.520

Mounting Accessories



129-7955 Brackets and screws



107-5200 PCB spacer

Brackets For mounting 90° PCB Connectors, two required per connector.
Spacer For mounting straight PCB connectors, two required per connector.

209674

Order Code	1+	25+	Price Per Pack	50+	100+	250+	500+
9, 15, 25, 37 Way (10 Pairs Per Pack)							
Brackets	129-7955 ●	3.910	3.580	3.380	3.040	2.630	2.460
Order Multiple=10		10+	100+	250+	500+		
Spacers	107-5200 ●	0.158	0.149	0.139	0.120		

Latch Assembly



Mfrs. List Nos: D110277 = 118-6663 D110278 = 118-6664

219833

2 Per Pack	Order Code	1+	10+	50+	100+	250+	500+
Plate with spring	118-6663 ●	4.18	3.68	2.95	2.26	2.05	1.84
Retaining plate	118-6664 ●	2.43	2.03	1.75	1.53	1.36	1.23

D Type Connector Covers



- Prevents physical and chemical damage
- For cable assemblies, computers, peripherals, etc
- Plug and socket options

211489

No. of Pins	Mfrs. List No.	Order Code	1+	20+	Price Each	100+	500+
Plug covers							
9	MHDC09P	529-5361 ●	0.37	0.33	0.31	0.28	
15	MHDC15P	529-5373 ●	0.40	0.35	0.33	0.32	
25	MHDC25P	529-5385 ●	0.40	0.36	0.35	0.32	
Socket covers							
9	MHDC09S	529-5397 ●	0.37	0.33	0.31	0.30	
15	MHDC15S	529-5403 ●	1.11	1.08	1.05	1.03	
25	MHDC25S	529-5415 ●	0.40	0.35	0.33	0.31	

Electromagnetic Shielding Gaskets



- I/O gaskets provide a ground between metal connectors and enclosure/mating connector
- Ensures continuous shield from cable to enclosure
- Light weight
- Shielding Effectiveness (SE) of 70dB between 1MHz to 18GHz
- UL listed
- Three thickness styles
- Each style available in 'D' sizes 1-5 (9,15,25,37,50 way)

Thickness styles
 a = 0.3mm (0.012") Die-cut non-woven fabric
 b = 1.02mm (0.040") Woven fabric around neoprene

210008

'D' Size	Thickness	Mfrs. List No.	Order Code	1+	50+	Price Each	100+	500+	1K+
b		267251-1	487-569 ●	0.70	0.64	0.61	0.56	0.52	
		267252-1	487-594 ●	0.81	0.73	0.71	0.65	0.62	
3 (25 way)	a	267250-3	487-612 ●	0.85	0.77	0.75	0.69	0.66	
	b	267253-1	487-624 ●	1.15	1.03	0.95	0.91	0.88	
4 (37 way)	a	267250-4	487-648 ●	0.80	0.72	0.70	0.65	0.61	

Amplimite 'D' Hardware



- All female screwlock kits fit metal shell or plastic connector and contain 2 assemblies per pack
- Slide latch clip assembly contains 2 per pack
- Latching blocks are supplied 2 per pack

Mfrs. List No.	Description	Suitable For	Order Code
747784-3	2 piece 4-40 jackscrew kit		139-3728
745255-2	2 Spring latches	HDE/HDP	134-5722
745779-2	2 spring latches with post moulded s/relief	HDE/HDP Metal	134-5680
Mfrs. List No.	Description	Suitable For	Order Code
5205980-1	Male screw retainer kit for Metal shells		109-8377
5745647-1	Male screw kit for plastic shells	HDE/HDP Metal	109-8379
5205817-1	Standard female screwlock kit	HDE/Plastic	109-8381
5207719-1	Long female screwlock kit	HDP/PL/Metal	109-8371
5206514-1	2 Locking post assemblies	HDF Plastic	109-8372
5745563-1	Female screwlock kit (all plastic)	HDF/HD/HDP/HDF	109-8451
5745404-1	9w slide latch kit	HDE/HDP	109-8373

210024

Order Code	Price Each			
	1+	100+	250+	500+
109-8377●	0.59	0.54	0.53	0.51
109-8379●	0.55	0.50	0.49	0.48
109-8381●	0.68	0.63	0.61	0.58
109-8371●	1.96	1.83	1.74	1.66
109-8372●	2.14	2.01	1.92	1.81
109-8451●	0.72	0.68	0.64	0.61
109-8373●	1.43	1.33	1.27	1.21
139-3728●	1.85	—	—	—
134-5722●	1.18	1.15	1.11	1.07
134-5680●	1.10	1.04	0.99	0.94

'D' Range Face Plates and Panels**Extruded Aluminium Panels 16 way.****19" Rack Mounting 2U High 9, 15 & 25 way 'D'**

H=88, W=483, D=20

- 2mm rigid, extruded aluminium panels
- Front, rear or through 'D' cut outs
- Satin anodised finish
- 3.3mm fixing holes for pop rivets or 4/40UNC
- Easy fit labelling strips
- 2U panels, 16way in 9, 15 & 25 'D'

209846

No. of Ways	Mfrs. List No.	Order Code	Price Each			
			1+	4+	8+	16+
9	KK2ASUBD9	746-022●	14.15	12.87	12.12	11.48
15	KK2ASUBD15	746-034●	14.15	12.87	12.12	11.48
25	KK2ASUBD25	746-046●	14.15	12.87	12.12	11.48

Modular Integrated Connector Enclosures**ModICE****Modular Integrated Connector Enclosure**

Modular Integrated Connector Enclosures (ModICE) offers sealed packaging solutions for rugged electronic control module applications often found in commercial vehicles within construction, mining, agriculture, industrial and on-highway markets. ModICE consists of 2 distinct enclosure sizes and 6 header configurations allowing 18, 30, 48 and 60 I/O.

- Rugged connector enclosure system
- Heat sink option
- Ferrite filtering option
- Interfaces with CinchSHS, industry standard harness connectors
- Enclosure dimensions:
SE: 153.2 x 134.6 mm
LE: 189.2 x 172.7
- IP67

Withstand Voltage 1000V - No breakdown
Insulation Resistance 1000Mohm

Enclosure Material
Header Material

Glass Filled Polymer
Glass Filled, High Temperature Polymer
Brass. Post tin plated.
Seals: Silicone

Contact Resistance 10mohm

Terminal Material

Operating Temperature -40 to +85°C

Small Enclosure: Dimensions 153.2 x 134.6 mm

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each 10+	25+	50+
SE Header						
18	5810118033	128-2182●	5.61	5.27	5.06	4.86
30	5810130046	128-2183●	7.48	7.02	6.72	6.48
48	5810148007	128-2184●	14.07	13.21	12.67	12.19
SE Header with Ferrite Filtering						
18	5810118032	128-2185●	6.33	5.94	5.69	5.48
30	5810130044	128-2186●	7.87	7.37	7.08	6.80
48	5810148005	128-2187●	9.47	8.88	8.52	8.20
Enclosure without Heatsink						
SE	5810130043	128-2196●	7.33	6.87	6.60	6.34
Enclosure with 1 Heatsink - use right side heat sink plate						
SE	5810130042	128-2197●	10.43	9.79	9.39	9.04
Enclosure with 2 Heatsinks - use left and right heat sink plate						
SE	5810130041	128-2198●	10.71	10.04	9.64	9.27
Heatsink Plates - use with Enclosure containing heat sinks						
Right Side	5810000021	128-2203●	1.30	1.22	1.17	1.13
Left Side	5810000020	128-2204●	1.21	1.14	1.09	1.06

Large Enclosure: Dimensions 189.2 x 172.7 mm

450902

No. of Ways	Mfrs. List No.	Order Code	1 +	Price Each 10 +	25 +	50 +
LE Header						
30	5810130051	128-2188●	9.97	9.35	8.97	8.63
48	5810148008	128-2191●	14.31	13.42	12.88	12.38
60	5810160006	128-2192●	17.36	16.26	15.60	15.01
LE Header with Ferrite Filtering						
30	5810130045	128-2193●	8.59	8.05	7.72	7.42
48	5810148006	128-2194●	12.38	11.60	11.15	10.72
60	5810160005	128-2195●	11.75	11.02	10.59	10.18
Enclosure without Heatsink						
LE	5810160033	128-2199●	9.11	8.53	8.18	7.87
Enclosure with 1 Heatsink - use right side heat sink plate						
LE	5810160032	128-2201●	8.99	8.42	8.08	7.77
Enclosure with 2 Heatsinks - use left and right heat sink plate						
LE	5810160031	128-2202●	15.21	14.26	13.68	13.17
Heatsink Plates - use with Enclosure containing heat sinks						
Right Side	5810000021	128-2203●	1.30	1.22	1.17	1.13
Left Side	5810000020	128-2204●	1.21	1.14	1.09	1.06

ModICE**SHS Harness Connector**

- Push to seat terminal
- Secondary lock for positive seating
- Multiple keyed 18 and 30 position
- Protective backplate
- Center thread jackscrew mating

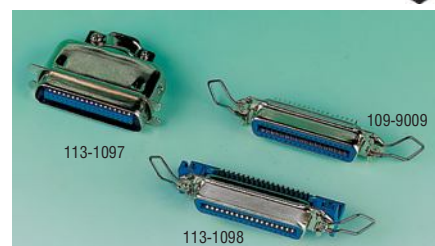
ModICE Header	Harness Connector to use with Header	
SE18	128-2205	-
SE30	128-2208	-
SE48	128-2205	128-2208
LE30	128-2208	-
LE48	128-2205	128-2208
LE60	128-2206	128-2208

450959

No. of Ways	Mfrs. List No.	Order Code	1 +	Price Each 10 +	25 +	50 +
SHS Harness Connector						
18	5810118023	128-2205●	4.52	4.25	4.07	3.93
30	5810130028	128-2206●	5.40	5.08	4.86	4.68
30 Alt. Keyed	5810130029	128-2208●	5.40	5.08	4.86	4.68

Contacts and Tooling

Ø mm	Mfrs. List No.	Order Code	1+	Price Per Reel		
				10+	25+	50+
Crimp Contacts (200 per reel)						
0.5 - 0.8mm²	4250000872	128-2209●	20.36	19.09	18.31	17.62
0.8 - 1mm²	4250000873	128-2210●	20.36	19.09	18.31	17.62
Price per pack (100)						
Cavity Filler				1+		
Plug	5810000011	128-2218●		4.17		
				Price Each		
Tooling				1+		
Crimp Tool	5991111615					
0.5 - 0.8mm²		128-2211		260.77		
Crimp Tool	5991111616					
0.8 - 1mm²		128-2213		260.77		
Removal Tool	5810118920	128-2214		31.30		
Secondary	5991111628					
Removal Tool		128-2215		26.08		
SE Release Tool	5991111611	128-2216		83.44		
LE Release Tool	5991111612	128-2217		91.79		

Centronics/IEEE 488 Style

A range of metal shell connectors most commonly used for IEEE488 and printer interface connections.

Current rating 3A dc
Temperature range -55°C to +105°C
Contacts Phosphor Bronze, Gold over Nickel

Contact resistance 30mΩ max.
Housing Blue Polyester, UL94V-0



Centronics/IEEE 488 Style - continued

219834

No. of Ways	Order Code	1+	25+	50+	100+	250+	500+
Straight Plugs							
14	113-1099●	5.76	5.31	5.18	4.71	4.48	4.14
36	113-1097●	9.48	9.15	8.95	8.23	7.83	7.22
50	113-1100●	12.42	11.47	11.24	10.45	10.08	9.31
Straight PCB Sockets							
14	109-9013●	3.66	3.47	3.25	3.00	2.89	2.77
24	109-9008●	3.86	3.51	3.38	3.02	2.80	2.61
36	109-9009●	7.10	6.44	6.21	5.54	5.14	4.73
50	109-9014●	9.62	8.80	8.62	8.31	7.78	7.19
90° PCB Sockets							
36	113-1098●	4.78	4.33	4.19	3.73	3.46	3.19

Centronics IDC Ribbon Connectors
Bailmount

- Metal front shell (24 way plastic shell)
- Pitch, 1.27 (0.050")

Current Rating	1A	Temperature Range	-55°C To + 105°C
Insulation resistance	1000 MΩ	Insulation Material	Polyester UL94V-0
Contact resistance	20Ω	Contact Material	Phosphor Bronze
Dielectric withstand Voltage	500V ac @ 1min	Contact plating	Gold over Nickel

236518

No of Ways	Order Code	1+	25+	50+	250+	500+
Plug						
24	109-9278●	1.650	1.460	1.260	1.110	1.020
36	109-9282●	1.060	0.910	0.800	0.700	0.650
50	109-9284●	1.650	1.460	1.260	1.110	1.030
Socket						
24	109-9281●	1.650	1.460	1.260	1.110	1.020
36	109-9283●	0.590	0.510	0.450	0.400	0.380
50	109-9285●	1.650	1.460	1.260	1.110	1.030
Strain relief						
24	109-9286●	0.280	0.220	0.192	0.173	0.162
36	109-9287●	0.138	0.115	0.099	0.090	0.084
50	109-9288●	0.138	0.115	0.099	0.090	0.084

SCSI Connectors

High Density I/O Connectors

Har-mik 1.27mm Pitch



Pushing Performance

- SCSI 'One stop shop' solution
- Two mating styles, pin/socket and bellows
- Meets ANSI standards
- Intra cabinet input/output and terminators
- Terminators ensure matched impedance transfer
- Bellows style gives reliable mating and reduced susceptibility to contact damage
- Conforms to Bi-directional parallel interface (IEEE 1284-C)

209945

Straight and 90° Pin I/O Connectors



Pushing Performance

114-2826
H=10.5, W=52.45, D=12.3114-2825
H=9.3, W=52.45, D=10.5

- Polarised 'D' shaped shell
 - UL Recognised
- | | | | |
|--------------------|-----------------|-----------|--|
| Contact rating | 1A | Housing | Thermoplastic resin UL94V-0 |
| Contact resistance | ≤30mΩ | Insulator | nickel plated |
| Temperature range | -55°C to +105°C | Contacts | Copper Alloy, Gold over Palladium / Nickel |

209946

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+	250+
Straight PCB socket - with latch blocks							
50	6001 050 5102	114-2824●	6.72	6.33	6.08	5.82	5.57
68	6001 068 5102	114-2825●	10.17	9.58	9.18	8.78	8.22
Straight PCB Socket - without latch							
68	6002 068 5120	109-6973●	10.96	10.30	9.83	9.02	8.35
90° PCB Socket - with latch and board locks							
50	6001 050 5140	114-2826●	6.80	6.33	6.06	5.79	5.55
68	6001 068 5140	114-2827●	10.88	10.14	9.71	9.30	8.92
90° PCB Socket - with 2.56 UNC and board lock							
68	6002 068 5141	114-2828●	12.45	11.72	11.17	10.22	9.48

90° Pin I/O Connectors



Pushing Performance



- High density connectors with angled solder pins
- M2.5 Panel and board fixing (100 pole 2.56 UNC)

Contact rating	1A	Housing	Thermoplastic Resin
Contact resistance	30mohm	Insulator	Die-cast zamac nickel plated
Temperature range	-55°C to +105°C	Contacts	Copper Alloy . Gold over Palladium / Nickel

239280

Mfrs. List No.	No. of Ways	Order Code	1+	10+	50+	100+
Plug	68	114-2818●	10.47	9.75	9.35	8.93
Socket	68	114-2821●	9.44	8.21	7.37	6.40

Insulation-Displacement Terminal Connection



Pushing Performance



- Male multiway connectors with a grid size of 1.27 mm, specifically for connection of round ribbon cables and individual conductors
- Without interlock

Insulation diameter: 0.65-0.80 mm

239274

Mfrs. List No.	No. of Ways	Order Code	1+	10+	50+	100+
Male multiway connectors						
6003 050 5210	50	120-7633●	10.32	8.95	7.99	6.99
6003 068 5210	68	120-7634●	13.63	11.84	11.33	—

Intra Cabinet, Ribbon Cable Connectors



Pushing Performance



H=10.26, W=63.88, D=15.7

- Female panel mount and male all plastic connectors
- Connector guides for cable alignment
- 4 point IDCfork design for accurate termination
- Optional strain relief

Contact rating	1A	Housing	Thermoplastic resin UL94V-0
Insulation resistance	≥1000M ohms	Shell	Nickel plated
Temperature range	-20°C to +105°C	Contacts	Beryllium Copper, Gold / Nickel plated

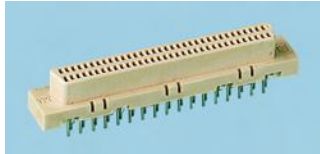
219859

No. of Ways	Mfrs. List No.	Order Code	1+	10+	Price Each 50+	100+	250+
Panel Mount Sockets							
68 (fastwide SCSI)	6004 068 5343	109-6974 ●	10.97	10.30	10.14	9.00	8.34
68 (SCSI-3 wide)	6004 068 5344	109-6975 ●	9.73	9.14	8.77	8.40	8.07
Free Plug							
68 (SCSI-3 wide)	6006 068 5440	109-6976 ●	8.43	7.95	7.60	7.25	6.81
Accessories							
68 strain relief (plastic)	6006 068 9001	114-2829 ●	1.11	1.03	0.96	0.81	0.76
Price Per Pack							
2 Per Pack			1+	10+	50+	100+	250+
Screw Locks	6001 000 9019	114-2830 ●	0.89	0.85	0.82	0.66	0.61

Straight PCB Socket (Plastic)



Pushing Performance

H=8.5,
W=53.2,
D=8.9

209949

No. of Ways	Mfrs. List No.	Order Code	1+	10+	Price Each 50+	100+	250+
68 (fast, wide SCSI)	6005 068 5100	109-6978 ●	7.30	6.87	6.57	6.27	6.00

Ribbon Cable 0.025" Pitch



Pushing Performance



- PVC and FEP material
- UL Recognised

FEP material - 90 Ohm single ended, 130 Ohm differential impedance for full SCSI bus performance.

219860

No. of Ways	Mfrs. List No.	Order Code	Price Each 1+
30.48m Reel			
68 (PVC material)	6090 068 6008	114-2831 ●	211.23

High Density PCB Mount I/O

Bellows Contact



Pushing Performance

965-650
H=9.4, W=52.45, D=16.7

- Har-mik bellows offer good EMI/RFI characteristics
- 'D' shaped polarization
- 36 way complies with IEEE 1284-C specification
- Integral board lock
- UL Recognised

Contact rating 1A
Temperature range -55°C to +105°C

Moulding Thermoplastic resin UL94V-0
Shell Die cast Zamac nickel plated
Contacts Copper alloy, gold over palladium/ nickel plating

209952

No. of Ways	Mfrs. List No.	Order Code	1+	10+	Price Each 50+	100+	250+
90° PCB Sockets - with latches							
26	6011 026 5140	114-2832 ●	6.30	5.91	5.56	4.78	4.44
36	6011 036 5140	114-2833 ●	7.65	7.23	6.76	5.95	5.39
50	6011 050 5140	114-2834 ●	6.98	6.56	6.13	5.29	4.90

Over 480,000 products online



RoHS ● Compliant
▲ Non-compliant



08447 11 11 11

Fax: 08447 11 11 12 1889

Amplimite .050 Series Headers SCSI



- Compatible with SCSI-2 and SCSI-3 standards
- Vertical and right angle headers

Housing Thermoplastic, UL94V-0, Black, SMT compatible
Shell Steel, plated Nickel over Copper
Bracket Zinc, plated Nickel over Copper
Contacts Phosphor Bronze, Gold plated on mating end, Tin plated on solder end

451257

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each 10+	50+
Right Angle Receptacle Headers - Through Hole, with Rails and Latches + Boardlocks					
50	1761028-3	128-4371 ●	3.22	2.87	2.58
68	1761028-4	128-4372 ●	5.21	4.63	4.16
Right Angle Receptacle Headers - Through Hole, with Boardlocks					
50	5787170-5	128-4373 ●	3.41	3.04	2.73
68	5787170-7	128-4374 ●	3.98	3.54	3.18
Vertical Receptacle Headers - Through Hole, with Rails and Latches					
68	5749069-7	128-4377 ●	6.61	5.89	5.29
Right Angle Receptacle Headers - Through Hole					
50	5749070-5	128-4378 ●	6.80	6.04	5.43
68	5749070-7	128-4379 ●	8.51	7.56	6.81

Amplimite 0.050 Cable Plugs SCSI2



- High density 'D' type interface to mate with SCSI2 receptacles
- Excellent EMI/RFI shielding when used with metal backshell kits
- Compatible with SCSI2, EIA RS232 IPI and HIPPI standards

Housing Black Thermoplastic, UL94V-0
Shell
Contacts Phosphor Bronze
Plating: Gold (mating end), Tin-lead (termination end)
Wire size 28-30AWG (0.08-0.09)
Insulation dia. 0.74-0.91mm, solid or 7 strand

219663

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each 10+	50+
26	5749621-2	109-8643 ●	3.98	3.85	3.73
50	5749621-5	109-8644 ●	5.03	4.87	4.75
68	5749621-7	109-8645 ●	6.31	6.10	5.93

High Density SCSI2 Connectors

Vertical and RA PCB Mount Sockets



- High Density SCSI2 connectors
- PCB Mounting
- 1.27. (0.050") Pitch.
- Vertical and right angle connectors

insulation resistance 500M Ω MIN
contact resistance 35m Ω
insulator material Glass filled PB7 UL-94V-0
Voltage 250V ac @ 1Min

Temperature range
Contacts -55°C to 105°C To
Contact plating Phosphor Bronze
Gold over nickel

236514

No. of Ways	Order Code	1+	25+	Price Each 50+	250+	500+
Right angle						
68	369-3739	1.36	1.19	1.02	0.88	0.79
68	109-9269 ●	2.72	2.39	2.08	1.84	1.68

18

SCSI Connectors - continued

SCSI2 High Density Connectors

PCB Mounting Sockets - Straight



- High density SCSI2 straight connector. ● Pitch 1.27mm (0.050")
- PCB Mounting.

Current		Current	
Insulation resistance	500M Ω	Temperature range	-55°C To + 105
Contact resistance	35m Ω	Contact Material	Phosphor Bronze
Insulation Material	Glassfilled PBT UL94V-0	Contact plating	Gold over nickel
Voltage	250V @1min		

369-3703 with 2 x 56 UNC screw holes, w/o rail with latch blocks
369-3715 with 4 x 40 UNC screw holes, w/o rail and latch blocks

236516

No. of Ways.	Order Code	1+	25+	50+	250+	500+
68	109-9266●	2.63	2.31	1.99	1.75	1.62
68	369-3715	1.46	1.29	1.12	0.98	0.91
68	109-9268●	1.51	1.33	1.15	1.01	0.94

SCSI2 High Density Connector

PCB Mount Sockets - Right Angle



- High Density SCSI2 connector
- 1.27 (0.050") Pitch

Current		Temperature Range	
Insulation resistance	500M Ω	Insulation Material	-55°C105°C To +
Contact resistance	35m Ω	Contact Material	Glass filled PBT UL94V-0
Voltage	250V		Phosphor Bronze, Gold over Nickel

236517/406721

No. of Ways.	Order Code	1+	25+	50+	250+	500+
50	109-9271●	2.44	2.14	1.87	1.60	1.52
68	109-9270●	2.12	1.87	1.61	1.42	1.31

18

SCSI2 Connector

IDC Cable Mount Socket



- High Density SCSI2 Socket
- 1.27 (0.50") Pitch contact spacing

Current	A	Insulator Material	PBT Glass filled
Insulation resistance	500M Ω	Voltage	250V @1min
Contact resistance	35 m Ω	Temperature range	-55°C To + 155°C

236515/406722

No. of Ways.	Order Code	1+	25+	50+	250+
50	109-9274●	0.96	0.83	0.71	0.63
68	109-9272●	1.45	1.27	1.09	0.97

REACH - SVHCs



Products containing **Substances of Very High Concern** under REACH can now be easily identified online. Look for this logo to access supporting safety datasheets at www.farnell.co.uk

SCSI2 High Density Connector

IDC Ribbon Cable - Plugs



- 1.27 (0.050") Pitch
- IDC ribbon connector

Current rating	1A	Temperature range	-55°C105°C to +
Insulation Resistance	500M Ω	Insulator Material	Glass filled PBT UL94V-0
Contact Resistance	35m Ω	Contact Material	Phosphor Bronze, Gold over Nickel
Dielectric withstand Voltage	250V @ 1min		

236513/406723

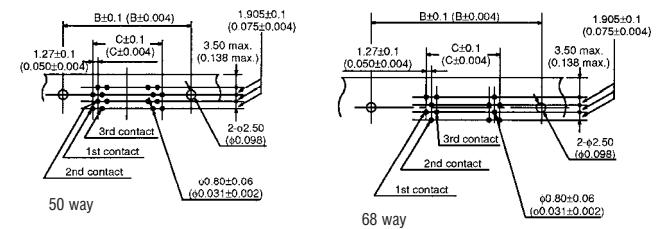
No. of Ways	Order Code	1+	25+	50+	250+
50	109-9275●	2.72	2.39	2.08	1.84
68	109-9273●	2.03	1.74	1.51	1.37

90° PCB Sockets, 50 and 68 Way



High density 90° PCB mounting 50 or 68 way sockets conforming to **ANSI** specifications for **SCSI2**.

H=10.5, W=52.45 (50 way), 63.88 (68 way), D=17.3



PCB drilling patterns

Contact rating	1A dc	Housing	Nickel plated
Contact resistance	30m Ω max. @ 6V dc 0.1A	Insulator	Black polyester, UL94V-0
Voltage rating	240V ac	Contacts	Copper Alloy
Temperature range	-55°C to +105°C		Gold over Palladium

219839

No. of Ways	Mfrs. List No.	Order Code	1+	25+	Price Each	250+	500+
50	FCN-235D050-G/E	109-7377●	6.87	6.53	6.21	6.03	5.71
68	FCN-235D068-G/E	109-7378●	10.49	9.70	9.45	9.16	8.72

Vertical PCB Sockets, 50 Way



- Shielded version without latches
- Snap in board lock

No. of Ways	A	B	C	D	P
50	52.45	30.48	46.48	34.70	3.18

Current Rating	1A	Temperature	-55°C to 105°C
Voltage Rating	30V	Housing	Black glass-filled polyester UL94V-0
Dielectric withstand voltage	500Vac	Contact	Phosphor Bronze, Gold over Nickel
Insulation resistance	1000M Ω min.	Tails	Tin plating over nickel
Contact resistance	25m Ω max.		

209829

No. of Ways	Mfrs. List No.	Order Code	1+	100+	Price Each	250+	500+	1K+
50	1587-6040	673-420●	11.27	8.85	8.07	7.06	6.17	

90° PCB Socket 50 Way

Amplimite 1.27mm (0.05")



- High density D type interface with 1.27x2.54 (0.05" x 0.1") contact centre spacing
- Excellent EM/RFI shielding
- Compatible with SCSI2, EIA RS232, IPI-2 and HIPPI standards

Housing	Black thermoplastic UL94V-0
Shell	Steel plated bright tin over copper
Contacts	Phosphor Bronze, plated Gold on mating end, Tin / Lead on termination end
Mounting holes	2-56 UNC threaded

210012

No. of Ways	Mfrs. List No.	Order Code	1+	100+	Price Each	250+
50	5787190-5	109-8654●	7.78	7.54	7.30	



Amplite



Backshell Zinc plated Nickel Over Copper
Spring Latch Stainless Steel
Strain relief staple Steel plated tin-lead over nickel

- Use with 26, 50 and 68 way cable plugs
- Available with straight and angled cable exits
- Squeeze to spring latches
- Each kit contains
 - 1 each upper and lower backshells and strain relief
 - 2 each spring latches and 2-56 screws

210013

No. of Ways	Mfrs. List No.	Order Code	1 +	Price Each	100 +	250 +
Straight Exit						
26	749608-2	109-8646●	6.87	6.58	6.38	
Angled Exit						
50	5749202-2	109-8651●	8.95	8.55	8.32	
68	5749204-2	109-8653●	10.22	9.80	9.51	

Adaptors

D-FCC-68 Adaptors



A range of adaptors for interfacing 'D' connectors to modular connectors.

The adaptors provide an easy method for using inexpensive 6 or 8 wire cable to interconnect with RS232 computer equipment. The modular socket has colour coded crimp terminations

which can be hardwired into the 'D' connector. Each kit is supplied with a grey cover and captive jack screws.

209771

Modular Socket	'D' Connector	Order Code	1 +	Price Each	25 +	50 +	100 +
RJ11	9 Way D Socket	117-9358●	4.70	4.07	3.73	3.38	
RJ11	25 Way D Plug	117-9359●	4.70	4.07	3.73	3.38	
RJ11	25 Way D Socket	117-9360●	2.73	2.37	2.22	2.01	
RJ45	9 Way D Plug	117-9361●	4.50	4.03	3.71	3.22	
RJ45	9 Way D Socket	117-9363●	4.65	4.15	3.84	3.32	
RJ45	25 Way D Plug	117-9364●	4.65	4.15	3.84	3.32	
RJ45	25 Way D Socket	117-9365●	3.02	2.69	2.49	2.15	

Modular Jack Adaptors



- One piece polycarbonate shell, housing a modular socket
- The modular socket has colour coded crimp-terminations which can be hard wired into the 'D' plug socket and then snapped into the housing
- Additional wired cables are available to enable extra pin connections. (647-871 and 648-883).
- Moulded in high temperature black polycarbonate to UL94V-0, with easy grip jack screws.

Mfrs. List No.	Farnell Order Code	Mfrs. List No.	Farnell Order Code	Mfrs. List No.	Farnell Order Code
MHDA25-PMJ8-K	429-739	MHDA9-SMJ8-K	647-846	MHDA9-PMJ6-K	647-858
MHDA25-SMJ8-K	429-740	MHDA25-PMJ6-K	647-810	MHDA9-SMJ6-K	647-860
MHDA9-PMJ8-K	647-834				

221471

RJ45 Connections	Order Code	1 +	Price Each	10 +	25 +	50 +
RJ45 to 25 Way D Plug	429-739	2.96	2.67	2.42	2.18	
RJ45 to 25 Way D Socket	429-740	2.96	2.67	2.42	2.18	
RJ45 to 9 Way D Plug	647-834	2.96	2.67	2.42	2.18	
RJ45 to 9 Way D Socket	647-846	2.96	2.67	2.42	2.18	
RJ11 Connections						
RJ11 to 25 Way D Plug	647-810	1.42	1.28	1.15	1.08	
RJ11 to 9 Way D Plug	647-858	2.84	2.55	2.30	2.14	
RJ11 to 9 Way D Socket	647-860●	2.84	2.55	2.30	2.14	

FCC-68 Modular Connectors

RJ Modular Plugs and strain relief inserts



A range of quality RJ series Modular Plugs

- High quality gold plated contacts
- Insulation piercing IDC blade contacts
- Strain relief is Ideal replacement for a moulded boot
- Ideal for volume user
- Body is glass filled polycarbonate - UL94V-0
- Standard crimp tool compatible

238497

Order Multiple=10	Mfrs. List No.	Order Code	10 +	Price Each	50 +	100 +	500 +
Ways / Contacts							
4/4	MHRJ224P4CF	393-8220●	0.102	0.080	0.067	0.057	
6/4	MHRJ116P4CR	393-8232●	0.123	0.090	0.080	0.068	
6/6	MHRJ126P6CR	393-8244●	0.136	0.102	0.090	0.081	
8/8	MHRJ458P8CR	393-8256●	0.179	0.132	0.120	0.109	
Strain Relief Inserts (only for use with 8/8 contact connector)							
Light Grey	MHRJ45SRI-LG	393-8268●	0.169	0.148	0.124	0.104	
Black	MHRJ45SRI-BK	393-8270●	0.169	0.148	0.124	0.104	
Blue	MHRJ45SRI-B	393-8281●	0.169	0.148	0.124	0.104	
Green	MHRJ45SRI-G	393-8293●	0.169	0.148	0.124	0.104	
Red	MHRJ45SRI-R	393-8300●	0.200	0.170	0.148	0.123	
Yellow	MHRJ45SRI-Y	393-8311●	0.169	0.148	0.124	0.104	

Unshielded Plugs



- Quick and easily terminated connectors
- Suitable for use with flat telephone cable.

90075-0027 90075-0031

No. of Ways/Contacts	Type	Length	Width	Mfrs. List No.	Order Code
4/4	—	12.32	7.62	90075-0027	112-5135
6/4	RJ11	12.32	9.65	90075-0035	112-5136
6/6	RJ12	12.32	9.65	90075-0031	112-5137
8/8	RJ45	12.32	11.68	90075-0141	112-5139

209679

No. of Ways/Contacts	Order Code	1 +	Price Each	100 +	250 +
Short Body					
4/4	112-5135●	0.66	0.54	0.50	
6/4	112-5136●	0.59	0.48	0.43	
6/6	112-5137●	0.75	0.58	0.53	
8/8	112-5139●	0.89	0.70	0.62	

Unshielded Plugs



- Suitable for flat cable connection

Housing: Polycarbonate
Contact surface: Gold plated, 6µm
Isolation resistance: 500mΩ
35mΩ

Mfrs. List No.	Contacts/Loaded	Order Code
P126	4/4	124-3233
P127	6/4	124-3234
P128	6/6	124-3235
P129	8/8	124-3236

239696

Mfrs. List No.	Order Code	1 +	Price Each	10 +	50 +	100 +
P126	124-3233●	0.061	0.049	0.039	0.038	
P127	124-3234●	0.061	0.049	0.039	0.038	
P128	124-3235●	0.085	0.062	0.061	0.048	
P129	124-3236●	0.210	0.183	0.146	0.123	

IDC Plugs

4/4, 6/4, 6/6 and 8/8 Way



▲ Denotes pin 1

4 and 6 way, short body

8 way, long body

- IDC plugs commonly used in both telecommunications and computer equipment.
- Two styles - handset and standard line plugs with a wide contact area for ease of crimping
- The handset plugs are mostly used to interconnect a telephone handset to the base unit
- The 8 way 8 contact version is also available with a polarising side key and is mainly used in computer applications

221433 NET111

No. of Ways/Contacts	Type	Order Code	1 +	Price Each	25 +	50 +	100 +	250 +	500 +
Handset Plug									
4/4	—	965-7347●	0.310	0.270	0.220	0.198	0.185	0.157	
Line Plugs									
6/4	RJ11	965-7355●	0.360	0.320	0.270	0.198	0.185	0.157	
6/6	RJ12	965-7363●	0.330	0.300	0.260	0.210	0.200	0.180	
8/8	RJ45	965-7371●	0.500	0.460	0.420	0.370	0.340	0.310	
8/8 + keyway	—	121-1733●	0.550	0.490	0.430	0.360	0.340	0.310	

18

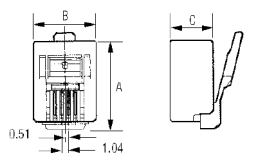


FCC-68 Modular Connectors - continued

Unshielded Plugs



RJ11 MMJ RJ45



- Modular plugs featuring mirror smooth contact surfaces with extended mating life
- Datcom and mobile communication applications
- The plugs have dual point contacts and are available in flat, oval or round cable versions
- Approved to **CSA, UL** recognised and manufactured to **FCC** docket 20780.

Contact rating	1.5A @ 30V ac/42V dc	Housing	Clear Polycarbonate, UL94V-0
Contact resistance	10mΩ max.	Contacts	Phosphor Bronze
Dielectric strength	1000V rms	Plating	50µinch gold over 100µinch nickel
Insulation resistance	500MΩ min.	Temp. range	-40°C to +125°C
Mating cycles	1000	Suitable wire size	24, 26, 28 AWG, 0.96mm dia.

Mfrs. List No.	No. of Positions	Type	Cable Type	Length A (mm)	Width B (mm)	Height C (mm)	Order Code
----------------	------------------	------	------------	---------------	--------------	---------------	------------

Stranded Conductors

937-SP-3044	4	—	Flat / Oval	13.3	7.6	6.6	429-752
937-SP-3066	6	RJ11	Flat / Oval	13.3	9.6	6.6	429-764
937-SP-3066R	6	RJ11	Round	13.3	9.6	6.6	429-776
937-SP-3066R-OST	6	MMJ	Round	13.3	9.6	6.6	429-788
937-SP-3066-OST	6	MMJ	Flat / Oval	13.3	9.6	6.6	429-790
937-SP-3088R	8	RJ45	Round	22.5	11.7	7.9	429-806

Solid or Stranded Conductors

940-SP-3044	4	—	Flat / Oval	13.3	7.6	6.6	429-818
940-SP-3066	6	RJ11	Flat / Oval	13.3	9.6	6.6	429-820
940-SP-3066R	6	RJ11	Round	13.3	9.6	6.6	429-831
940-SP-3066-OST	6	MMJ	Flat / Oval	13.3	9.6	6.6	429-855
940-SP-3088R	8	RJ45	Round	22.5	11.7	7.9	429-867

NET98/221639

10 Per Pack

No. of Positions	Order Code	1+	10+	25+
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Stranded Conductors

4	429-752●	2.50	2.25	2.09
6	429-764●	3.22	2.88	2.69
6	429-776●	3.22	2.88	2.69
6	429-788●	4.75	4.49	4.18
6	429-790●	4.75	4.49	4.18
8	429-806●	4.86	4.38	4.07
4	429-818●	2.50	2.25	2.09
6	429-820●	3.22	2.88	2.69
6	429-831●	3.22	2.88	2.69
6	429-855●	4.75	4.49	4.18
8	429-867●	4.86	4.38	4.07

Unshielded 8 Way RJ45 Plug



- Unshielded 8 position RJ45 plug ideal for constructing patch leads
- Suitable for terminating round cable

Housing	Clear Polycarbonate
Contacts	Phosphor Bronze
Plating	1.27µm gold in localised gold. Plate area, gold flash over the remainder, over 2.54µm nickel
Suitable wire	0.74mm to 0.99mm dia. stranded wire, 26 or 28 AWG with a 5.34mm dia. max. jacket

221459

10 Per Pack

Order Code	1+	10+
------------	----	-----

546-124●

14.38

13.82

High Performance RJ45 Connectors



Plugs

- Exceed TIA/EIA-568A requirements of UTP applications
- Supplied with a load bar to aid installation with a 1.26mm twist
- Designed 24 AWG stranded cable with a maximum diameter of .99mm

Crimp tool

- Cut and strip blades incorporated within the tool
- Ratchet mechanism

221605

Mfrs. List No.

Order Code

1+

10+

25+

100+

High Performance Plugs

UTP 5-558530-3 307-3464● 0.41 0.38 0.36 0.35

FTP 5-569552-3 120-5942● 0.89 0.84 0.80 0.78

Tooling

Professional Crimp Tool 3-231652-0 307-3488 161.15 142.78 -- --

Shielded 8 Way RJ45 Plug



- Shielded 8 position RJ45 plug ideal for constructing patch leads
- Suitable for terminating flat oval cable

Housing	Clear Polycarbonate
Shield	Copper Alloy plated with 2.03µm min. tin lead over 2.54µm min. copper
Plating	Phosphor bronze
	1.27µm min. gold in localised gold plate area, gold flash over the remainder, over 2.54µm min. nickel
Suitable wire	0.74mm to 0.99mm dia. stranded wire, 26 or 28 AWG with a 2.80mm x 9.02mm maximum jacket

FOR SUITABLE CRIMP TOOL SEE ORDER CODE 546-148

221458

5 Per Pack

Order Code

546-136●

1+

13.57

Price Per Pack

10+

12.97

RJ45 Shielded Standard



- Compact shielded Plug
- 8 position, 8 contacts
- Meet FCC Rules and Regulations, part 68
- Accommodates 24 to 28 AWG wire
- Mate with any FCC accepted jacks, shielded or unshielded
- UL Recognised and CSA Certified

Contact Rating	150V at 1.5A	Material	Polycarbonate.
Withstand Voltage	1000V ac	Body	UL94V-2
Insulation Resistance	500Mohm	Flamability	Phosphor Bronze
Durability	750 mating cycles	Contact	Gold / Nickel
Temperature Range	-40°C to 60°C	Contact Plating	

334965

Cable Type

Mfrs. List No.

Order Code

1+

10+

50+

100+

Price Each

Stranded

5-569532-2

118-7824●

0.98

0.88

0.81

0.73

Solid

5-569530-2

473-9565●

0.50

0.45

0.42

0.39

Crimp Tool

2-231652-1

218-9483

138.17

RJ45 EMT Shielded

Cat5e, for all EMV requirements



- Very high performance modular plug
- 8 position, 8 contacts
- Suitable for shielded round cable up to 6mm outside diameter: FTP, S-UTP, S-FTP and PIMF
- Shielded contacts using AMP Hex-Crimps to meet the very high demands of the EMV-standards
- Separate external strain relief - 5 colours
- UL Recognised and CSA Certified

Contact Rating	150V at 1.5A	Material	Polycarbonate
Withstand Voltage	1000V ac	Body	UL94V-2
Insulation Resistance	500Mohm	Flamability	Brass
Durability	750 mating cycles	Contact	Selective Gold
Temperature Range	-40°C to 60°C	Contact Plating	

334967/406725

Description

Mfrs. List No.

Order Code

1+

10+

50+

100+

Price Each

Plug

336330-1

473-9504●

0.670

0.610

0.600

0.580

Crimp Tool

539690-1

785-4692

431.610

Strain Relief

Colour

10+

50+

100+

500+

Grey

737893-2

473-9590●

0.250

0.220

0.199

0.174

Red

737893-3

473-9607●

0.250

0.220

0.199

0.174

Green

737893-5

473-9620●

0.250

0.220

0.199

0.174

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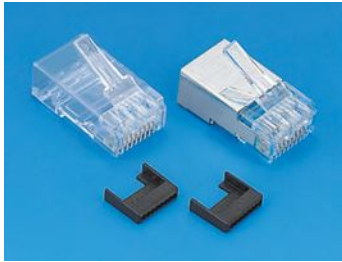


08447 11 11 22



techsales@farnell.co.uk

Live technical chat at
www.farnell.co.uk

RJ45 Shielded Cat5e

- One-piece construction with pre-loaded contacts
- 8 position, 8 contacts
- Exceed FCC and TIA/EIA-568A requirements
- Accommodates 24 or 26 AWG wire
- Selectively gold plated terminals
- UL Recognised and CSA Certified

Contact Rating
Withstand Voltage
Insulation Resistance
Durability
Temperature Range

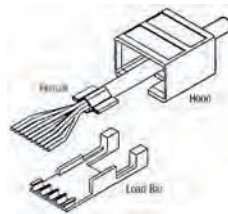
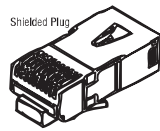
150V at 1.5A
1000V ac
500Mohm
750 mating cycles
-40°C to 60°C

Material
Body
Flammability
Contact
Contact Plating

Polycarbonate
UL94V-2
Phosphor Bronze
Gold over Nickel

334966/406724

Description	Mfrs. List No.	Order Code	1+	10+	50+	100+
Stranded Cable						
Plug	5-569552-2	473-9589	1.34	1.17	1.07	0.99
Crimp Tool	3-231652-0	307-3488	161.15	142.78		

Shielded 8 Way RJ45 Plugs

- Fully shielded plugs designed for ease of termination and assembly and to minimise EMI/RFI
- Approved to **UL** and **CSA** and manufactured to FCC docket 20780.
- A four piece assembly consisting of a strain relief ferrule which clamps the braid and also contacts directly on to the shielded plug
- A load bar holds twisted pair wires firmly in place during assembly
- A black flexible hood clicks over the plug housing

Contact rating 1.5A @ 30V ac/42V dc
Contact resistance 10mΩ max.
Dielectric strength 1000V rms
Insulation resistance 500MΩ min.
Mating cycles 1000 min.

Housing Shield
Contacts Phosphor Bronze
Plating 50µinch gold over 100µinch nickel
Suitable wire 24, 26, 28 AWG, 0.96mm dia.

Mfrs. List No.: 937-SP-360808 = 430-031, 940-SP-360808 = 430-043

221427

5 Per Pack	Order Code	1+	5+	20+	50+	100+
Stranded wire	430-031	10.01	9.05	8.02	7.11	6.54
Solid wire	430-043	10.34	9.31	8.34	7.37	6.67

Shielded 8 Way RJ45 Plug

- Shortbody RJ45 plug suitable for CAT5 shielded twisted pair plastic cable.
- Plastic housing has an integrated wire manager
- Loaded IDC terminals have two contact points
- The metal shield ensures optimum protection due to a hex crimp on the cable
- A short grey boot is included

Contact rating 1.5A@ 125V ac
Contact resistance 10mΩ max.
Dielectric strength 1000V rms
Contacts Phosphor Bronze
Plating 1.3µm Gold over Nickel
Insulation resistance 500MΩ min.

Mating cycles 500
Frequency 30 to 150Mhz
Housing Clear Polycarbonate, UL94V-0
Shielding Brass, tin plated
Suitable wire 28 AWG, 5.4mm O.D.
Temp. range -40°C to +80°C

Mfrs. List No. 95043-2891

219838

5 Per Pack	Order Code	1+	5+	20+	50+	100+
	997-3885	12.33	11.04	9.71	9.26	8.81

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**Strain Relief Boots**

RJ45



- Protection for terminated plugs
- Nine colours available for easy cable recognition
- This neoprene strain relief boot offers protection against strain on cable connections
- Designed for fitment on RJ45 data plugs the strain relief will accept standard 4 Pair UTP and STP cable
- Strain relief boots can be used with the shielding cans (728-780) below, to provide both shielded and protected termination

221529

8 Per Pack	Order Code	1+	10+	50+
Black	728-950	1.97	1.73	1.38
Light Grey	728-962	1.97	1.73	1.38
Dark Grey	728-640	1.97	1.73	1.38
Blue	728-652	1.97	1.73	1.38
Yellow	728-664	1.97	1.73	1.38
Red	728-676	1.97	1.73	1.38
Green	728-688	1.97	1.73	1.38
White	728-690	1.97	1.73	1.38
Purple	728-706	1.97	1.73	1.38

Modular Connectors, Cat 6

Plugs



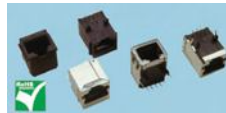
- Designed for solid and stranded conductors
- Meets EIT/TIA Category 6 component standard when terminated to Category 6 compliant cable
- Electro-polished contacts for minimum of 1000 insertion cycles
- Loadbar for ease of assembly
- Field installable with Category 6 termination tool
- Shielded and unshielded plugs available

New

Plug Body Material Polycarbonate
Contact Material Copper Alloy
Contact Plating Gold
No. of Ways 8
LAN Category Cat6
Flammability Rating UL94V-0

Description	Mfrs. List No.	Order Code	5+	50+	100+	500+
Unshielded for un-splined cable	SS-39100-008	157-2183	0.93	0.83	0.78	0.72
Unshielded for splined cable	SS-39100-011	157-2184	0.93	0.83	0.78	0.72
Shielded	SS-39200-011	157-2185	1.45	1.35	1.30	1.19

Jacks



- Preloaded, formed wire contacts offer superior mechanical and electrical performance
- Through hole jacks for PCB soldering
- Designed for Category 6 patch panel and wall jack applications
- Vertical, right angle, shielded and unshielded jacks available
- Minimum of 1000 insertion cycles

Plug Body Material Thermoplastic
Contact Material Copper Alloy
Contact Plating Gold
No. of Ways 8
LAN Category Cat6
Flammability Rating UL94V-0

Description	Mfrs. List No.	Order Code	1+	10+	50+	100+
Vertical, unshielded	SS-60000-007	157-2186	2.59	2.27	1.87	1.55
Vertical, shielded	SS-60000-008	157-2187	2.79	2.49	2.07	1.76
R/A, shielded	SS-60000-009	157-2188	2.79	2.49	2.07	1.76
R/A, unshielded	SS-60000-010	157-2189	2.59	2.27	1.87	1.55

Cat6a Jacks

- Easily compensated to CAT6a performance levels through an integrated flexible circuit board design
- Flexible PCB design helps cancel Near End Cross Talk (NEXT) at the plug / jack interface
- Right angle mount, shielded jack
- Minimal secondary compensation required due to the jack's construction
- Selectively plated contacts with 50 micro-inches of gold
- Designed for use in 10 Gigabit Ethernet applications
- UL 94V-0 plastic
- Wave solder compatible

Description	Mfrs. List No.	Order Code	1+	10+	50+	100+
R/A, shielded	SS-60300-010	157-2190	4.01	3.64	3.35	2.93

Hand Tools

Professional hand tools for the assembly of shielded and unshielded Cat 6 plugs.

FCC-68 Modular Connectors - continued

Modular Connectors, Cat 6 - continued

Hand Tools - continued

524711

Description	Mfrs. List No.	Order Code	Price Each
Unshielded	2980047-01	157-2197	92.14
Shielded	2980075-01	157-2198	248.47

Unshielded 10 Way RJ48 Plug



- UL recognised - File No. E132408 (N)
- Complies with F.C.C requirements

Contact rating 1.5A @ 30V ac/42V dc
Contact resistance 10mohm
Mating cycles 1000
Housing Clear Polycarbonate, UL94V-0

Contacts Phosphor Bronze
Plating 50µinch gold over 100µinch nickel
Conductor ∅ 0.965mm

Mfrs. List No.: 9940SP301010R

431732

	Order Code	1+	Price Per Pack (5)	
			10+	50+
RJ48 Plug	112-2287●	5.46	4.55	3.98
Price Each				
Crimp Tool	308-9599	88.58		
Die Set	121-1551	30.85		

Modular Jacks

Shielded and Unshielded



- Unshielded jacks are through hole mount
- Shielded jacks are panel and PCB ground through hole mount

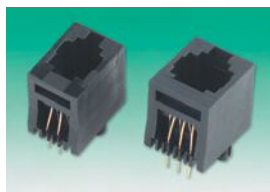
Voltage 150V
Current Rating 1.5A
Housing Polyester, Black, UL94V-0

Contacts Phosphor Bronze, Gold plated
Durability 750 mating cycles

451169

Contacts	Mfrs. List No.	Order Code	1+	50+	100+	250+
R/A - Through Hole						
4/4	1-1705949-1	128-4335●	0.26	0.25	0.23	0.22
6/6	1-1705950-1	128-4337●	0.35	0.33	0.31	0.30
8/8	1-1705951-1	128-4338●	0.44	0.41	0.39	0.37
R/A - SMT						
6/6	5557314-1	152-2225●	0.84	0.75	0.71	0.62
8/8	5555764-1	152-2226●	0.70	0.63	0.61	0.53
Top Entry - Through Hole						
4/4	5520257-2	128-4339●	0.35	0.32	0.31	0.29
6/6	216548-1	128-4341●	0.39	0.36	0.35	0.33
8/8	216550-1	128-4342●	0.44	0.41	0.39	0.37
Top Entry - SMT						
6/6	1-338086-3	152-2227●	1.00	0.90	0.86	0.73
8/8	1-338088-3	152-2228●	0.76	0.68	0.65	0.57
R/A Shielded - Panel and PCB Ground Through Hole						
6/6	5555140-1	128-4343●	0.54	0.50	0.48	0.46
8/8	106066-2	128-4345●	1.04	0.97	0.93	0.88

Modular Jacks - Vertical and Right Angle PCB Mount



A range of right angle and vertical PCB mounted modular jacks

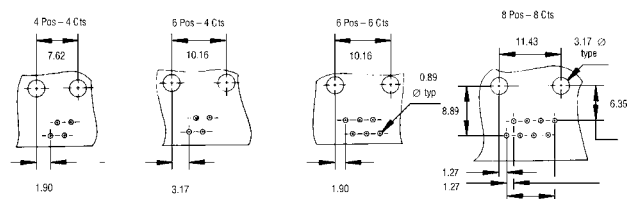
- Shielded or Unshielded options
- Compatible with industry standard PCB layouts
- Pre tinned solder terminals

Contact Material Phosphor Bronze
Contact Plating Gold over Nickel

238499

Contacts	Mfrs. List No.	Order Code	1+	10+	100+
RA Unshielded					
4/4	MHRJJ44NFRA	393-8335●	0.34	0.31	0.29
6/4	MHRJJ64NFRA	393-8347●	0.36	0.33	0.31
6/6	MHRJJ66NFRA	393-8359●	0.50	0.46	0.44
RA Shielded					
6/6	MHRJJ66NFRAS	393-8372●	0.67	0.63	0.60
8/8	MHRJJ88NFRAS	393-8384●	0.90	0.85	0.80
Vertical Unshielded					
4/4	MHRJJ44NFV	393-8396●	0.34	0.31	0.29
6/4	MHRJJ64NFV	393-8402●	0.36	0.33	0.31
6/6	MHRJJ66NFV	393-8414●	0.50	0.46	0.44
8/8	MHRJJ88NFV	393-8426●	0.54	0.50	0.46
Vertical Shielded					
8/8	MHRJJ88NFVS	393-8438●	0.90	0.85	0.82

Unshielded Flush Mount Panel / PCB Sockets

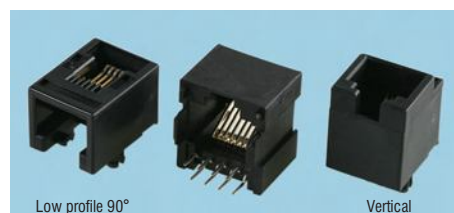


Housing	Black Polyester UL94V-0	Contacts	Phosphor BronzeGold	Plating	Level 1 - 30µinch gold	Level 2 - 50-60µinch gold	Order Code
Mfrs. List No.	No. of Ways/Contacts	Plating Level	H	Socket W	D	Panel Cut-out H W	
95009-2441	4/4	1	11.56	16.38	20.6	16.38 x 11.56	973-2055
95009-2641	6/4	1	13.59	16.38	20.6	16.38 x 11.56	973-2063
95009-2661	6/6	1	13.59	16.38	20.6	16.38 x 11.56	973-2071
95009-2881	8/8	2	15.62	16.38	20.6	16.38 x 11.56	973-2535

209680

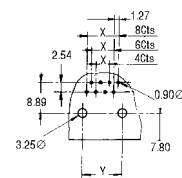
No. of Ways/Contacts	Order Code	1+	10+	100+	500+
4/4	973-2055●	1.14	1.04	0.92	0.83
6/4	973-2063●	1.27	1.12	1.00	0.93
6/6	973-2071●	1.35	1.20	1.06	0.98
8/8	973-2535●	1.66	1.48	1.29	1.04

Unshielded Low Profile PCB Sockets



- UL recognised and CSA approved

Contact rating 1.5A @ 125V dc
Contact resistance 20mΩ max.
Dielectric strength 1000V ac
Insulation resistance 500MΩ min.
Mating cycles 50
Housing Black Polyester, UL94V-0
Contacts Phosphor Bronze
Plating 1.3µm gold on nickel
Temp. range -40°C to +80°C



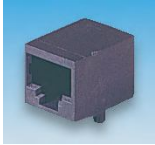
No. of Ways/Contacts	H	W	D	X	Y	Mfrs. List No.	Order Code
Low Profile 90°							
4/4	11.5	11.18	18.1			95501-2441	156-0167
6/4	11.5	18.1	3.81	10.16	95501-2641		156-0166
6/6	11.5	13.21	18.1	6.35	10.16	95501-2661	153-6490
8/8	11.5	15.24	18.1	8.89	11.43	95501-2881	152-4544
Vertical							
4/4	15.7	13.21	15.08	3.81	10.16	95503-2641	157-2017
6/6	15.7	11.18	15.08	6.35	10.16	95503-2661	162-0210
8/8	15.7	15.24	15.08	8.89	11.43	95503-2881	162-0209

209802

No. of Ways/Contacts	Order Code	1+	10+	50+
Low Profile 90°				
4/4	156-0167●	0.73	0.54	0.40
6/4	156-0166●	0.36	0.34	0.30
6/6	153-6490●	0.99	0.74	0.69
8/8	152-4544●	1.37	1.19	1.09
Vertical				
4/4	157-2017●	1.11	0.80	0.58
8/8	162-0209●	1.32	0.94	0.69

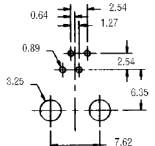
Unshielded PCB Sockets

bel Stewart Connector

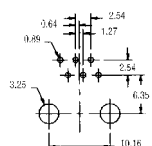


90°

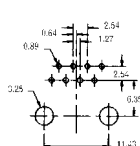
Vertical with panel stop



4 Position



6 Position



8 Position

- Fully enclosed housings approved to **CSA, UL** recognised and manufactured to **FCC** docket 20780

Contact rating	1.5A @ 30V ac/42V dc	Mating cycles	1000
Contact resistance	10mΩ max.	Housing	Black Polyester, UL94V-0
Dielectric strength	1000V rms	Contacts	Phosphor Bronze
Insulation resistance	500MΩ min.	Plating	30µinch gold over 75µinch nickel

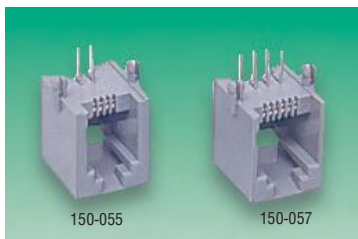
No. of Positions	Type	Dimensions (mm)	Mfrs. List No.	Order Code
Low Profile 90°				
4	RJ11	12.83 11.3 20.7	SS-6444-NF	113-7972
6	RJ11	12.83 13.84 20.7	SS-6466-NF	113-7973
8	RJ45	12.83 15.37 20.7	SS-6488-NF	113-7974
Vertical				
6	RJ11	16.51 16 16.36	SS-6566-FLS	113-7975
8	RJ45	16.51 18.03 16.36	SS-650810-FLS	113-7976

221426

No. of Positions	Order Code	1+	10+	50+	100+	250+
Low Profile 90°						
4	113-7972●	1.39	1.29	0.77	0.75	0.69
6	113-7973●	1.75	1.63	1.00	0.95	0.85
8	113-7974●	2.15	2.00	1.18	1.14	1.05
Vertical						
6	113-7975●	2.77	2.49	2.05	1.82	1.54
8	113-7976●	2.52	2.28	2.01	1.78	1.51

Unshielded Narrow Profile PCB Sockets

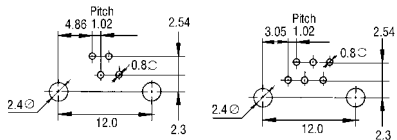
molex



H=14.5, W=12.2, D=13.0



H=14.5, W=15.0, D=13.0



Housing: Grey Glass filled Polyester UL94V-0
Contact: Phosphor Bronze. 4µinch gold plated in contact area, over 40µinch nickel plating.
Solder area dip tinned.

Mfrs. List No. 52018-4416=978-6090, 52018-6616=978-6112, 52018-6415=978-6104, 52018-8816=121-1012

209681

No. of Ways/Contacts	Order Code	1+	10+	100+	500+
4/4	978-6090●	0.66	0.63	0.60	0.58
6/6	978-6112●	0.91	0.84	0.81	0.77
8/8	121-1012●	1.48	1.34	1.21	1.10



40,000 PRICES REDUCED

RoHS Compliant Non-compliant



08447 11 11 11

Fax: 08447 11 11 12 1895

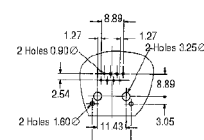
Shielded Low Profile 8 Way RJ45 PCB Sockets

molex



Right angle

Vertical



- Footprint meets industry standard
- Metal shielding for ESD protection
- Mates with industry standard FCC 68 plugs

Contact rating	A@ 125V	Housing	LCP, UL94V-0
Contact resistance	mΩ max	Contacts	Brass
Dielectric strength	V ac	Plating	1.3µm Gold
Insulation resistance	MΩ min	Temp range	°C to +°C
Mating cycles			

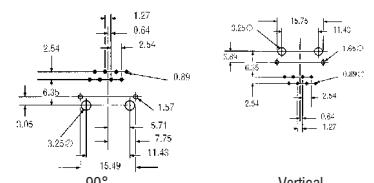
Type	H	W	D	Mfrs List No.	Order Code
Right Angle (Cat 3)	11.5	15.24	18.1	95540-2881	160-2633
Vertical (Cat 5)	16.2	15.24	16.4	95552-2887	162-0208

209800

Type	Order Code	1+	10+	50+	100+
Right Angle - Cat 3	160-2633●	2.88	2.67	2.48	2.26
Vertical - Cat 5	162-0208●	2.88	2.67	2.48	2.26

Shielded 8 Way RJ45 PCB Sockets

bel Stewart Connector



H=13.84, W=15.88, D=21.21 H=17.02, W=17.02, D=15.88

- Fully shielded sockets approved to **UL** and **CSA** and manufactured to **FCC** docket 20780

Contact rating	1.5A @ 30V ac/42V dc	Housing	Black Polyester, UL94V-0
Contact resistance	10mΩ max.	Shield	Brass, tin plated
Dielectric strength	1000V rms	Contacts	Phosphor Bronze
Insulation resistance	500MΩ min.	Plating	50µinch gold over 100µinch nickel
Mating cycles	1000		

Mfrs. List No.: SS6488S-NF = 113-7977, SS650810S-A-FLS = 113-7978

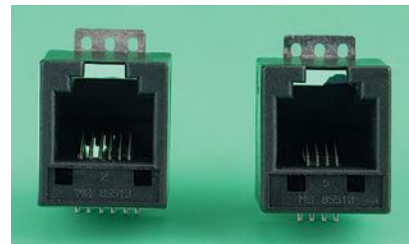
221428

	Order Code	1+	10+	50+	100+	250+
90°	113-7977●	3.59	3.33	2.89	2.65	2.41
Vertical	113-7978●	4.63	4.28	3.77	3.43	3.13

Modular Jacks

SMT, Vertical Low Profile

molex



- 0.10mm (.004") coplanarity
 - Recommended PCB thickness 1.57mm (.062")
- | | | | |
|-----------------------|-------|-------------------|-----------------------------|
| Voltage | 125V | Housing | Black Polyamide 4/6 UL94V-0 |
| Current Rating | 1.5 | Contacts | Phosphor Bronze |
| Contact Resistance | 20mΩ | Plating | Gold |
| DWV | V | Temperature Range | -40°C to 80°C |
| Insulation Resistance | 500MΩ | | |

233709

Circuits	Loaded Circuits	Mfrs. List No.	Order Code	1+	10+	50+	100+
6	6	85513-5014	NEW 138-8980●	0.79	0.63	0.54	0.51
8	8	85513-5013	NEW 134-5055●	1.10	0.90	0.77	0.72

Modular Jacks

SMT, Right Angle Low Profile

molex



- Low profile - 11.5mm high

- 0.10mm coplanarity

FCC-68 Modular Connectors - continued

Modular Jacks - continued

SMT, Right Angle Low Profile - continued

Voltage	125V	Housing	Black Polyamide 4/6 UL94V-0
Current Rating	1.5A	Contacts	Phosphor Bronze
Contact Resistance	20mΩ	Plating	Gold
Insulation Resistance	500MΩ	Temperature Range	-40°C to 80°C

232118

Circuits	Loaded Circuits	Mfrs. List No.	Order Code	1+	10+	50+	100+
4	4	85502-5005	138-8978●	0.62	0.52	0.44	0.40
4	4	85502-5006	147-1565●	0.66	0.56	0.46	0.44
6	6	85502-5007	138-8979●	0.65	0.55	0.46	0.44
8	8	85502-5008	133-1561●	0.67	0.56	0.47	0.45

Modular Jacks
Shielded

925-1910

Voltage	125V	Housing	Black Phosphor Bronze UL94V-0
Current Rating	1.5A	Contacts	Phosphor Bronze
Contact Resistance	10mΩ	Plating	Gold
DWV	1000V	Temperature Range	-40°C to 80°C
Insulation Resistance	500MΩ		

233718

Circuits	Loaded Circuits	Mfrs. List No.	Order Code	1+	10+	50+	100+
Right Angle Standard Profile (Cat3)							
8	8	0446200002	925-1910●	1.59	1.44	1.32	1.19
Vertical Standard Profile (Cat3)							
8	8	95623-2881	157-2013●	1.01	0.84	0.67	0.63
Vertical Low Profile (Cat5)							
8	8	85508-5001	160-2634●	1.35	1.21	1.10	1.03

Double Modular Jack

SMT, Right Angle Low Profile



- Surface mount solder tab provides retention to the PCB and strain relief for PC tails
- Side-to-side stackable for modular configurations
- 0.15mm max. nail-to-tail coplanarity ensures high reliability during surface mount soldering

Voltage	125V	Housing	Black PA Polyamide (Nylon) UL94V-0
Current Rating	1.5	Contacts	Phosphor Bronze
Contact Resistance	10mΩ	Contact Plating	Gold
DWV	1000V	Temperature Range	-40°C to 80°C
Insulation Resistance	500MΩ		

411008

Circuits	Loaded Circuits	Mfrs. List No.	Order Code	1+	10+	50+	100+
8	8	0441930003	925-1901●	2.02	1.82	1.63	1.51

High Speed Modular Jacks

Flangeless Low Profile



- Category 5E performance
- Footprint meets industry standard
- Mates with industry standard FCC 68 plugs

Voltage	125V	Insulation Resistance	MΩ
Current Rating	1.5A	Contacts	Phosphor Bronze
Contact Resistance	mΩ	Plating	Gold
DWV	1000V	Temperature Range	-40°C to 80°C

411037

Circuits	Loaded Circuits	Mfrs. List No.	Order Code	1+	10+	50+	100+
Shielded							
8	8	85505-5113	156-0163●	1.22	1.10	1.01	0.93
SMT Shielded							
8	8	85543-5001	134-5053●	1.55	1.41	1.26	1.18

Inverted Modular Jack

Low Profile



- Inverted plug latch on top for easy insertion and extraction
- Mating contacts on bottom of inverted jack provide shorter leads to reduce electrical noise
- Connector designed for through hole PCB mounting and pin-through-paste soldering
- Cat 3 performance

Voltage	125V	Housing	Black PA Polyamide (Nylon) UL94V-0
Current Rating	1.5	Contacts	Phosphor Bronze
Contact Resistance	10mΩ	Contact Plating	Gold
DWV	1000V	Temperature Range	-40°C to 80°C
Insulation Resistance	500MΩ		

411086

Circuits	Loaded Circuits	Mfrs. List No.	Order Code	1+	10+	50+	100+
8	8	0438600001	925-1898●	0.73	0.65	0.61	0.55

Unshielded 90° PCB Sockets

10 Way - RJ48



- UL recognised and manufactured to FCC requirements

Contact rating	1.5A @ 30V ac/42V dc	Housing	Black Thermoplastic, UL94V-0
Contact resistance	10mΩ max.	Contacts	Copper Alloy
Mating cycles	1000	Plating	30µinch Gold over Nickel

431734

Order Code	1+	10+	50+	100+	250+
112-2288●	2.76	2.51	2.28	2.05	1.89

Unshielded, Vertical PCB Sockets



- FCC compliant - part 68, subpart f
- 4-6 and 8-position receptacles
- Horizontal and vertical entry styles
- Drawn wire contacts
- Meets industry standard jack-to-board footprints

- Available with snap or diamond shaped mounting pegs
- FCC approved GXT™ plating
- UL Recognised and CSA approved

Current rating	2 amp dc	Contact Spring	Phosphor Bronze
Withstanding voltage	1000 kV rms, 60Hz	Body material	Thermoplastic resin(UL94V-0)
Insulation resistance	500M Ohms min	Durability	250 cycles
Contact resistance	20m Ohm max		

221506

Number of Ways/Contacts	Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
Vertical Jack - Diamond Peg							
4/4	69253-001LF	109-7907●	0.710	0.520	0.440	0.370	0.360
6/6	69254-001LF	109-7909●	0.690	0.390	0.320	0.280	0.270
8/8	69255-001LF	109-7912●	0.760	0.660	0.590	0.540	0.490
Vertical Jack - Snap Peg							
4/4	90511-001LF	109-7913●	0.360	0.340	0.290	0.270	0.220
6/6	90512-001LF	109-7914●	1.050	0.580	0.470	0.400	0.380
6/4	90512-003LF	109-7915●	0.210	0.178	0.161	0.143	0.123
8/8	90598-001LF	109-7916●	1.450	0.840	0.670	0.570	0.540

Unshielded, Horizontal PCB Sockets



- FCC compliant - part 68, subpart f
- 4-6 and 8-position receptacles
- Horizontal and vertical entry styles
- Drawn wire contacts
- Meets industry standard jack-to-board footprints
- Available with snap or diamond shaped mounting pegs

- FCC approved GXT™ plating

Current rating	2 amp dc	Contact Plating (Finish)	Gold / Nickel
Withstanding voltage	1000 volts rms, 60Hz	Contact Spring	Phosphor Bronze
Insulation resistance	500 Ohms min	Body material	Thermoplastic Resin
Contact resistance	20 Ohm max		Black
Electrical performance meets or exceeds EIA/TIA 568A specifications		Durability	250 cycles

221505

No. of Ways/ Contacts	Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
Horizontal Low Profile Jack - Snap Peg							
4/4	87180-044LF	109-7902●	0.83	0.60	0.50	0.43	0.39
6/4	87180-064LF	109-7903●	0.66	0.58	0.48	0.42	0.37
6/6	87180-066LF	109-7904●	1.10	0.58	0.47	0.40	0.38
8/8	87180-088LF	109-7905●	1.24	0.63	0.53	0.46	0.41
6/6	68898-001LF	109-7906●	0.33	0.30	0.26	0.22	0.21

Shielded Filtered Jack



- UL Recognised and CSA approved
- FCC compliant - part 68, subpart f
- Horizontal RJ-45 style
- Drawn wire contacts
- Meets industry standard jack-to-board footprints
- According to the EIA/TIA 568, TSB 31, 40 \ specifications
- FCC approved GXT™ plating

Current rating	2 amp dc	EIA/TIA 568A specifications					
Withstanding voltage	60 volts rms, 60Hz	Contact Plating (Finish)	Gold / Nickel				
Insulation resistance	500 Ohms min	Contact Spring	Phosphor Bronze				
		Body material	Thermoplastic Resin				
Contact resistance	20 Ohm max		Black				
Electrical performance meets or exceeds		Durability	250 cycles				

221504

No. of Ports	Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
1	95672-001LF	121-1641●	6.11	5.35	4.62	4.15	3.70

Unshielded Gang Jack



- CSA Approved and UL Recognised
- FCC compliant - part 68, subpart f
- Horizontal RJ-45 style
- Unshielded version
- Available with 8 ports
- Drawn wire contacts
- Meets industry standard jack-to-board footprints
- According to the EIA/TIA 568, TSB 31, 40 specifications
- FCC approved GXT™ plating

Current rating	2 amp dc	EIA/TIA 568A specifications					
Withstanding voltage	1 kV rms, 60Hz	Contact Plating (Finish)	Gold over Nickel				
Insulation resistance	500 Ohms min	Contact Spring	Phosphor Bronze				
		Body material	Thermoplastic Resin				
Contact resistance	20 Ohm max		Black				
Electrical performance meets or exceeds		Durability	250 cycles				

221501

No. of Ports	Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
8	94911-008MLF	109-7899●	6.10	5.66	5.41	4.97	4.87

Shielded Gang Jack



- CSA Approved and UL Recognised
- FCC compliant - part 68, subpart f
- Horizontal RJ-45 style
- Shielded, unshielded, filtered and Category 5 versions available
- Available with 1 or 8 ports

- Drawn wire contacts
- Meets industry standard jack-to-board footprints
- According to the EIA/TIA 568, TSB 31, 40 specifications
- FCC approved GXT™ plating

Current rating	2 amp dc	EIA/TIA 568A specifications					
Withstanding voltage	1kV rms, 60Hz	Contact Plating (Finish)	Gold / Nickel				
Insulation resistance	500 Ohms min	Contact Spring	Phosphor Bronze				
		Body material	Thermoplastic Resin				
Contact resistance	20 Ohm max		Black				
Electrical performance meets or exceeds		Durability	250 cycles				

221503

No. of Ports	Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
1	94910-001MLF	121-1637●	2.68	2.38	2.01	1.88	1.60
4	94910-004MLF	109-7898●	5.59	4.98	4.35	3.93	3.50
8	94910-008MLF	121-1639●	5.59	5.20	4.91	4.52	4.37

Cat. 5 Shielded Gang Jack



- UL Recognised and CSA approved
- FCC compliant - part 68, subpart f
- Horizontal RJ-45 style
- Shielded, unshielded, filtered and Category 5 versions available
- Available with 1 or 4 ports
- Drawn wire contacts
- Meets industry standard jack-to-board footprints

- According to the EIA/TIA 568, TSB 31, 40 specifications
- FCC approved GXT™ plating

RoHS ● Compliant
▲ Non-compliant

08447 11 11 11

Current rating	2 amp dc	EIA/TIA 568A specifications					
Withstanding voltage	60 volts rms, 60Hz	Contact Plating (Finish)	Gold / Nickel				
Insulation resistance	500 Ohms min	Contact Spring	Phosphor Bronze				
		Body material	Thermoplastic Resin				
Contact resistance	20 Ohm max		Black				
Electrical performance meets or exceeds		Durability	250 cycles				

221502

No. of Ports	Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
Cat. 5 Shielded Gang Jack - Snap Peg							
1	95678-001LF	109-7900●	2.32	2.06	1.79	1.62	1.43
4	95678-004-00LF	109-7901●	5.58	4.97	4.35	3.91	3.50

RJ45 Shielded Modular Jack



Inverted



- Fully shielded, inverted RJ45 Jack
- 8 position, 8 contacts
- Meets FCC Rules and Regulations, Part 68
- UL Recognised and CSA Certified

Contact Rating	150V ac max., 1.5A @ 25°C	Material					
Insulation Resistance	500Mohm	Flamability	UL94V-0				
Durability	750 mating cycles	Contact	Phosphor Bronze				
Temperature Range	-40°C to 70°C	Contact Plating	Gold				

334975/406727

Mfrs. List No.	Order Code	1+	10+	50+	100+
1-406541-1	116-2481●	1.94	1.77	1.61	1.55

RJ45 Shielded Modular Jack



Inverted with LED's



The LED's are integrated into the modular jack thus eliminating the need for additional system space for indicators. The modular jack functions as transmit/receive with line status and collisions identified by viewing the LED's directly in each port. Recommended applications include Fast Ethernet, 10 Base-T Ethernet and 10/100 BaseT Ethernet (Cat 5 on two pair 1/2, 3/6)

- Compact size with high reliability
- 8 position, 8 contacts
- Meet FCC Rules and Regulations, Part 68
- UL Recognised and CSA Certified

Contact Rating	150V ac max., 1.5A @ 25°C	Material					
Withstand Voltage	1000V ac	Body	High temperature thermoplastic				
Insulation Resistance	500Mohm	Flamability	UL94V-0				
Durability	750 mating cycles	Contact	Phosphor Bronze				
Temperature Range	-40°C to 70°C	Contact Plating	Gold				

334973/406728

Colour LED's	Mfrs. List No.	Order Code	1+	+	+	+
Yellow/Green	2-406549-1	116-2483●	1.48	--	--	--

Double Modular Jack



- 8 Position/8 Contacts
- 750 Mating Cycles
- Shielded
- Through Hole Mounting

Voltage	150V						
Current Rating	1.5A						
Housing	Polyester, Black, UL94V-0						
Contacts	Phosphor Bronze, Gold plated						
Durability	750 mating cycles						

451194

Configuration	Mfrs. List No.	Order Code	1+	10+	20+	50+
2 x 1	5569381-1	128-4346●	5.10	4.74	4.54	4.34

RJ45 Shielded Stacked



Cat5, PCB Mounted Jacks



- Low profile Cat 5 Multi-port
- 8 position, 8 contacts jacks
- 2 rows of either 2 or 4 jacks available
- High temperature polyester (PCT) for IR reflow applications
- UL Recognised and CSA Certified

Voltage Rating	150V max.	Material					
Withstand Voltage	1000V ac	Flamability	UL94V-0				
Insulation Resistance	500Mohm min.	Shield	Copper alloy, tin-lead plated				
Durability	750 mating cycles	Contact	Phosphor Bronze				
Temperature Range	-40°C to 70°C	Contact Plating	Gold				

FCC-68 Modular Connectors - continued

RJ45 Shielded Stacked - continued

Cat5, PCB Mounted Jacks - continued

334971/406729

Configuration	Mfrs. List No.	Order Code	1+	10+	50+	100+
2 x 2	5569260-1	116-2484●	6.38	6.00	5.74	5.51
2 x 4	5569262-1	116-2485●	9.84	9.24	8.85	8.49

Cat 5e

Shielded PCB Mount Jack and Plugs



- Meets performance requirements of Cat 5e when link tested up to 250MHz Class E
- Jacks fully shielded with the facility to take ground from the mating plug to the panel and PCB (2 PCB and 6 panel ground points)
- Plugs supplied with black hood and guide plate to assist assembly
- Hood incorporates latch protector and can be fitted after plug assembled onto cable

Specification	Jack	Plug
Voltage Rating	125V AC	125V AC
Current Rating	500mA	500mA
Temperature Range	-25°C to +80°C	-25°C to +80°C
Insulation Resistance	100MΩ for 1 min	≥100MΩ
Contact Resistance	250mΩ max	≤230mΩ
Mating Cycles	200	
Contacts	Copper Alloy Selective Gold	
Shield Plate	Copper Alloy Tin Plated	
Insulation	PBT UL94V-0 Black	

238488

Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
PCB Jack TM21R-5C-88(50)	107-7747●	1.94	1.85	1.74	1.62	1.43
Plug + TM21P-88P(03)	412-7640●	2.62	2.51	2.38	2.19	1.92
Hood TM11-21	412-7626	325.51				

PCB Mounted RJ45 Jack



Tyco Electronics have released this low profile modular jack to meet requirements for AdvancedTCA and AdvancedMC cards. These jacks are shielded and include panel ground springs for EMI containment. They are available in single port and 1x4 configurations with LEDs, and are designed for GigE performance.

- Cat 5e performance
- Low profile meets half height requirements. 4.20mm above PCB, 7.38mm below PCB
- Press-fit termination

Description	Mfrs. List No.	Order Code	Description	Mfrs. List No.	Order Code
Single Port, Green/Yellow LED	1888250-2	152-7884	1x4, Green/Yellow LED	1888251-2	152-7886

497509

Mfrs. List No.	Order Code	1+	5+	10+
1888250-2	152-7884●	4.04	3.84	3.58
1888251-2	152-7886●	12.80	12.19	11.37

RJ45 Shielded Modular Jack



- FCC compatible - Part 68, Subpart F
- Fully shielded RJ-45 Jack
- Available with 2, 4, 6 or 8 Ports

Current	1.5 amp dc	Contact spring	Phosphor Bronze
Voltage	150 volts rms, 60Hz	Colour	Black
Enclosure	Nylon, UL94V-0	Operation Temperature	-40°C to +80°C

468757

Ports	Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
2	5406443-1	134-6691●	4.77	4.47	4.13	--	--
4	5406203-3	134-6693●	3.67	3.44	3.17	--	--
6	5406206-1	134-6695●	7.90	7.40	6.83	--	--
8	5558505-1	134-6697●	11.24	10.55	9.73	--	--

RJ Modular Jacks

Gigabit



- LED Indicators
- UL Recognised
- Ganged or Stacked

LEDs
Yellow - Green/Orange
Green - Green
Green - Green
Green/Yellow - Green
Green - Green/Orange
Green - Green/Orange
Yellow - Green/Orange
Green/Orange - Green/Orange
Green - Green/Yellow
Yellow - Green/Orange

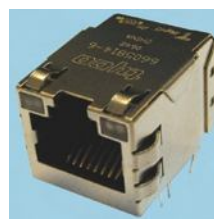
Mfrs. List No.	Order Code
RJMG201022610NR	135-7422
RJMG201021110NR	135-7423
RJMG201021120NR	135-7424
RJMG201024110NR	135-7425
RJMG201021610NR	135-7427
RJMG214021610NR	135-7431
RJMG214022620NR	135-7432
RJMG221128810NR	135-7437
RJMG201221930NR	135-7443
RJMG201222830NR	135-7444

474500

Mfrs. List No.	Order Code	1+	10+	20+	50+
Single Port					
RJMG201022610NR	135-7422●	3.39	2.96	2.64	2.38
RJMG201021110NR	135-7423●	4.23	3.70	3.31	2.97
RJMG201021120NR	135-7424●	4.23	3.70	3.31	2.97
RJMG201024110NR	135-7425●	4.23	3.70	3.31	2.97
RJMG201021610NR	135-7427●	4.23	3.70	3.31	2.97
1 x 4 Ganged					
RJMG214021610NR	135-7431●	15.22	13.32	11.84	10.66
RJMG214022620NR	135-7432●	15.22	13.32	11.84	10.66
2 x 1 Stacked					
RJMG221128810NR	135-7437●	7.26	6.36	5.65	5.08
Ultra Low Profile					
RJMG201221930NR	135-7443●	5.15	4.50	4.01	3.60
RJMG201222830NR	135-7444●	5.15	4.50	4.01	3.60

Modular Jacks with Integrated Magnetics

MAG 45



- RJ45, 8 Position
- Through Hole
- Side Entry
- UL recognised, UL 94V-0
- IEE 802.3 & ANSI X3.263 compliant
- Supports all appropriate and available PHY Chips and applications

Magnetics integrated into connector:

- Less components needed
- Saves board space
- Cheaper assembly on PCB (only 1 component)

LEDs	Mfrs. List No.	Order Code
None	6605759-1	128-4348
Green/Orange + Yellow	1368458-2	128-4351
Green + Yellow (end port only)	5-6610000-1	128-4353
Green + Green	1-6605834-1	128-4349
Green/Yellow + Green/Yellow	6605444-6	128-4347
Green/Yellow + Green/Yellow	6605814-6	128-4350
Green/Orange + Yellow	1368398-2	128-4352

451200

No. of Ports	Mfrs. List No.	Order Code	1+	10+	20+	50+
10/100 Base T Ethernet						
1	6605759-1	128-4348●	2.70	2.54	2.43	2.33
1 (LP)	1368458-2	128-4351●	7.34	6.93	6.62	6.31
1 x 2	5-6610000-1	128-4353●	7.03	6.60	6.30	5.99
10/100 Power Over Ethernet (POE)						
1	1-6605834-1	128-4349●	4.41	4.09	3.93	3.76
Gigabit Ethernet						
1 (TD)	6605444-6	128-4347●	4.34	4.07	3.88	3.67
1	6605814-6	128-4350●	4.34	4.07	3.88	3.67
1	1368398-2	128-4352●	7.74	7.24	6.99	6.64

LP = Low Profile, TD = Tab Down

RJ Modular Jacks

10/100



- LED Indicators
- UL Recognised

Contact	Phosphor Bronze	Flamability	UL 94V-0
Insulator	Thermoplastic Polyester	Contact Plating	Selective Gold
Temperature Range	0°C to +70°C		

474539



40,000 PRICES REDUCED

Mfrs. List No.	Order Code	1+	10+	20+	50+
Single Port					
RJMG163217101NR	135-7433●	2.79	2.44	2.17	1.95
RJMG163218101NR	135-7435●	2.79	2.44	2.17	1.95
RJMG163118101NR	135-7436●	2.79	2.44	2.17	1.95
Single Port Low Profile SMT					
RJMG1M5218101LR	135-7441●	3.55	3.10	2.75	2.48
RJMG185118101LR	135-7442●	3.55	3.10	2.75	2.48

Stacked RJ45 and USB Port with Integrated Magnetics



MAG 45



- 1 x 10/100 Base-T Ethernet RJ45, 8 Position + 2 x USB
- LEDs: Green/Orange + Yellow
- Through Hole
- Side Entry
- UL recognised, UL 94V-0
- IEE 802.3 & ANSI X3.263 compliant
- Supports all appropriate and available PHY Chips and applications
- Magnetics integrated into connector:
 - Less components needed
 - Saves board space
 - Cheaper assembly on PCB (only 1 component)

451214

No. of Ports	Mfrs. List No.	Order Code	1+	10+	20+	50+
1 x RJ45 + 2 x USB	6620004-1	128-4355●	5.88	5.54	5.28	5.05

Integrated Connector Modules (ICMs) 10/100 Base



A range of single port RJ45, 10/100Base Ethernet 1:1 turns ratio, integrated connectors to suit most applications for LAN and Telecommunications. They integrate a combination of transformers; common mode chokes (CMC), resistors, capacitors and LEDs. The transformers offer isolation, impedance matching and filtering. The common mode chokes, provide high impedance against common mode signals, while allowing differential mode signals to pass through.

The integration of the components into the RJ45 cuts down on PCB real-estate, allowing smaller product designs, this reduces the component count, and so production component placement cost. Integrating the magnetics also improves the EMC performance by approx 20dB, helping to get the design through the EMC tests first time.

SI-10021

- Tab-down 10/100Base Ethernet Connector
- The first step on saving board space

SI-20039

- 10/100/1000 Ethernet, four pair CMC
- Drop in replacement for a standard RJ45, to dramatically improve EMC

SI-60062-F

- Tab-down, 10/100Base Ethernet, Y/G LED
- Add in LED's to indicate network status

SI-50001

- Tab-up, 10/100Base Ethernet, Y/G LED
- Tab-up to allow better access to the tab, and allow for the LED pins to be away from the Ethernet signal pins.

SI-70002

- 10/100Base Ethernet, Twin USB A, Y/G LED
- Integrate USB A connectors, ideal for single board computers.

249011

Mfrs. List No.	Order Code	1+	10+	50+	100+
SI-60002-F	113-7981●	2.88	2.49	2.22	2.16
SI-60008-F	113-7982●	2.48	2.22	2.15	2.11
SI-60062-F	113-7983●	3.11	2.78	2.70	2.64
SI-50158-F	113-7984●	5.23	4.68	4.51	4.43
C893-1DX1-E5	113-7985●	4.90	4.39	4.25	4.17

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Modular RJ45 Panel Couplers Shielded and Unshielded



- Shielded or Unshielded options
- Compatible with industry standard panel cutouts
- Cat5e

431736

Mfrs. List No.	Order Code	1+	5+	10+
Unshielded				
MH3101-8821	112-2291●	2.29	2.07	1.96
Shielded				
MH3101S-8821	112-2292●	5.56	5.01	4.35

Low Cost Plastic Crimp Tool with Stripper



- Low cost plastic crimping tools
- Contain outer insulation stripping blades with stop gauges
- Just the right amount of outer insulation is removed prior to plug/cable assembly
- Only suitable for the connectors 106-308 and 106-309

221434

No. of Ways/Contacts	Order Code	1+	5+	10+
4/4	106-321	15.28	12.55	11.13
6/4 and 6/6	106-322	17.00	13.97	12.38

Crimp Tool for FCC-68 Plugs



A full cycling parallel action ratchet crimp tool with manual release and a thumbscrew for replacing dies quickly. Suitable for crimping all Molex unshielded modular plugs. Supplied with full instructions.

Order dies separately.

209799

	No. of Ways/Contacts/Body Type	Mfrs. List No.	Order Code	Price Each 1+
Ratchet Crimp Tool	—	69008-1150	473-145	89.35
Die Set	4/4 SHORT	69008-1125	473-157	59.47
Die Set	6/4 SHORT	69008-1126	473-169	60.75
Die Set	6/6 SHORT	69008-1127	473-170	60.75
Die Set	8/8 SHORT	69008-1129	473-182	60.75
Die Set	8/8 LONG	69008-1103	473-352	88.59

Crimp Tool for RJ45 Plugs

STEWART



- A full cycling parallel action ratchet crimp tool with manual release and a thumbscrew for replacing dies quickly
- Suitable for crimping all Stewart RJ45 modular plugs. Supplied with full instructions
- Order dies separately

221425

	No. of Positions	Mfrs. List No.	Order Code	Price Each 1+
Crimp tool	—	2980011-01	308-9599	88.58
Die Set	MMJ	2980014-01	308-9629	29.66
Die Set	4	2980012-01	308-9605	30.58
Die Set	6	2980013-01	308-9617	30.58
Die Set	8	2980015-01	308-9630	30.58
Die Set - Shielded	8	2980017-01	308-9642	30.58
Ferrule crimp tool	—	2980028-01	308-9654	73.76
Ferrule Insert cable OD 5.2mm	—	2980031-01	308-9666	33.85

FCC-68 Modular Connectors - continued

Crimp Tool for RJ45 Plugs



- Ratchet crimp tool suitable for terminating AMP modular plugs to jacketed cable
- Features spring-actuated handles with cushioned hand grips
- The ratchet release will allow disengagement of the ratchet in the event of a faulty termination.

221457

Mfrs. List No.	Order Code	1+	10+
734218-3	546-148	101.59	95.51

Crimp Tool for Shielded Plug



- A full cycling parallel action ratchet crimp tool with manual release
- Suitable for crimping Molex shielded modular plug 497-861
- Supplied with full instructions

209801

Mfrs. List No.	Order Code	Price Each
69008-1100	473-250	182.03

All-in-One Telephone Tools

Economy Crimping Tools - WE/SS and AMP



Two models available: Western Electric (WE)/Stewart Stamping (SS) types and AMP (Tyco) for 6 and 8 position modular telephone plugs.

347128

Mfrs. List No.	Order Code	Price Each
All-in-one Tool (WE/SS)	1545	34.55
All-in-one Tool (AMP)	1554	34.55

All-in-One Pro Telephone Tools

Crimping Tools - WE/SS and AMP



Crimps CAT-3 to CAT-6 with one crimping tool. Two models available: Western Electric (WE)/Stewart Stamping (SS) types and AMP (Tyco) for 4 - 6 and 8 position modular telephone plugs.

347127

Mfrs. List No.	Order Code	Price Each
All-in-one Pro (WE/SS)	1530R	52.24
All-in-one Pro (AMP)	1540	52.24

Crimp Tool All in One

Amp and WE/SS Style



1346963



1346964

488316

Order Code	Price Each
Crimp Tool Amp Style	31.96
Crimp Tool WE/SS Style	31.96

RJ45 Ethernet Connector Systems

Cat 5e Ethernet Buccaneer

IP68 Sealed



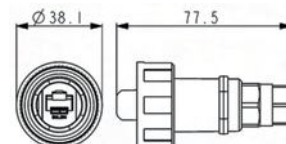
The Ethernet Buccaneer provides a high degree of environmental sealing for Cat 5e Ethernet connections using standard RJ45s. Dust and waterproof to IP68 the Ethernet Buccaneer is ideal for industrial applications where a robust and secure connection is required.

- Dust and waterproof to IP68
- Shielded RJ45 connectors to maintain screening
- Flex re-wireable & chassis body styles
- Patch cords conform to Cat 5e standard
- Plug connector is shrouded from accidental damage
- Shroud also provides positive alignment
- Compression gland sealing system
- Sealing caps to maintain IP68 rating

Sealing	IP68 EN60529 (When mated)	TIA/EIA Rating	Cat 5e
Flammability	UL94V-0	Characteristic Impedance	100Ω ±15Ω at 4MHz to 100MHz
Operating Temp	-40°C To 70°C	Capacitance	1600pF/km
Patch cords		Operating Temp	-40°C to +70°C

248485

Re-wireable Flex Cable Connector

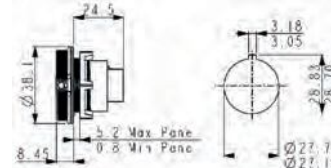


- Re-wireable flex cable connector
- Supplied with shielded RJ45 plug
- Mates with panel mounting connector, PX0833

248500

Mfrs. List No.	Order Code	1+	25+	50+
PX0834/B	966-7733	8.09	7.52	7.20

Panel Mount Connector



- Cat 5e shielded coupler
- For use with Ethernet Buccaneer flex connectors
- Standard patchcord can be plugged into rear

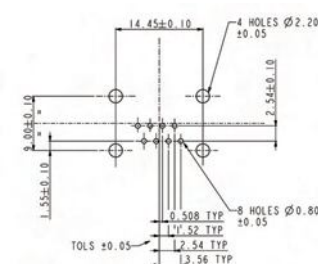
- Single hole fixing
- Complete with panel sealing gasket

248534

Mfrs. List No.	Order Code	1+	25+	50+
PX0833	966-7725	15.45	14.37	13.75

Panel Mounting Connector

PCB Termination



- Cat 5e shielded RJ45 interface
- Rear panel mounting
- Mates with FIO: 9667733, 4285888, 4285890, 4285906, 4285918, 4285920 and 4285931 flex connectors
- For direct mounting to PCB
- Complete with panel sealing gasket

430395

Mfrs. List No.	Order Code	1+	25+	50+
PX0839/PC	116-6679	4.49	4.18	4.00

Over 480,000 products online



Panel Mounting Connector IDC Termination



- Cat 5e shielded RJ45 interface
- Rear panel mounting
- Mates with FID: 9667733, 4285888, 4285890, 4285906, 4285918, 4285920 and 4285931 flex connectors
- IDC block for discrete termination
- Complete with panel sealing gasket

430396

Mfrs. List No.	Order Code	1+	25+	50+
PX0839/IDC	116-6680●	11.75	10.93	10.46

IP68 Ethernet Buccaneer® PCB Mounting Connector



- Cat 5e shielded coupler
- Direct horizontal mounting to PCB, 90° pins
- Flange fixing
- Rear of panel mounting
- Mates with Farnell p/ns 121-1516, 121-1517, 121-1518, 121-1519, 121-1520, 121-1521, 966-7733

New

528475

Mfrs. List No.	Order Code	1+	25+	50+
PX0839/90	168-7567●	4.54	4.36	4.19

IP68 Ethernet Buccaneer® Panel Mounting Connector



- Cat 5e shielded coupler
- Standard RJ45 patchcord can be plugged into rear
- Flange fixing
- Complete with panel sealing gasket
- Mates with Farnell p/ns 121-1516, 121-1517, 121-1518, 121-1519, 121-1520, 121-1521, 966-7733

New

528474

Mfrs. List No.	Order Code	1+	25+	50+
PX0870	168-7565●	15.00	14.40	13.85

Ethernet Buccaneer® IP68 Panel Mounting Connector



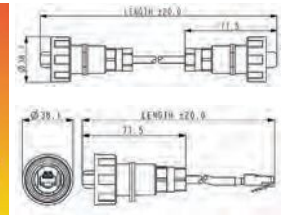
- Cat 5e shielded coupler
- Standard patchcord can be plugged into rear
- Earth wire
- Single hole fixing
- Complete with panel sealing gasket
- Mates with Farnell p/ns 121-1516, 121-1517, 121-1518, 121-1519, 121-1520, 121-1521, 966-7733

New

528434

Mfrs. List No.	Order Code	1+	25+	50+	100+	500+
PX0833/E	165-4415●	26.91	24.01	21.34	19.20	17.46

Patchcords



- Patchcords with IP68 connector
- Supplied with shielded RJ45 plug
- 2m, 3m & 5m lengths
- Mates with panel mounting connector, PX0833
- S-FTP cable construction
- PE jacket cable
- Wiring configuration to 568-B
- Exceeds EIA/TIA Cat 5e

PX0837/2M00	121-1516	2m	Buccaneer to shielded RJ45
PX0837/3M00	121-1517	3m	Buccaneer to shielded RJ45
PX0837/5M00	121-1518	5m	Buccaneer to shielded RJ45
PX0838/2M00	121-1519	2m	Buccaneer to Buccaneer
PX0838/3M00	121-1520	3m	Buccaneer to Buccaneer
PX0838/5M00	121-1521	5m	Buccaneer to Buccaneer

248514

Mfrs. List No.	Length	Order Code	1+	25+	50+
PX0837/2M00	2m	121-1516●	12.89	11.99	11.47
PX0837/3M00	3m	121-1517●	14.95	13.90	13.31
PX0837/5M00	5m	121-1518●	17.00	15.81	15.13
PX0838/2M00	2m	121-1519●	15.99	14.87	14.23
PX0838/3M00	3m	121-1520●	18.55	17.25	16.51
PX0838/5M00	5m	121-1521●	19.09	17.75	16.99

Sealed In-Line Cable Joiner LAN/Ethernet



- IP68 rated
- For RJ45 connectors
- Complete with coupler
- Shielded (STP), Shielded CAT5e and Unshielded

(UTP) versions

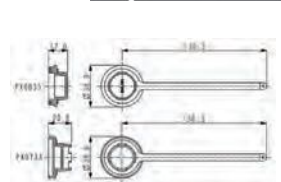
- Glands supplied to seal cables from 3.5 to 8mm

Current Rating	1.5A	Material	Glass Filled Polyamide UL94V-0
Voltage Rating	30V, 42V	Colour	Black
No. of Conductors	8	Sealing	IP68 to BSEN 60529:1977
Cable Range	3.5 to 8mm (glands supplied)	Operating Temperature Range	-20°C to 70°C

347547

Type	Mfrs. List No.	Order Code	1+	25+	50+
Unshielded	PX0777/UTP	117-2516●	6.45	6.00	5.74
Shielded	PX0777/STP	117-2518●	8.79	8.17	7.82
Shielded, CAT5e	PX0777/CAT5E STP	117-2519●	11.29	10.50	10.05

Sealing Caps



- Sealing caps to maintain IP68 rating when connectors are not in use

Mfrs. List No.	Order Code	Description
PX0835	428-5876	Sealing Cap for PX0831/2/4
PX0733	314-390	Sealing Cap for PX0833

248535

Order Code	1+	25+	50+
428-5876●	0.98	0.91	0.87
314-390●	0.55	0.51	0.49

REACH - SVHCs



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RJ45 Ethernet Connector Systems - continued

RJ Field Sealed RJ45 MIL-C-26482



Amphenol

- Sealed against fluid and dusts (IP67)
- Shock, Vibration and Traction resistant
- Suitable for at least 500 mating cycles

Transforms regular RJ45 cordset for use in harsh environments. Easy to assemble, the plug adapts a standard RJ45 cordset without the need for tools.

Salt Spray	96h
Flammability / Smoke	UL94 V0 and NF F 16 101 & 16 102
Vibrations	10Hz - 500Hz, 10g, 3 axes: no discontinuity ≤ 10ns
Shocks	IK06: 250g dropped from 40cm onto mated connectors
Humidity	21 days, 43°C, 98% humidity
Thermal Shock	5 cycles @ - 40°C / + 100°C
Temperature Range	-40°C to +85°C

450052

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+
Receptacle, Square Flange	RJF 21B	122-0775●	20.01	19.01	18.21	17.62
Receptacle, Jam Nut	RJF 71B	122-0786●	24.53	23.32	22.34	21.60
Plug Assembly	RJF 6B	122-0790●	17.32	16.64	16.12	15.60
Cap for Square Flange Receptacle	RJF C2B	122-0787●	15.43	14.68	14.04	13.45
Cap for Jam Nut Receptacle	RJF C7B	122-0788●	19.30	18.34	17.57	16.84
Cap for Plug Assembly	RJF C6 B	122-0791●	14.34	13.63	13.05	12.50
Panel Gasket	JE18	122-0789●	1.32	1.22	1.17	1.13
Removal Tool	RJF ODE	122-0793	16.31	15.69	14.82	13.59

RJ Field Sealed RJ45 Self Closing Cap



- Automatically protects RJ Field square flange receptacles
- Closes when either an RJ Field plug or regular RJ45 cordset is removed from receptacle

450087

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+
Nickel and metallised inserts (EMI)	RJF 21 N SCC	122-0794●	27.68	25.75	24.63	23.56
Black and blank insert	RJF 21 B SCC	122-0795●	26.23	24.40	23.36	22.35

RJ Field Sealed RJ45 MIL-C-26482 Right Angle



Ideal for appliances where panel depth is of a premium

497313

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+
RJ45 Square Flange	RJFTV21RAG	142-8230▲	34.12	32.20	29.42	27.98
RJ45 Square Flange	RJF21RAB	142-8232●	23.44	22.12	20.21	19.22
RJ45 Jam Nut	RJF71RAB	142-8233●	28.09	26.51	24.23	23.04

RJ Field Sealed RJ45 Reverse Bayonet



122-0798



122-0799



122-0800

Amphenol



122-0801

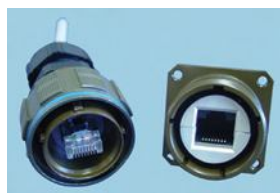
Transforms regular RJ45 cordset for use in harsh environments. Easy to assemble, the plug adapts a standard RJ45 cordset without the need for tools.

- Sealed against fluid and dusts (IP67)
- Shock, Vibration and Traction resistant
- Suitable for at least 500 mating cycles

Salt Spray	1000h
Flammability / Smoke	UL94 V0, NF F 16 101 and DIN 5510-2
Thermal Shock	5 cycles @ - 40°C / + 100°C
Temperature Range	-40°C to +85°C

450080

RJ Field TV Sealed RJ45 MIL-C-38999 Series III



Transforms regular RJ45 cordset for use in harsh environments. Easy to assemble, the plug adapts a standard RJ45 cordset without the need for tools.

- Sealed against fluid and dusts (IP67) in mated and unmated conditions
- Shock, Vibration and Traction resistant
- Suitable for at least 500 mating cycles
- Olive Drab Cadmium finish
- Metallised receptacle inserts

Salt Spray	96h
Flammability / Smoke	UL94 V0 and NF F 16 101 & 16 102
Vibrations	NAS 1599
Shocks	IK06: 250g dropped from 40cm onto mated connectors
Humidity	21 days, 43°C, 98% humidity
Thermal Shock	5 cycles @ - 40°C / + 100°C
Temperature Range	-40°C to +85°C

450097

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+
Receptacle, Square Flange	RJF TV 21 G	122-0804▲	27.59	26.22	25.10	24.04
Receptacle, Jam Nut	RJF TV 71 G	122-0805▲	37.70	35.81	34.32	32.88
Plug Assembly	RJF TV 6M G	122-0802▲	32.23	30.61	29.32	28.09
Cap for Square Flange Receptacle	RJF TVC 2 G	122-0806▲	22.13	21.01	20.13	19.29
Cap for Jam Nut Receptacle	RJF TVC 7 G	122-0807▲	24.21	23.00	22.03	21.09
Cap for Plug Assembly	RJF TVC 6 G	122-0803▲	23.94	22.76	21.81	21.08
Panel Gasket	JE19	122-0808●	1.48	1.22	1.19	1.16
Removal Tool	RJF ODE	122-0793	16.31	15.69	14.82	13.59

RJ Field TV sealed RJ45

MIL-C-38999, Nickel Finish



- Sealed against dust and fluids (IP67)
- Shock, Vibration and Traction resistant
- No cabling operation in field and no tools required
- Mechanical coding/polarization (2 positions)
- Improved EMI protection
- Nickel plated finish

With USB Field, you can insert a standard USB 2.0 cordset into a metallic plug which will protect it from dust, shocks and fluids.

Salt Spray	48h
Flammability / Smoke	and NF F 16 101 & 16 102
Vibrations	10-500 Hz
Shocks	IK06: 250g dropped from 40cm onto mated connectors
Humidity	21 days, 43°C, 98% humidity
Temperature Range	-55°C to 85°C

488651

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+
Receptacles						
Sealed Flange USB Back Termination	USBF TV 21 N	142-8218●	28.33	26.71	25.31	24.05
Sealed Flange Solder Back Termination	USBF TV 22 N	142-8219●	28.33	26.71	25.31	24.05
Jam Nut USB Back Termination	USBF TV 71 N	142-8221●	32.60	30.28	28.97	27.33
Jam Nut USB Back Term	USBF TV 72 N	142-8223●	32.60	30.28	28.97	27.33
Plug						
Plug Assembly	USBF TV 6 N	142-8224●	37.00	34.21	32.67	30.95
Accessories						
Plug Assembly Cap	USBF TVC 6 N	142-8225●	19.67	18.39	17.53	16.03
Receptacle Square Flange Cap	USBF TVC 2 N	142-8220●	18.82	17.64	16.91	15.98
Receptacle Jam Nut Cap	USBF TVC 7 N	142-8222●	23.57	21.99	20.85	20.16

RJ Industrial Ethernet



Pushing Performance

The Modular Harting RJ Industrial® family of connectors is based on the standard RJ45 connector pattern, and is specifically developed for use in harsh industrial environments. The Harax® rapid termination technology has been proven in many industrial applications. The design of the Harting RJ® family allows for the quick and easy termination and connection to ethernet devices in either data only or hybrid networks.

- IP20, Standard cable connector
- IP67, Push-Pull Connector

Protection level IP20-67
Wire Size, Flexible 22 AWG
Wire Size, Rigid 22-23 AWG
Temperature Range -40°C To +70°C

- IP67, Hybrid Connector
- IP67, Data3A

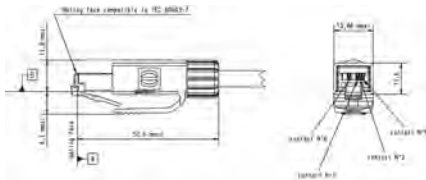
Cable Sheath Diameter, IP20, IP67, 3A 6.5 - 6.9mm
Cable Sheath Diameter, Push-Pull connector 5.8 - 7.2mm
Mating Cycles 750 >

335475/406730

IP20 Data Connectors



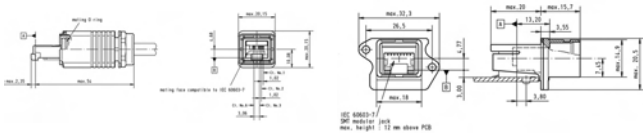
- Smallest RJ45 ethernet connector
- AWG 22 Cables can be connected using IDC technology
- Designed on a 14mm standard grid
- Latching clip makes unlocking connector significantly easier
- Connector set includes housing cable gland, and instruction manual



311946

Mfrs List No.	Order Code	1+	25+	50+
09451511100	110-6814●	6.16	5.63	5.43

Push/Pull Connectors IP67



Connector Set:

- Sealed to IP67
- Connector can be locked/unlocked using only one hand
- Very compact housing
- Connector set includes housing, Cable gland and instruction manual

Push/Pull Feed Through:

- Sealed to IP67
- Very compact using only 21 x 27mm of panel space
- Compatible with standard RJ45 connectors for service and test purposes
- Data lines are connected at the rear
- Set includes: housing and instruction manual

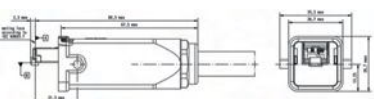
311948/406732

Mfrs List No.	Order Code	1+	25+	50+
Connector Set 09451451100	110-6815●	7.81	7.33	7.03
Panel feed through 09452451102	117-0278●	6.04	5.73	5.49

Data 3A Connectors IP67

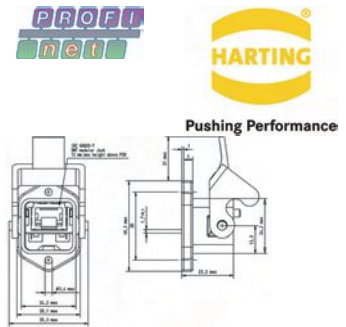


- Based on the Han 3A profile for data and hybrid solutions
- Optional housings give IP65/67 protection
- Plastic or metal housing
- Optional coding prevents incorrect mating up to four different connectors



311950/406733

Panel Feed Through, Data 3A



- IP67 data connector in standard Han®3A
- RJ45 Compatible for standard service and test purposes
- Optional coding prevents incorrect mating up to four different connectors
- Plastic or metal housing

311951/406734

Mfrs List No.	Order Code	1+	25+	50+
Plastic Type 09452251100	110-6821●	10.81	10.81	10.81
Metal Type 09452151100	110-6817●	12.83	12.05	11.55

Industrial Ethernet Field Installable RJ45 Modular Plugs



New

The category 5e IP20 field installable RJ45 modular plug is designed for use in industrial applications. The 4 way version is capable of data transmission rates of 10/100 Mbps/s, and the 8 way version is capable of 1000 Mbps/s. The tool-less IDC contact design makes it easy to terminate in the field.

Key features:-

- Tool-less IDC termination
- Stainless steel locking tab and rigid plastic case make it ideal for use in harsh environments
- Shielded
- Mates with standard RJ45 modular jacks
- Easy to assemble - only 3 parts
- Accepts cable diameters between 6.3 and 6.7mm
- 4 way - 22 AWG solid and stranded wire
- 8 way - 26 AWG stranded wire
- IP20, UL94V-0

Contact Material	Contact Plating	Rated Current	Rated Voltage	No. of Mating Cycles	Operating Temperature
Copper Alloy	Gold	500mA per pin	24V DC	750	-40 to 70°C

526094

Mfrs. List No.	No. of Ways	Order Code	1+	25+	50+
1903526-1	4	167-1835●	8.00	7.11	6.40
1903527-1	8	167-1836●	9.22	8.19	7.37
Ind. Ethernet RJ45 Modular Plug Assemblies					
1987004-1	4	167-1837●	11.22	9.97	8.97
1987004-2	8	167-1838●	12.43	11.05	9.95

Rugged RJ45 Ethernet Connection System Bayonet Locking



Ideal for use in harsh environments where EtherNet protocol is used including manufacturing facilities, water treatment plants and transportation hubs. Designed with one sealing surface, the connectors ensure optimum performance even in harsh environments.

- Bayonet latching for easy connection
- Meets NEMA 6P and IP67 protection ratings
- Meets Open DeviceNet Vendors Association and ControlNets Vendors Association IP specification

386344

Over 480,000 products online



RJ45 Ethernet Connector Systems - continued

RJ-45 Industrial Ethernet connectors and assemblies



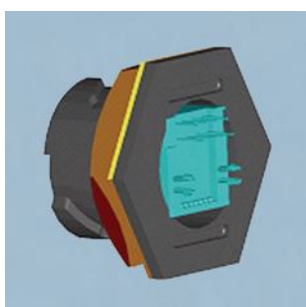
- Circular bayonet locking style allows quick and easy connection
- One sealing surface for superior sealing
- Accepts 2.9mm to 6.4mm cable diameters
- Meets **NEMA 6P** and **IP67** protection ratings

molex

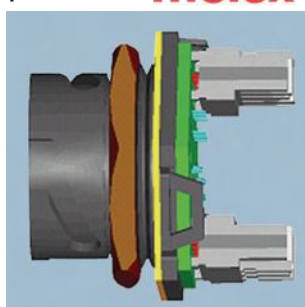
386320/406736

	Mfrs List No.	Order Code	1+	25+	50+
Plug	847000002	878-0579 ●	9.53	8.68	7.95
Receptacle	847000001	878-0560 ●	18.39	16.72	15.33
Dust Cap	847000003	878-0587 ●	7.12	6.47	5.93

RJ-45 PCB and Panel Mounted Receptacles



PCB Receptacle



Panel Receptacle

PCB Receptacle

- Direct solder to PCB
- Bayonet latching for easy connection
- Meets **NEMA 6P** and **IP67** protection ratings

Panel Receptacle

- Industrial RJ45 ethernet Panel mount jack with punchdown termination
- Bayonet latching for easy connection
- One sealing surface for superior sealing
- Potted versions for extra environmental sealing
- Meets **NEMA 6P** and **IP67** protection ratings

386337/406737

	Mfrs List No.	Order Code	1+	25+	50+
PCB	84702-0005	878-0595 ●	7.18	6.55	5.83
PCB Potted	84702-0007	878-0609 ●	6.88	6.26	5.73
Panel	84702-0006	878-0617 ●	14.47	13.15	12.06
Panel Potted	84702-0008	878-0625 ●	16.14	14.66	13.44

Patchcords



- Industrial CAT5e patch cables
- Category 5e specified for high data transmission speeds
- **IP 67** and **NEMA 6P** ratings provide water and dust tight connections
- Mates with Molex panel or PCB mounting receptacles
- One sealing surface gives less likelihood of failure

molex

386339

Length (m)	Mfrs List No	Order Code	1+	25+	50+
Sealed Plug / Sealed Plug		878-0633 ●	21.64	19.69	18.05
1.8	84702-1006				
Sealed Plug / RJ45 Plug					
4.5	84702-2015	878-0706 ●	27.93	25.38	23.27
6.5	84702-2021	878-0714 ●	30.70	27.90	25.58
Sealed Plug / Free End					
6	84702-3020	878-0765 ●	18.83	17.13	15.71

Ethernet / USB Panel Mount Assemblies

SCRE, SCRU

New **samtec**



Ethernet Assembly



USB Assembly

Insulator Material	PBT	Contact Material	Phosphor Bronze	Contact Plating	Gold	Panel Thickness	0.8 - 5.2mm	Flammability Rating	UL94V-0
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527374

Mfrs. List No.	No. of Ways	Order Code	1+	10+	50+	100+	250+
Ethernet Panel Mount Assembly							
SCRE-01	8	166-7927 ●	11.57	8.10	7.45	6.82	5.92
USB Panel Mount Assemblies							
SCRU-01	4	166-7928 ●	6.31	4.22	4.05	3.53	3.13
SCRU-02	4	166-7929 ●	6.31	4.22	4.05	3.53	3.13

Bluetooth Connector Systems

IP68 Bluetooth Cable Replacement Introduction

B BULGIN

New

The IP68 Environmentally sealed Buccaneer® Bluetooth Cable Replacement products eliminate RS232, RS422 or RS485 data cables and allow equipment to communicate wirelessly with up to 100m range. These self-connecting units automatically establish wireless Point-to-Point or multiple-slave Multi-Drop data connections between serial interfaces or dumb devices without any need for special commands, a PC, PLC or Software.

The products can be quickly and easily installed internally or externally in harsh or hostile applications, when cabling is difficult, impractical or expensive to install. Typical applications are communication between different buildings, between walls or floors, around other obstructions, or in open field sites. Significant savings can be made over a hard-wired solution in terms of installation time, disruption and cost.

526903

Technical Specification:-			
Wireless	Bluetooth V2 Class 1 range up to 100m Class 2 range up to 25mm	Security	Authentication, encryption and pin code supported
Serial Interface	RS485 (4-wire) full-duplex RS485 (2-wire) half-duplex RS232 (4-wire) full-duplex	Baud Rates	9600, 19200, 38400, 57600 supported 8 data bits, no parity, 1 stop bit (default) Alternative settings supported
Mechanical	Sealing IP68, EN60529 when mated Operating Temp. -20 to +70°C Vibration to EN60082	Electrical	DC supply 6 to 24Vdc EMC Industry immunity 10V/m
Approvals	FCC part 15 Class B compliant RoHS compliant		

IP68 Bluetooth Cable Replacements RS232 / RS485

B BULGIN



- Dust & waterproof to IP68, EN60529 when mated
- RS485 & RS232 Serial data to Bluetooth Adapter
- Up to 57600 Baud, full / half duplex
- Wireless transparent data connection
- Self connecting for true cable replacement
- Built-in sealed antenna
- Range - Up to 100m class 1, up to 25m class 2
- Mates with PX0884 as well as Farnell p/ns 469-713, 978-050



Technical Specifications:-

Body Moulding	Nylon	Flammability Rating	UL94V-0
Lens	Nylon	Operating Temp.	-20°C to 70°C
DC Supply	6 to 24Vdc	Contacts	Copper alloy, Gold plated

Mfrs. List No.	Class	Order Code	1+	5+
Master Units				
PX0885/01/M	Class 1	162-9385 ●	147.18	125.86
PX0885/02/M	Class 2	162-9387 ●	125.86	111.65
Slave Units				
PX0885/01/S	Class 1	162-9386 ●	147.18	125.86
PX0885/02/S	Class 2	162-9388 ●	125.86	111.65

Bluetooth Buccaneer® Interface Adaptor



- For use with PX0885 Buccaneer® Bluetooth cable replacements
- Convenient screw terminations
- RS232 9-D plug connector
- Incorporates 9 way Buccaneer® connector

524409

Mfrs. List No.	Order Code	1+	5+
PX0884	162-9397●	27.20	22.64

Fibre Optic Connectors

ST, SC Hot Melt Connectors with Tooling



- High performance hot melt connectors
- Qualified to **TIA/EIA 568B** standards
- Pre loaded with adhesive
- PC zirconia ceramic ferrule provides superior optical contact and durability
- Hot melt termination kit contains all materials necessary to terminate 3M connectors

Termination Kit Contents	Mnfrs List No	Quantity
230V Oven	6323	1
Universal Holder	6365-UH	6
Round Polishing Pad	6365-PP	1
Soft Polishing Pad	8365-PP	2
2µm Lapping film (pale green)	6192-A	200
0.5µm Diamond film (pale gray)	661X-0.5S	15
0.5µm Final Lapping film (frosted)	863X-0.02S	50
0.5µm Lapping film (pale yellow)	263X	50
Polishing Jig	8892	3
Jacket Stripper	6365-JS	1
Kevlar Snips	6365-KS	1
Stripping Tool	6365-ST	1
Crimp Tool	6365-CT	1
Fibre Scribe	6365-FS	1
View Scope (200X)	6365-VS	1
Pronto Adhesive	CA-8	1
Lint Free Cloths	--	100
230V UK Power Cord	--	1
230V EU Power Cord	--	1
Alcohol Bottle (empty)	--	1
Water Bottle (empty)	--	1
Fibre Scrap Can	--	1
Roll Up Pouch	--	1
Fibre Marking Pen	--	1
Training CD Rom	--	1
Instructions (Paper)	--	1

386538/406739

Type	Order Code	1+	10+	25+
Connector, ST Hotmelt Termination Kit	121-1041●	5.70	5.43	5.17
	121-1042●	1,811.87		

ST Coupler



- Allows terminated fibre cables to be coupled together
- Die cast metal housing, polymer alignment sleeve
- Supplied with lock nut and washer
- Intermateable with all "ST style" connectors

221559/406742

Mfrs. List No.	Order Code	1+	10+	50+
ST Coupler	501381-1	915-919●	3.41	3.27
				3.11

SC Coupler



- Allows terminated fibre cables to be coupled together
- Plastic housing with metal alignment sleeve
- Accepts 2 x simplex connectors or one duplex connector each side
- Intermateable with any SC type connector

221558

Mfrs. List No.	Order Code	1+	10+	50+
SC Coupler	5504640-1	109-8772●	21.37	20.86
				20.45

SC-ST Adaptor-Duplex



- Interconnects SC terminated cable with ST terminated cable
- Plastic housing with metal alignment sleeve

221560

Mfrs. List No.	Order Code	1+	10+	50+
SC-ST Adaptor	5504663-2	109-8774●	21.98	21.22
				20.88

ST Connectors-Epoxy Multimode



- Ceramic ferrule
- Overmolded polymer body prevents ferrule movement
- Compatible with following cable specifications: 50/125 or 62.5/125 micron cable, 250 or 500 micron primary coating, 900 micron buffer and 2.5 to 3mm ruggedised cable
- Intermateable with all "ST Style" connectors (STII, STIV etc)
- No crush force on fibre

Insertion loss: <0.4dB Temperature range: -45° to 85°C
No of mating: 1000

221557

Mfrs. List No.	Order Code	1+	10+	50+
ST Connector	503677-2	105-6422●	4.35	4.10
Light Crimp ST Polymer	5492168-1	105-6039●	5.30	4.94
				4.72

SC Connectors-Epoxy



- Ceramic ferrule and plastic body
- Overmoulded plastic ferrule holder prevents ferrule movement
- Compatible with the following cable specification: 50/125 or 62.5/125 µm cable 250 or 500 µm primary coating, 900µ buffer and 2.5 to 3mm ruggedised cable
- Intermateable with all "SC Style" connectors
- Excellent strength, no crush force on fibre

Insertion Loss <0.4dB Temperature range -45° to 85°C
No. of Matings 500

221556

Mfrs. List No.	Order Code	1+	10+	50+
SC Connector (Simplex)	5503948-1	105-6423●	7.50	7.31
				7.18

Signal and Data Tools

Modular Ratchet Tool and Dies For DataCom Connectors



- Modular tool with interchangeable die sets
- 7 die sets to suit most RJ connectors
- ABS case holds 1 tool and 7 die sets

Part No. Description

1302	1300 Series Universal Tool Frame
2061	Crimp Die RJ45 8P8C (8 Pin) WE / Stewart
2062	Crimp Die RJ11/RJ12 6P6C, 6P4C 6P2C WE / Stewart
2064	Crimp Die RJ45 8P8C (8 Pin) Tyco AMP
2065	Crimp Die RJ11 RJ12 6P6C 6P4C 6P2C Tyco AMP
2068	Crimp Die RJ50 10P10C (10 Pin)
901013	ABS Tool Case



Signal and Data Tools - continued

Modular Ratchet Tool and Dies - continued

For DataCom Connectors - continued

272152

Mfrs. List No.	Order Code	1+	Price Each 3+	5+
Universal Tool Frame				
1302	887-146	34.99	32.54	31.15
Crimp Dies				
2061	439-2474	13.87	12.90	12.35
2062	439-2498	13.87	12.90	12.35
2064	439-2516	13.87	12.90	12.35
2065	439-2528	13.87	12.90	12.35
2068	439-2530	13.87	12.77	12.21
ABS Tool Case				
901013	377-6657	21.71	20.74	19.80

8000 Series CrimpALL™ Fibre Optic Crimp Tool

Interchangeable Die Sets



Incorporates 4 important ergonomic features that improve user satisfaction and job function:

1. Angled head prevents awkward wrist bending during operation.
2. Reduced handle grip distance is comfortable for workers with small and large hands.
3. The higher crimp force is produced with a lower hand force so hands don't tire as quickly.
4. No breakover hand force.

- Ergonomic design
- Long lasting tool that delivers over 50,000 crimp cycles
- Ultra-smooth, fully-ratcheting cycle with built in safety release
- Double plated jaw assembly
- Comfortable rubber embedded handles.

Interchangeable Dies		Interchangeable Dies	
Order Code	Application	413-2660	SMA, SMB, SFR, ST and SC type

240407

	Order Code	1+	Price Each 5+	10+
Crimp tool frame	413-2658	40.75	38.72	37.08
Die set 2652	413-2660	13.46	12.69	12.22

18

DataReady Kit



A complete Cat5 datacomm tool set in a handy zipper case.

Kit includes:

- All in one telephone tool for RJ45 and RJ11
- Impact punch-down tool with 110 and 66 blades
- AM12 cutter/stripper for unshielded and shielded cable
- Patch-Check continuity tester
- Category 5 RJ45 connectors (x20)
- Zipper case with carrying strap and complete instructions

232159

Desc	Mfrs. List No.	Order Code	Price Each 1+
DataReady Kit	901053	388-8320	139.96

Electronics Design World



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www.electronicsdesignworld.com

DataReady™ Kit

Cat.5 AMP/Krone kit



A complete Category 5 datacomm tool set in a zip up case. The kit includes everything needed for a CAT-5 installation.

Kit contains:

- AM 12 UTP/STP cutter/stripper - 1112
- All-in-one telephone tool for RJ45 & RJ11 modular plugs (AMP) - 1545
- Standard impact punchdown tool - 3526
- Standard 110 blade - 4528
- Standard Krone blade - 4527
- Patch-Check™ tester - 1529
- RJ45 connectors - 9546

346128

Mfrs. List No.	Order Code	Price Each
9010531	748-7665	139.96

DataReady Pro Kit

Data cable installation kit



A complete data cable installation kit providing everything for cutting, stripping, crimping, terminating and testing data cables and modular plug cable systems. Contains:

- CrimpALL interchangeable die set crimper frame
- Die sets for RJ45 WE/SS, RJ11, RJ12 WE/SS, RJ22, RJ45 AMP, RJ11 DEC-MMJ
- AM12 twisted pair (UTP/STP) cutter /stripper
- PDT punchdown tool with 110 and 66 blades
- LAN ProNavigator tester with remote
- Operating and instruction manual

238283

Mfrs. List No.	Order Code	Price Each
901378	396-5764	290.75

Premise Service Kit

AMP/Krone kit



A large data, voice and coaxial LAN installation kit providing everything for twisted pair and coaxial cable installation.

Kit contains:

- KT8 round cable cutter - 900265
- Data SureStrip™ UTP/STP & flat satin cutter/stripper - 1116
- LC CST-58/59 coax stripper - 1255
- FlatCat™ flat satin cable cutter/stripper - 1160
- CrimpALL® CrimpFrame with EZI-CHANGE™ thumb screws - 8000
- Die sets:
RJ45 AMP-style - 2061
RJ11 AMP Style - 2062
RG58/59/62AU BNC/TNC - 2034
- SurePunch™ PDT punchdown tool - 3570

- SurePunch™ 110 reversible blade - 4572
- SurePunch™ Krone reversible blade - 4573
- LAN ProNavigator™ tester - 1543
- Speaker probe with volume control and light - 1571

346115

Mfrs. List No.	Order Code	Price Each
9010391	748-7657	322.20

Universal Serial Bus

Micro USB Receptacle



A new Micro USB connector with the smallest footprint available in USB connectors. This miniature connector is smaller than the conventional Mini-USB connector and enables portable device makers to further miniaturize portable products.

- Supports current USB On-The-Go supplement
- Design feature helps prevent wire pinching
- Typical applications include Mobile Phones, MP3 Players, other portable devices

495375

Mfrs. List No.	Order Code	1+	25+	50+	100+	500+
Type B						
1981568-1	152-1868●	0.53	0.49	0.46	0.44	0.41
Type AB						
1981584-1	152-1869●	0.60	0.56	0.52	0.51	0.47

Micro USB ZX Series



- Micro USB compliant connector
- Maintains high retention forces over 10,000 mating life cycle
- Micro USB saves approximately 25% PCB space

Current Rating 1 A
Voltage Rating 30V AC
Operating Temperature 0°C to 50°C
Durability 10,000 cycles
Contacts Copper Alloy

491388

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+
Micro USB					
Receptacle USB B Type	ZX62-B-5PA(11)	NEW 164-5325●	0.590	0.540	0.500
Receptacle USB B Type	ZX62M-B-5P	142-5721●	0.650	0.590	0.550
Receptacle USB AB Type	ZX62-AB-5PA(11)	NEW 164-5326●	0.590	0.540	0.500
Plug	ZX20-B-5S	142-5723●	0.590	0.540	0.500
Shield	ZX20-B-SLDC	142-5724●	0.115	0.113	0.100
Cable Assembly	ZX40-B-5S-1000-STDA	142-5725●	14.820	11.540	9.940

USB Wireable Plug



- Solder Cup

Current Rating 1.5A
Voltage Rating 30 AC
Insulation Resistance 1000MΩ
Operating Temperature -55°C to 85°C

495854

Description	Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
USB Plug Type A KUSBX-AP-KIT-SC	143-7593●		0.74	0.63	0.56	0.45	0.40
USB Plug Type B KUSBX-BP-KIT-SC	143-7594●		0.74	0.63	0.56	0.45	0.40

USB 2.0



- USB 2.0

Housing: Brass, Nickel plated
Insulation: PBT Glass Filled
Solder Pin: Brass, Tin Plated
Contact Spring: Brass, Gold plated

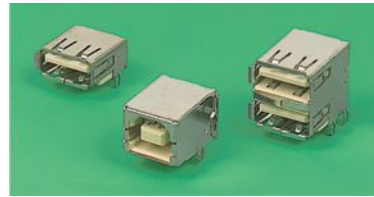
Contact Resistance: ≤30mΩ
Rated Current: 1A
Rated Voltage: 30VAC
Test Voltage: 500V@60s
Insulation Resistance: ≥108kΩ
Temperature Range: -25°C to +85°C

239539/406473

Mfrs. List No.	Order Code	1+	10+	50+	100+
USB Sockets					
Type A: Vertical PCB Mount - Single - 4 Pole					
2410 01	117-7882●	0.310	0.250	0.230	0.195
Type A: RA PCB Mount - Single - 4 Pole					
2410 02	117-7883●	0.310	0.250	0.230	0.195
Type A: RA PCB Mount - Double - 4 Pole					
2410 03	119-6550●	0.520	0.410	0.380	0.330
Type B: Vertical PCB Mount - Single - 4 Pole					
2411 01	117-7884●	0.310	0.250	0.230	0.195
Type B: RA PCB Mount - Single - 4 Pole					
2411 02	117-7885●	0.310	0.250	0.230	0.195
USB Cable Assemblies A - B					

Mfrs. List No.	Order Code	1+	10+	50+	100+
A to B 2.0m					
2431 02	124-3239●	3.340	2.710	2.470	2.140
A to B 3.0m					
2431 03	119-6551●	3.980	3.230	2.950	2.570
A to B 5.0m					
2431 05	124-3241●	6.570	5.310	4.840	4.210

Receptacles



- 4 and 5 pin receptacles available
- Through-hole and SMT
- With or without back shielding

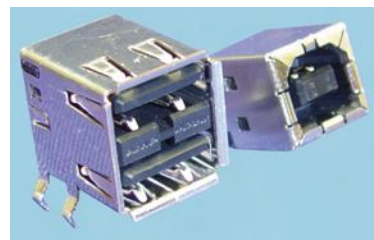
- A and B types
- A type in single and double deck
- UL approved

Insulation resistance 1000MΩ min.initial
Withstanding voltage 750V ac (rms), 60 Hz
Current rating 1A max.
Contact resistance 30mohmΩ max.initial
Contact capacitance 2pF max.
Temperature range 0°C to +40°C
Housing Phosphor Bronze, Tin / Lead plated
Insulator Moulded Plastic UL94V-0
Plating (contact) 0.76um (30uin) PaNi Contact (tails) 2.54um (100uin) tin-lead Solder tail

209991

No. of Ways	Mfrs. List No.	Order Code	1+	100+	500+	1K+
Thru Mount - Style A						
4 Position Double Deck	72309-0034BLF	109-7895●	1.63	1.48	1.34	1.20
Surface Mount - Style A						
4 Position, Single Deck	87583-2010BLF	SMD 131-4363●	0.60	0.56	0.52	0.48
Thru Mount - Style B						
4 Position, Single Deck	61729-0010BLF	109-7897●	0.81	0.48	0.44	0.41

USB Receptacle



419671

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
Right Angle Through Hole - Type A						
4	292303-1	107-6663●	0.75	0.66	0.62	0.58
4+4 Stacked	5787617-1	107-6664●	0.69	0.67	0.65	0.63
Vertical Through Hole - Type A						
4	292336-1	107-6667●	1.15	1.02	0.96	0.95
Right Angle Through Hole - Type B						
4	292304-1	107-6665●	0.31	0.29	0.28	0.27
Vertical Through Hole - Type B						
4	5787834-1	107-6666●	0.36	0.34	0.32	0.31
SMT - Type B						
4	1734346-1	SMD 132-1918●	0.66	0.62	0.59	0.53

Mini-USB Type B Receptacle Connector



- Improved rear shell for EMI shielding
- Reduced mounting area
- Pre-loaded contacts
- High contact pressure
- Interface contamination removed by wiping contacts

Insulator Material Heat Resistance Plastic
Contact Material Copper Alloy
Contact Plating Au (0.75µm Min.)
Current Rating 1A
Voltage Rating 30V AC/DC
Operating Temperature 0°C bis 50°C

523671

Mfrs. List No.	No. of Ways	Order Code	1+	10+	50+
24 5141 005 000 863+	5	155-8179●	0.80	0.76	0.72



Universal Serial Bus - continued

Cable Assemblies



210017

Cable Length (m)	Mfrs. List No.	Order Code	1+	50+	Price Each 100+	500+	1K+
Shielded - Type A to F/E							
2	974540-1	105-6019	9.29	8.50	7.65	6.87	6.24

USB 2.0 Cable Assemblies



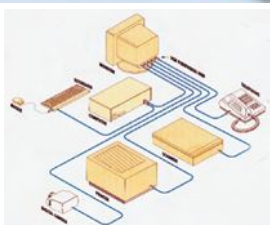
419674

Cable Length (m)	Mfrs. List No.	Order Code	1+	10+	Price Each 50+	100+	+
Type A to Type B							
1m	1487587-1	107-6669	1.45	1.35	1.29	1.22	--
1.5m	1487588-2	107-6671	1.59	1.48	1.41	1.34	--
2m	1487588-1	107-6672	1.76	1.64	1.56	1.47	--

USB Cable Assemblies



- High quality cable assemblies
- Various cable lengths available



Function: Serial, bidirectional data bus for networking different peripherals up to 127 on one bus
 Additional function: Power supply transmission (for IEEE 1394)
 Transmission rate: 12 Mbit/s (standard); 1.5 Mbit (slow)
 Cable length: per segment, maximum 0.83m
 Bus lines: 4- core, shielded
 Plug connector: Series A and B avoids loop formation

245799/407904

Mfrs. List No.	Order Code	1+	Price Each 5+
USB 'A-B' cable, 0.83 m	120-1896	2.74	2.20
USB 'A-B' cable, 1.30 m	120-1897	5.15	4.22
USB 'A-B' cable, 2.00 m	121-1028	6.24	5.88
USB 'A-B' cable, 3.30 m	120-1898	7.24	6.80
USB 'A-B' cable, 5.00 m	120-1899	10.50	9.87

USB - On The Go

Connectors and Cable Assemblies



- Approximately 1/6th the size of standard USB connectors
- Cable Assemblies have 5 pin design (one ID pin)
- Cable Assemblies are fully shielded for EMI protection
- Fully compliant with current USB 2.0 specifications
- Operates at speeds up to 480 Mbps
- Rugged durability up to 5000 cycles
- Connector, Order Code 4768334 has additional back cover shielding

OTG connectors can be used to enable mobile devices such as digital cameras, PDAs, audio players, printers and cellular phones to exchange data directly without the need for a host PC. The new OTG technology also enables mobile products to become "dual-role" devices, serving as either host or peripheral.

335213/406744

Description	Mfrs. List No.	Order Code	1+	25+	Price Each 50+	100+	500+
Connectors							
Mini AB Receptacle	565790519	112-5347	0.91	0.81	0.74	0.69	0.64
Mini AB Receptacle	56579-0576	SMD-978-6490	0.65	0.58	0.55	0.52	0.49
Mini B Receptacle	548190519	978-6465	1.40	1.32	1.24	1.19	1.14
Mini B Receptacle -Cover Tape	548190572	SMD-978-6473	0.89	0.85	0.81	0.77	0.73
Mini B Receptacle -Cover Tape	675031020	SMD-112-5348	0.63	0.55	0.44	0.43	0.39
Mini B Receptacle, vertical	500075-1517	112-5349	2.36	2.13	2.03	1.92	1.80
Cable Assemblies (male/male)							
- 1.0m long							
USB Type A to Mini B	88732-8600	122-1070	2.84	2.28	2.12	1.98	1.70
USB Type A to Mini B	88732-8602	122-1071	2.84	2.28	2.12	1.98	1.70

Micro USB Receptacles



New

Micro USB supports the current USB On-The-Go supplement, this allows communication between portable devices without going through a host. Being much smaller than the Mini-USB, the Micro-USB is the choice of mobile phone makers.

- Mating cycles over 10000
- Stainless steel shell provides high mating durability and strength
- Shell tabs enhance PCB retention

Current Rating	1 A	Durability	10,000 cycles
Voltage Rating	100V AC	Contacts	Copper Alloy
Operating Temperature	-20°C to 85°C		

510577

Description	Mfrs. List No.	Order Code	1+	25+	Price Each 50+	100+	500+
AB type Top Mount	47590-0001	156-8022	0.46	0.43	0.40	0.40	0.40
AB type Bottom Mount	47589-0001	156-8023	0.44	0.41	0.39	0.39	0.39
B type Mid Mount	47491-0001	156-8025	0.58	0.54	0.50	0.50	0.50
B type Bottom Mount	47346-0001	156-8026	0.54	0.50	0.47	0.47	0.47
Cable Assemblies							
USB A to Micro USB B, 1M	68784-0001	161-7585	3.44	3.19	2.99	2.99	2.99
USB A to Micro USB B, 1.5M	68784-0002	161-7586	3.87	3.61	3.38	3.38	3.38
USB A to Micro USB B, 2M	68784-0003	161-7587	4.32	4.02	3.75	3.75	3.75

USB Connector Systems

HandyLink™ I/O Interconnect System

Connectors and Cable Assemblies



The new USB 2.0 compatible, 0.8mm (.031") pitch HandyLink™ product family of connectors, cable assemblies and accessories from Molex offers a perfect solution to any handheld device design or application. The HandyLink family includes a right-angle SMT receptacle, a wire and PCB version of the plug, perpendicular and parallel mounted cradle connectors for docking applications and a wide array of cable assemblies. The HandyLink family's current-carrying capability of 1.5A continuous (up to 3.0A depending on circuit configuration) and compact size provide an optimal solution for the mobile device industry. The patented integrated-latch design provides ESD protection and mechanical integrity. The HandyLink connector interface is suitable for wire-to-board or board-to-board docking solution for hand held devices.

- USB 2.0 compatible up to 622Mbps
- Low profile receptacle height: 3.5mm
- Hot plug mating
- Robust cradle connector offers parallel or perpendicular mounting to PCB
- 1.5A - 3A Depending on circuit configurations
- Lead free process compatible and RoHS compliant

454714

Description	Mfrs. List No.	Order Code	1+	Price Each 10+	50+
HandyLink™ Connectors 0.8mm					
SMT Receptacle	44828-1162	SMD-132-2903	2.15	1.94	1.77
PCB Plug	45593-1600	132-2905	3.10	2.79	2.54
90° Cradle	45560-0161	132-2906	3.02	2.71	2.48
Cable Assemblies (Male - Male) 2m					
H/Link to H/Link	36697-0002	132-2908	11.08	9.97	9.06

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Bulgin - USB Buccaneer
PX0840 / PX0841

The USB Buccaneer is designed to confirm to the latest USB version 2 specification and provide an environmental seal to IP68. This dust and waterproof USB connector is suitable for industrial or hostile environments where a high speed computer interface is required.

- Dust and waterproof to IP68
- Data rates up to 480Mbps
- PCB adaptor leads
- Hot pluggable, standard 4 pole USB interface
- Double and Single ended sealed cable versions
- 2m and 5m lengths
- PVC black cable jacket

Sealing IP68, EN60529 (when mated)
Flammability
Operating Temp. 0°C to 70°C

2m IP68 A type USB to standard B type USB
5m IP68 A type USB to standard B type USB
2m IP68 B type USB to standard A type USB
5m IP68 B type USB to standard A type USB
2m IP68 A type USB to IP68 B type USB

335221/406745

Mfrs. List No.	Length	Order Code	1+	10+	50+
PX0840/A/2M00	2m	999-7377●	4.85	4.51	4.32
PX0840/A/5M00	5m	999-7385●	7.99	7.43	7.11
PX0840/B/2M00	2m	999-7393●	4.85	4.51	4.32
PX0840/B/5M00	5m	999-7407●	7.99	7.43	7.11
PX0841/AB/2M00	2m	999-7415●	9.23	9.06	8.25

Panel Mount Connectors

966-7741 - Computer USB connector



966-7750 - Peripheral USB connector

- Single hole fixing
- Front panel sealed to IP68
- Sealed "A" type to "B" type or "B" type to "A" type adaptor
- Opposite connector at rear of adaptor
- Mounting hole diameter 27.5mm (plus keyway)

335222/406746

Description	Mfrs. List No.	Order Code	1+	10+	50+
IP68 "A" type USB	PX0842/A	966-7741●	5.49	5.11	4.89
IP68 "B" type USB	PX0842/B	966-7750●	5.49	5.11	4.89

Rear Panel Mounting Connector - PCB Direct Mount

1166684

1166685

- 1166684 - USB "A" type IP68 connector
- 1166685 - USB "B" type IP68 connector
- PCB contacts at rear
- Direct PCB mount
- Mates with FIO: 9997377, 9997385, 9997393, 9997407, 9997415 and 9997423

430398

Description	Mfrs. List No.	Order Code	1+	25+	50+
IP68 "A" type USB	PX0845/A	116-6684●	5.80	5.39	5.16
IP68 "B" type USB	PX0845/B	116-6685●	5.80	5.39	4.47

Front Panel Mounting Connector
Flying Lead Termination

1166681

1166683

430397

Description	Mfrs. List No.	Order Code	1+	25+	50+
IP68 "A" type USB	PX0843/A	116-6681●	5.80	5.39	4.90
IP68 "B" type USB	PX0843/B	116-6683●	5.80	5.39	5.16

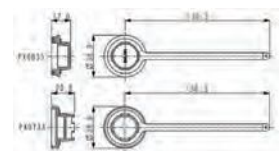
Adaptor Leads

- PCB adaptor lead, USB to 5 way crimp connector
- Lead length 100mm
- 5 way PCB header (0.1"/ 2.54mm pitch)

Mfrs. List No.	Order Code	Description
14193	999-7431	USB "A" type to 5 way crimp
14194	999-7440	USB "B" type to 5 way crimp
14191	966-7768	5 way PCB header - straight
14192	966-7776	5 way PCB header - right angle

335224

Order Code	1+	10+	50+
999-7431●	2.140	2.110	1.900
999-7440●	2.140	2.110	1.900
966-7768●	0.138	0.132	0.127
966-7776●	0.160	0.155	0.138

Sealing Caps

- Sealing caps to maintain IP68 rating when connectors are not in use

Mfrs. List No.	Order Code	Description
PX0835	428-5876	Sealing Cap for PX0840 and 841
PX0733	314-390	Sealing Cap for PX0842

335223/406748

Mfrs. List No.	Order Code	1+	25+	50+
PX0835	428-5876●	0.98	0.91	0.87
PX0733	314-390●	0.55	0.51	0.49

IP68 Sealed - Mini USB Buccaneer

The Mini USB Buccaneer provides a compact solution for USB connections in industrial environments. Utilising industry standard Mini "B" connections, the connector provides an IP68 sealed, secure and robust connection performing to USB V2.0, for use in areas where dust or water could prove detrimental to system operation. Fully shielded, providing good levels of noise immunity and EMI protection. Cables are overmoulded offering secure, tamper-proof connections.

- Dust and waterproof to IP68
- USB V2.0 data rates up to 400Mbps
- Shielded system, high noise immunity
- Overmoulded cables, tamperproof construction

Sealing	IP68	Performance	USB V2.0
Mating Cycles	5000	Operating Temp.	-20°C to +70°C
Flammability	UL94V-0		

442433



USB Connector Systems - continued

Sealed Mini USB Cables

PX0441 / PX0442



- IP68 sealed Mini "B" type to standard "A" USB
- Fully overmoulded construction
- Available in 2, 3 & 4.5m lengths
- Mates with PX0443, PX0446 and PX0447



- IP68 sealed Mini "B" type to Mini "A" USB
- Fully overmoulded construction
- Available in 2, 3 & 4.5m lengths
- Mates with PX0443, PX0446 and PX0447

2m	IP68 Mini USB B to USB A
3m	IP68 Mini USB B to USB A
4.5m	IP68 Mini USB B to USB A
2m	IP68 Mini USB B to Mini USB A
4.5m	IP68 Mini USB B to Mini USB A

442434

Mfrs. List No.	Length	Order Code	1+	25+	50+
PX0441/2M00	2m	122-9677●	5.29	4.92	4.71
PX0441/3M00	3m	122-9678●	6.29	5.85	5.60
PX0441/4M50	4.5m	122-9681●	11.39	10.58	8.62
PX0442/2M00	2m	122-9682●	5.89	5.48	5.24
PX0442/4M50	4.5m	122-9684●	11.99	11.15	10.67

Rear Panel Mount Connectors



1229687



1229686

- Mini "B" type
- With pins for direct PC mounting
- Mates with PX0441 and PX0442
- Mini "B" type
- Leaded with 5 way header
- Mates with PX0441 and PX0442

442494

Mfrs. List No.	Order Code	1+	25+	50+
PX0446	122-9686●	3.55	3.30	2.69
PX0447	122-9687●	3.55	3.30	2.69

Front Panel Mount Connectors



- Mini "B" type
- Leaded with 5 way crimp, for use with PC header
- Mates with PX0441 and PX0442

442435

Mfrs. List No.	Order Code	1+	25+	50+
PX0443	122-9685●	3.55	3.30	3.16

IP68 USB Buccaneer® Rear Panel Mounting Connectors



PX0848



PX0849

- IP68 rated, dust and waterproof sealing when mated
- USB V2.0, low and high speed bus connection, 1.5Mbps to 480Mbps
- Plug and play capability - standard 4 pole interface
- Visual mating indication
- High noise immunity and EMI protection
- Screw coupling - secure, proven locking system



Current	1A	Contact Plating	30 µin. Gold
Voltage	30Vac	Operating Temperature	0°C to 70°C
Contact Resistance	30mohm	Mating Cycles	1000
Contact Material	Copper Alloy	Flammability Rating	UL94V-0

Product Descriptions:-

PX0848/A - A type USB, rear panel mounted. Sealed A type at front of panel, standard B type at rear.

PX0848/B - B type USB, rear panel mounted. Sealed B type at front of panel, standard A type at rear.

PX0849/A - A type USB, rear panel mounted. Sealed A type at front of panel, leaded with 5 way header at rear.

PX0849/B - B type USB, rear panel mounted. Sealed B type at front of panel, leaded with 5 way header at rear.

NB- PX0848 and PX0849 mate with Bulgin's PX0840 and PX0841 USB leads (Farnell p/ns 999-7377, 999-7385, 999-7393, 999-7407, 999-7415)

524415

Mfrs. List No.	USB Type	Order Code	1+	25+	50+
PX0848/A	Type A	162-9392●	5.89	5.28	5.18
PX0848/B	Type B	162-9393●	5.89	5.28	5.18
PX0849/A	Type A	162-9394●	5.89	5.28	5.18
PX0849/B	Type B	162-9395●	5.89	5.28	5.18

IP68 Mini USB Buccaneer®



Mini AB Type

PX0458
Rear Panel MountingPX0456
Front Panel MountingPX0457
Rear Panel Mounting

The Mini USB Buccaneer provides a compact solution for USB connections in industrial environments. Utilising the industry standard Mini AB connections for the panel connection, the latest in the USB Buccaneer range offers a secure, robust connection performing to USB V2.0, where dust or water could prove detrimental to system operation. The system is fully shielded providing good levels of noise immunity and EMI protection. Cables are fully overmoulded construction offering secure, tamper-proof connections.

Features:-

- Mini AB type
- IP68 rated, dust & waterproof to EN60529
- USB V2.0, data rates up to 480Mbps
- PX0456 leaded with 6 way crimp, for use with PC header
- PX0457 leaded with 6 way header
- PX0458 with pins for direct PC mounting

NB- Mate with Bulgin PX0441 & PX0442 USB leads (Farnell p/ns 122-9677, 122-9678, 122-9681, 122-9682, 122-9683, 122-9684)

Current	1A	Flammability Rating	UL94V-0
Voltage	30Vac / 42Vdc	Contact Plating	50 micron gold
Contact Resistance	50mohm	Mating Cycles	5000
Operating Temperature	0°C to 70°C		

524412

Mfrs. List No.	Mounting Type	Order Code	1+	25+	50+
PX0456	Front Panel Mounted	162-9389●	4.57	4.31	4.06
PX0457	Rear Panel Mounted	162-9390●	4.57	4.31	4.06
PX0458	Rear Panel Mounted	162-9391●	4.57	4.31	4.06

Accessories



- Sealing Caps
- 5 way PCB eaders

For use with PX0441 & PX0442
For use with PX0443
For use with PX0446 & PX0447

5 way straight header
5 way right angle header

442507

Mfrs. List No.	Order Code	1+	25+	50+
PX0485	124-5342●	0.720	0.670	0.640
PX0480	384-1285●	0.780	0.720	0.690
PX0484	840-6642●	0.840	0.780	0.760
14191	966-7768●	0.138	0.132	0.127
14192	966-7776●	0.160	0.155	0.138

IP68 Sealed - Bluetooth Buccaneer



Primarily designed for harsh industrial environments where the flexibility of a wireless connection is required, Bluetooth Buccaneer is an ideal solution where equipment or systems may be portable or the inflexibility of static cabling makes communication difficult or impractical. Bluetooth Buccaneer provides a robust secure connection environmentally sealed to IP68 offering an easy to use pluggable wireless device running from standard USB. Available with Class I and Class II power outputs, with transmission range up to 100m, they mate with USB Buccaneer connectors, 966-7741.

- Dust & waterproof to IP68 EN60529 when mated
- Bluetooth V1.1 & V1.2
- Up to 100m range
- Built-in antenna
- Standard A type USB interface
- Mates with USB Buccaneer
- Secure screw thread locking
- Windows XP recognised, other operating systems supported
- Optional driver download via Bulgin web site

Sealing Protocol	IP68 Bluetooth V1.1 and V1.2	Sealing Protocol	IP68 Bluetooth V1.1 and V1.2
Bluetooth Classifications Class I - 100mW (20dbm) <100m* range		Sensitivity	-76db
Bluetooth Classifications Class II - 2.5mW (4dbm) <20m* range		Max data rate	723Kbps
Frequency band	2.4 GHz licensed ISM band	Support	Piconet, up to 7 slaves

Low power modes available

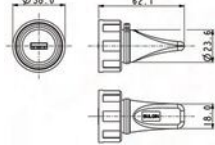
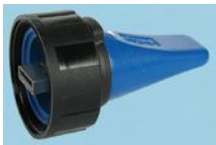
Microsoft WHQL approved, included in the SP2 update pack

Notes:

*Range is dependant on prevailing conditions

*Minimum output at maximum power setting

IP68 Bluetooth Adaptor



- Environmentally sealed to IP68
- Bluetooth V1.1 and V1.2
- Class I and Class II
- Mates with USB Buccaneer ,PX0842/A, Order Code 9667741

417925

Mfrs. List No.	Type	Order Code	1+	5+	10+
PX0880/1	IP68 USB/Bluetooth Class I	108-0324	42.55	37.87	35.74
PX0880/2	IP68 USB/Bluetooth Class II	108-0326	32.55	28.97	27.34

USB Field TV Sealed USB MIL-C-38999 Series III



- Sealed against fluid and dusts (IP67)
- Shock, Vibration and Traction resistant
- Suitable for 500-1500 mating cycles
- Improved EMI protection
- Choice of back terminations on receptacles - USB-A receptacle or Solder (4 tinned holes)
- Olive Drab Cadmium finish

Transforms regular USB cordset for use in harsh environments. Easy to assemble, the plug adapts a standard USB cordset without the need for tools.

Salt Spray	≥500h
Flammability / Smoke	UL94 V0 and NF F 16 101 & 16 102
Vibrations	10Hz - 500Hz, 10g, 3 axes: no discontinuity ≤ 1μs
Shocks	IK06: 250g dropped from 40cm onto mated connectors
Humidity	21 days, 43°C, 98% humidity
Temperature Range	-55°C to +85°C

450110

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+
Receptacle, Square Flange, USB-A	USBF TV 21 G	122-0811	29.73	27.64	26.45	25.32
Receptacle, Square Flange, Solder	USBF TV 22 G	122-0812	28.90	27.81	26.29	24.09
Receptacle, Jam Nut, USB-A	USBF TV 71 G	122-0814	34.03	31.66	30.30	29.00
Plug Assembly	USBF TV 6 G	122-0817	41.51	38.62	36.96	35.36
Cap for Square Flange	USBF TVC 2 G					
Receptacle		122-0813	19.46	18.12	17.33	16.57
Panel Gasket	JE15	122-0819	2.03	1.90	0.94	0.89
Removal Tool	USBF ODE	122-0820	18.27	17.00	16.27	15.57

USB Field Sealed USB Self Closing Cap



- Automatically protects USB Field square flange receptacles
- Closes when either a USB Field plug or regular USB cordset is removed from receptacle

450096

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+
Nickel and metallised inserts (EMI)	USBF 21 N SCC	122-0796	27.09	25.19	24.11	23.08
Black and blank insert	USBF 21 B SCC	122-0797	25.50	23.73	22.71	21.73

Reinforced USBFTV Memory Keys



- 1024 KB Memory Size
- Cap Sealing of IP67
- USB Cordset is included with each memory key
- Choice of Nickel, Olive or Black

488654

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+
Nickel	USBKEY1024N	142-8239	105.32	99.37	90.80	86.33
Black	USBKEY1024B	142-8241	105.32	99.37	90.80	86.33
Olive Drab	USBKEY1024G	142-8242	105.32	99.37	90.80	86.33
Olive Drab	USBFTVKEY6A1024GCAP	142-8243	112.14	105.79	96.68	91.93
Nickel	USBFTVKEY6A1024NCAP	142-8244	112.14	105.79	96.68	91.93

Industrial USB - IP67 Plugs and Receptacles



- Sealed housing for harsh industrial environments
- Single seal surface ensures IEC 60529 IP67 sealing
- 1/3 turn bayonet latching for quick connection
- Same form factor as RJ45 Ethernet
- Over-moulded cord-sets and pigtails ensure IP67 sealing on cable side

419726

Mfrs. List No.	Length	Order Code	1+	25+	50+
USB Plug Type A to Pigtail					
84727-1001	2m	965-2795	8.94	8.42	7.79
84727-1003	3m	965-2809	9.38	8.82	8.20
USB Plug Type B to Pigtail					
84728-1001	2m	965-2825	8.94	8.42	7.79
Panel Mount USB Receptacle Type A to Pigtail					
84729-0001	0.152m	965-2850	11.96	9.61	8.36
PCB / Panel Mount USB Receptacle Type B					
84730-0001		965-2892	3.13	2.94	2.74

Industrial USB - IP67 Panel Mount Lead Type A to Type A



419744

Mfrs. List No.	Length	Order Code	1+	25+	50+
Panel Mount Receptacle to Plug					
84729-0003	0.152m	965-2868	6.33	5.98	5.55
84729-0004	0.8m	965-2876	8.75	8.24	7.64
84729-0005	1.3m	965-2884	6.89	6.49	6.01

IEEE 1394 Connectors

Fire Wire - IEEE 1394 SMT and Through Hole



- Fire Wire connectors
- Applications, MP3 Players, Mobile phones, Digital cameras etc
- Surface mounting or through hole

Current	1	Contact material	Brass
Insulation resistance	100M ΩMIN @ 500V	Housing material	Thermoplastic
Contact resistance	40 Ω	Temperature range	-55°C To + 85°C
Contact Plating	Gold over Nickel		

236511/406749

Type	Order Code	1+	25+	50+	250+	500+
SMT Horizontal	109-9043	0.89	0.81	0.69	0.60	0.55
THT Horizontal	109-9044	0.87	0.78	0.67	0.55	0.53
THT Vertical	109-9045	0.87	0.78	0.67	0.55	0.53

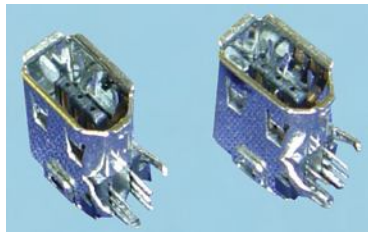
Over 480,000 products online



18



IEEE 1394 Connectors - continued

Right Angle Upright
IEEE 1394 Socket Assembly

- 6 Position
- Through hole

419676

Mfrs. List No.	Order Code	1+	10+	50+	100+
5787956-1	107-6673●	0.70	0.65	0.62	0.59

IEEE 1394
Cable Assemblies

The **IEEE1394** high-speed serial bus provides enhanced connectivity for a wide range of devices, including consumer electronics, audio/video (A/V) appliances, storage peripherals, PCs and other portable devices.

- Conforms IEEE1394 standard
- Easy connections to equipment
- For use with plug and play devices

411101

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+	100+
Cable Assemblies (Male / Male) 6 Pin to 6 Pin, 2m	1324770-5	120-6030●	7.88	7.67	7.47	--	--

IEEE 1394
Connectors and Cable Assemblies

IEEE1394, also named "Firewire" by Apple, and "i.Link" by Sony, is a new standard I/O interface designed to service the demands of the emerging multimedia bus requirements. 1394 is unique in its ability to carry video and audio with assured quality, based on its high bandwidth capabilities.

This simple to use, peer-to-peer connection system

can carry a dense multimedia data stream between computers, video cameras, high-fidelity audio products, and imaging devices at a maximum speed of 400Mbps.

The hot plugging capabilities of 1394 make it ideal as a consumer interface. A new node can be plugged in without powering down. When a new node is detected, all existing nodes on the bus sense it and know a change in bus topology has occurred.

Sockets

- Provides the interface for speeds up to 400 Mbps
- Full metal shielding for ESD protection
- High temperature plastic housing for SMT processing

335211/407901

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+	100+
IEEE 1394-1995, 2.0mm pitch							
Connectors, 6 Pin							
Right Angle, Upright	534600629	978-6392●	2.94	2.61	2.56	2.43	2.31
Right Angle, Flat	53984-0671	978-6414●	5.55	4.87	4.32	3.89	3.53
IEEE P1394a, 0.80mm pitch							
Connectors, 4 Pin							
Right Angle, Flat	54030-0471	978-6422●	0.73	0.63	0.56	0.52	0.47

IEEE 1394 - Low Profile A/V



The Cable Assembly provides a digital link between consumer devices and PCs with the four-circuit, 1394 standard and 1394 A/V connectors. A sturdy detent lock on the shell interface provides secure mating retention. Compatible with compliant IEEE 1394a products from other manufacturers.

- IEEE 1394 standard to IEEE 1394 A/V Cable Assembly
- 4 circuit to 4 circuit configuration
- Shielded cable

335205/407902

Mfrs. List No.	Order Code	1+	10+	25+	50+	100+
Cable Assemblies 4.5 mtr (male/male) 85517-0002	997-4202	12.12	10.85	10.54	10.17	9.54

IEEE 1394 - Industrial
Connector and Cable Assembly

This SMT PCB socket and cable plug system is designed for rugged applications such as factory automation machines, instrumentation and industrial cameras.

An outer metal shell design on both the plug and socket offers superior EMI/RFI protection. Six friction grounding fingers provide additional shielding and mating stability. The system can reach speeds up to 400 Mbps and is IEEE 1394-1995 compliant.

The right-angle SMT PCB socket features a diecast metal shell that provides robust construction for harsh environments and four screw lock locations for secure panel and PCB mounting. Metal PCB tabs offer additional SMT solder-joint support and plastic pegs provide board-placement guidance. The socket is made of high-temperature housing to withstand SMT soldering environments.

Socket

- Provides for speeds up to 400Mbps
- Robust diecast metal shell for harsh environments
- Double shielding offers superior EMI/RFI protection
- Four screwlock locations enable secure panel and PCB mounting
- Spring retention features provides secure mating and outer shell grounding

Cable Assemblies

- Provides for speeds up to 400Mbps
- 6 circuit to 6 circuit configuration
- Easy to use latch provides strong retention and audible "click"
- Rugged PCB moulded boot includes serrated finger grips for easy mating and unmating and an open area for custom logos

335199/407903

Description	Mfrs. List No.	Order Code	1+	10+	25+	50+	100+
Connector							
IEEE 1394 PCB socket 55395-0619	55395-0619	978-6481●	7.67	7.13	6.83	6.56	6.28
Cable Assembly (male/male)							
4.5m	592337003	112-5351●	57.13	53.70	51.39	49.11	44.81

IEEE 1394 Connector System

IP68 Sealed - FireWire Buccaneer



Dust and waterproof to **IP68**, Bulgin's FireWire Buccaneer is ideally suited to industrial or hostile environments where a high data rate combined with a robust and secure connection is required.

- Dust and waterproof to **IP68**
- IEEE 1394a performance to 400mbps
- 4 & 6 pole FireWire connectors
- Panel adaptor leads to PCB

Sealing	IP68	Performance	IEEE1394a
Flammability	UL94V-0	Operating Temp.	0°C to 70°C

418750

4 Pole FireWire IP68 Cables



4 Pole to 4 Pole



4 Pole to 6 Pole

- IP68 sealed connector to standard 4 and 6 pole FireWire
- Overmoulded construction
- 2m and 4m lengths

2m IP68 4 pole to standard 4 pole

418754

Mfrs. List No.	Length	Order Code	1+	25+	50+
PX0417/2M00	2m	995-7928●	8.98	8.35	7.99

6 Pole FireWire IP68 Cables



- IP68 6 pole sealed connector to standard 6 pole FireWire
- Overmoulded construction
- 2m and 4m lengths

2m IP68 6 pole to standard 6 pole
4m IP68 pole to standard 6 pole

418756

Mfrs. List No.	Length	Order Code	1+	25+	50+
PX0846/2M00	2m	995-7960●	11.64	10.82	10.36
PX0846/4M00	4m	995-7979●	16.01	14.89	14.25

IP68 Panel Mount Connectors



- Front panel mounting
- 4 and 6 pole FireWire
- PX0419 mates with PX0417 & PX0418
- PX0847 mates with PX0846
- PX0419 terminated with 5 way crimp at rear
- PX0847 terminated with 7 way crimp at rear

418757

Mfrs. List No.	Poles	Order Code	1+	25+	50+
PX0419	4	995-8002●	4.80	4.46	4.27
PX0847	6	995-8010●	5.51	5.12	4.90

FireWire Accessories
Sealing Caps

- Sealing caps to maintain IP rating when connectors are not in use

For use with PX0846
For use with PX0847

418768

Mfrs. List No.	Order Code	1+	25+	50+
PX0835	428-5876●	0.98	0.91	0.87
PX0733	314-390●	0.55	0.51	0.49

Serial ATA Storage Interface

Serial ATA Storage Interface
Desk top and Server Storage

107-8527

System Plug reverse right angle

107-8528
Signal Plug, straight, Vertical107-8530
Device Plug107-8533
Receptacle, SMT.101-2233
Signal Cable101-2235
Power Cable assembly

- Ideal Storage interface to meet increased bandwidth and performance requirements
- Can support 1.5 Gbps.

Current Rating	1.5A max	Contact Resistance	30mΩ max
Dielectric withstand Voltage	500V AC 1 min. at sea level	Operating Temperature (Desktop)	-25°C to 85°C
Insulation Resistance	1000MΩ min	Operating Temperature (Server)	-40°C to 105°C

272340/406750

	Mfrs. List No.	Order Code	1+	10+	100+
Desktop Storage					
System plug, reverse r/a	67490-3220	107-8527●	0.37	0.33	0.29
System plug, standard r/a	67490-1220	107-8524●	1.10	0.97	0.88
Signal plug, vertical	67491-0020	107-8528●	0.67	0.59	0.54
Signal plug, vertical	67491-1030	107-8529●	0.54	0.47	0.43
Receptacle, right angle, SMT	67492-9220	107-8531●	0.97	0.85	0.77

	Mfrs. List No.	Order Code	1+	10+	100+
Server Storage					
Device plug	877030001	107-8530●	2.58	2.28	2.07
Receptacle, SMT	87713-1001	107-8533●	2.94	2.37	2.13
Cable Assemblies					
Signal cable - Female to Female					
Straight - straight, 0.5M	88750-5318	101-2233●	6.56	6.32	5.93
Straight - straight, 1M	88750-5418	107-8518●	9.46	8.41	7.57
Straight - r/angle, 0.5M	88762-5400	107-8519●	2.13	1.92	1.70
Straight - r/angle, 1M	88762-5410	107-8520●	2.46	2.19	1.98
Power cable					
Male - female, 0.15M	88751-1310	101-2235●	1.39	1.23	1.09
4 way female - pigtail, 1.5M	88751-1410				
		107-8522●	1.37	1.22	1.15
5 way female - pigtail, 1.5M	88757-7810				
		107-8523●	2.64	2.34	2.11

Serial ATA Storage Interface

Board-to-Board and Cable-to-Board Solution



Moving beyond traditional desktop and network storage applications, Serial ATA is quickly becoming an integral part of consumer electronic products with integrated hard disk drives.

Typical applications include HDD-DVD recorders, home-servers, multimedia hubs, LCD TVs, digital juke boxes, HDD enabled game consoles, set-top boxes with personal video recorders, audio players and audiovisual devices for the automotive industry.

494685

Mfrs. List No.	Description	Order Code	1+	10+	100+
External SATA Receptacle					
47082-1000	Receptacle, SMT 7 Way	151-9799●	1.110	0.940	0.860
Signal Plugs					
47080-4005	Plug, SMT RA latch	151-9800●	0.640	0.540	0.500
47155-4001	Plug, Thru Hole Latch	151-9801●	0.330	0.290	0.270
67800-5025	Plug, Vert SMT Latch	151-9802●	0.530	0.450	0.420
67800-8005	Plug, Vert Thru Hole Latch Footprint A	151-9804●	0.440	0.380	0.350
67800-7005	Plug, Vert Thru Hole Latch Footprint B	151-9805●	0.490	0.410	0.380
Combo Plug					
87799-0001	SMT inc Jumper	151-9810●	1.780	1.500	1.380
Combo Receptacle					
47018-4001	Receptacle, SMT RA 22 Way 5.15mm	151-9813●	1.360	1.140	1.050
87678-1001	Receptacle, Vert Backplane 22 way	151-9811●	2.480	2.090	1.910
47018-2001	Receptacle, SMT RA 22 Way 4.30mm	151-9812●	1.270	1.070	0.980
Power Connectors					
67926-0001	Receptacle, IDT Metal Latch	151-9806●	0.730	0.630	0.570
67926-0011	Receptacle, IDT Friction locking	151-9807●	0.520	0.440	0.400
67926-0040	Cover for IDT Receptacle, Feed To	151-9808●	0.108	0.083	0.073
67926-0041	Cover for IDT Receptacle, Feed-Thru	151-9809●	0.135	0.112	0.101
Cable Assemblies					
68561-0015	Straight Latching to Straight Latching	151-9814●	1.550	1.310	1.190
68561-0016	Straight Latching to RA Latching	151-9816●	1.640	1.390	1.270

E-SATA



- E SATA Plugs with cable assembly options

Current Rating	1.5 A
Insulation Resistance	Mohm-m
Voltage Rating	40 AC
Operating Temperature	-25°C to 85°C

491674

	Order Code	1+	10+	50+
R/A DIP Plug	142-8277●	0.60	0.53	0.47
R/A DIP Plug without bottom spring	142-8278●	0.60	0.53	0.47
Vertical DIP Plug	142-8279●	0.60	0.53	0.47
R/A SMT Plug	142-8280●	0.60	0.53	0.47
R/A SMT Plug without bottom spring	142-8281●	0.60	0.53	0.47
R/A SMT Plug Reverse	142-8282●	0.60	0.53	0.47
Cable Assembly				
120mm	142-8283●	0.72	0.65	0.58
245mm	142-8286●	0.82	0.72	0.64
250mm	142-8284●	0.82	0.72	0.64
450mm	142-8285●	0.94	0.85	0.73

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Visit www.farnell.co.uk and look for the Tech Info heading in your search results.



Serial ATA Storage Interface - continued

HDMI™ E-SATA Stacked Connector



E-Sata covers a very wide range of applications in the external storage market. E-Sata encompasses applications from single disk drives to multi disk storage/backup.



- Up to six times faster than existing external storage solutions such as USB 2.0 or Firewire
- Complies with EMI
- Rugged user friendly external connection

514877

No. Ways	Mfrs. List No.	Order Code	1+	Price Each	+
7	1888540-1	157-0005●	3.68	--	--

Serial Attached SCSI

Serial Attached SCSI (SAS) Cable Assemblies



Tyco Electronics 4x Series of cable assemblies are designed to meet the most demanding SAS applications.

- High signal integrity capabilities
- Fully shielded for EMI/RFI protection
- Reduced crosstalk(Less than 3%)

496253

Cable Length (m)	Mfrs. List No.	Order Code	1+	Price Each	10+	50+
2m	1812765-3	152-2223●	110.96	96.48	88.77	
4m	1812765-5	152-2224●	161.05	140.04	128.85	

Small Form Pluggable

SFP Cages



Tyco Electronics supports the market with a full range of SFP products, including single port and high density SFP products in single row and stacked configurations. This range includes a full range of Light Pipes for single cages, ganged (single row), and stacked (double row) SFP products.

Mfrs. List No.	Order Code	Mfrs. List No.	Order Code	Mfrs. List No.	Order Code	Mfrs. List No.	Order Code
1489669-1	152-2194	1761007-1	152-2198	1658939-1	152-2203	1658629-1	152-2208
1367629-1	152-2195	1658723-1	152-2199	1761394-1	152-2204	1658758-1	152-2209
1367147-1	152-2196	1761008-1	152-2200	1658628-1	152-2205	1658894-1	152-2210
1761014-1	152-2197	1761015-1	152-2201	1658859-1	152-2207	1658895-1	152-2211

496270

Order Code	Description	1+	10+	50+
Single Port				
152-2194●	CAGE, 1X1	2.56	2.43	2.22
152-2195●	CAGE, 1X1, LIGHTPIPE	6.09	5.79	5.29
152-2196●	DUST CAP	0.37	0.35	0.32
Ganged				
152-2197●	CAGE, GANGED, 1X2	3.95	3.76	3.44
152-2198●	CAGE, GANGED, 1X2, LIGHTPIPE	8.85	8.43	7.68
152-2199●	CAGE, GANGED, 1X4	12.54	11.93	10.89
152-2200●	CAGE, GANGED, 1X4, LIGHTPIPE	16.87	16.06	14.65
152-2201●	CAGE, GANGED, 1X6	13.47	12.83	11.71
152-2203●	CAGE, GANGED, 1X6, LIGHTPIPE	30.74	29.28	26.73
152-2204●	DUST CAP, GANGED	0.40	0.38	0.35
Stacked				
152-2205●	CAGE, STACKED, 2X1	5.20	4.96	4.52
152-2207●	CAGE, STACKED, 2X1, LIGHTPIPE	12.52	11.91	10.87
152-2208●	CAGE, STACKED, 4X2	32.89	31.30	28.58
152-2209●	CAGE, STACKED, 4X2, LIGHT-PIPER	37.75	35.95	32.81
152-2210●	CAGE, STACKED, 6X2	46.70	44.46	40.60
152-2211●	CAGE, STACKED, 6X2, LIGHT-PIPER	53.98	51.41	46.93

SFP Cable Assemblies



- Low cost solution for short reach applications
- Compatible with MSA Compliant SFP cages
- Applications include Servers and Storage

496312

Mfrs. List No.	Length	Order Code	1+	10+	50+
1902495-1	0.5m	152-2212●	62.63	59.65	54.47
1902495-2	1m	152-2213●	89.47	85.21	77.80

XFP 10 Gigabit Serial Pluggable Solution



The XFP Multi-Source agreement specifies the next generation pluggable transceiver. Tyco Electronics' is fully compliant with the XFP MSA. The goal of the XFP MSA is to provide a universal design for the transceiver that will be suitable for all applications (One size fits all).

- Press fit PCB attach
- Designed for use in belly-to-belly applications
- Applications include 10 Gigabit Ethernet Switches and Routers, 10 Gigabit Aggregator ports

Mfrs. List No.	Description	Order Code
1888481-1	XFP Kit, with ins tape and SAN Heat Sink (6.5mm)	152-2214
788862-1	XFP PT Connector, SMT 30 position	152-2215
1902480-1	XFP Cable Assembly, Passive 0.3M	152-2216

496343

Mfrs. List No.	Order Code	1+	10+	50+
1888481-1	152-2214●	33.11	31.54	28.80
788862-1	152-2215●	2.60	2.48	2.25
1902480-1	152-2216●	100.66	95.87	87.53

SFP Connectors, Cages, Cable Assemblies and Adapters



The SFP product range meets the demands of networking and storage industries, which require denser and faster packaging for high-speed serial interfaces. The Multi-Port connectors offer high port density with complete integration of stacked 20-circuit SFP connector ports within a cage. Integrated light pipes are available to provide port-status indication to the user.

Mfrs. List No.	Description	Order Code
74441-0007	Receptacle, SMT R/A 30 way	152-0101
75640-5001	2-by-1 Multiport Connector	152-0103
74720-0510	Plug, Loopback	152-0104
74736-0240	Heatsink, PCI 4.2mm	152-0105
74736-0241	Heatsink, SAN 6.3mm	152-0107
74726-0001	Lightpipe cover assembly, 1-by-1	152-0108
74727-0001	Lightpipe cover assembly, 1-by-2	152-0109
74736-0220	Cage assembly W/O heat sink	152-0110
74736-0230	Heatsink clip	152-0111
74722-0001	Ganged cage, 1-by-2	152-0112
74737-0004	Pressfit cage, 0.120" legs Belly-to-Belly	152-0113
74737-0009	Pressfit cage, 0.133" legs	152-0114

494794

Order Code	1+	Price Each	10+	50+
152-0101●	1.90	1.65	1.50	
152-0103●	11.06	9.65	8.70	
152-0104●	4.56	3.98	3.59	
152-0105●	6.98	6.10	5.50	
152-0107●	7.29	6.37	5.73	
152-0108●	1.13	1.00	0.90	
152-0109●	2.01	1.75	1.59	
152-0110●	10.93	9.54	8.61	
152-0111●	0.77	0.66	0.59	
152-0112●	3.19	2.79	2.51	
152-0113●	1.21	1.06	0.96	
152-0114●	1.21	1.06	0.96	

Mfrs. List No.	Description
74742-0002	Cable assembly, passive 2m
74720-0502	Adapter, Loopback
74741-0001	Adapter, Copper LOS ground
74741-0002	Adapter, Copper LOS toggle
85388-0100	Adapter, STM1 e Coax
85391-0100	Adapter, Base-T

494877

Order Code	1+	Price Each	10+	50+
152-0115●	33.41	29.16	26.30	
152-0116●	33.61	29.32	26.44	
152-0117●	89.61	78.19	70.51	
152-0119●	89.61	78.19	70.51	
152-0121●	89.61	78.19	70.51	
152-0122●	89.61	78.19	70.51	

Over 480,000 products online



Digital Video (with / without audio)

Display Port™ 0.50mm Pitch
Connector and Cable Assembly

molex



The DisplayPort™ is designed for internal and external system solution for high bandwidth audio and video data transfer in the notebook and PC market. Consisting of a 20 circuit, 0.50mm pitch receptacle and cable assembly with metal shield for full EMI / RFI protection. The receptacle is designed with four solder pins for added mechanical stability as well as a snap-in plastic peg for positive polarisation during mounting.

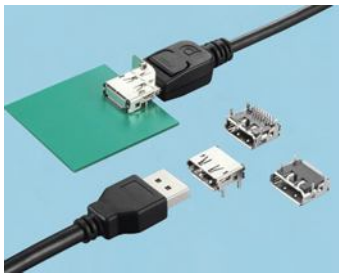
- Plastic locating peg
- Shielded for EMI/RFI protection
- Small footprint
- Polarised mating

463377

Description	Mfrs. List No.	Order Code	1+	10+	50+	100+
PCB Receptacle						
	47272-0001	134-5651●	1.92	1.60	1.38	1.20
Cable Assembly (Plug/Plug)						
2m	68783-0007	134-5652●	31.21	29.55	29.13	28.71

Display Port Connectors
DP1 Series

JAE



New

- Compatible with the next-generation flat panel interface standard DisplayPort 1.1a.
- Secure shielding with metallic shell, VESA certified
- Board-side receptacle is available as a reverse SMT type for reverse mounting, angle SMT type with flange, and standard angle SMT
- Mating height is 6.5mm
- 2m and 3m plug cable assemblies available

Specifications:-			
Current Rating	0.5A	Withstanding Voltage	500 VACrms/min.
Contact Plating	Gold	Contact Resistance	50mohm
Insulation Resistance	100Mohm	No. of Contacts	20
Durability	10000 cycles	Applicable Wire	Twinax cables (30-32 AWG)
Operating Temp.	-20°C to 85°C		

528156

Mfrs. List No.	Order Code	1+	10+	50+	100+	400+
R/A SMT Standard Type without Flange						
DP1R020JQ1R400	167-9718●	0.86	0.82	0.75	0.68	0.64
R/A SMT Reverse Type without Flange						
DP1R020JQ2R400	167-9719●	0.86	0.82	0.75	0.68	0.64
R/A SMT Standard Type with Flange						
DP1R020JQ3	167-9720●	1.53	1.46	1.34	1.25	--
Display Port Cable Assemblies						
Mfrs. List No.	Cable Length	Order Code	1+	5+	10+	
DP1P020ST30200LB	2m	167-9721●	20.99	18.99	16.99	
DP1P020ST30300LB	3m	167-9722●	23.99	20.99	18.99	

Display Port Connectors

SPC multicomp



1686453



1686454



1686455



1686457



1686456

New

- Enable a digital display connection as a viable alternative to VGA
- Display port handles digital transfers at rates up to 10.8Gbps
- 2560 x 1600, 2048 x 1536 high resolution
- Deep color 30/36-bit
- Digital audio and video
- Supports RSA for digital content protection
- Applications: PC, projector, DVD player, set top box, and LCD TV/PDP TV

Specifications:-

Contact Plating	Gold Flash over Nickel	Shell Plating	Nickel
Termination Method	Solder	No. of Contacts	20

528462

Type	Order Code	1+	10+	50+	100+	500+
Receptacle, W/O Flange, W/O Top Spring, with Pole, W/O Rib SMT	168-6453●	0.77	0.70	0.64	0.59	0.53
Receptacle, with RIB, with Spring, with Pole, 2 Group DIP Tail DIP	168-6454●	0.77	0.70	0.64	0.59	0.53
Receptacle, W/O Flange, W/O feet, with Pole Cable	168-6455●	0.80	0.73	0.66	0.61	0.56
Plug, with Latch Hole, with Hood Cable	168-6456●	1.11	0.99	0.90	0.82	0.69
Plug, with Latch Hole, W/O Hood Cable	168-6457●	0.98	0.87	0.79	0.72	0.60

DMS-59™ System Interface
Connectors and Cable Assemblies

molex



Molex's DMS-59™ features the Molex LFH™ (Low Force Helix) contacts aimed at the industry wide standard for multi-head graphic card applications. The DMS-59 is based on the 60-circuit LFH using circuit #58 as the voided pin for the keying mechanism. The connector system consists of a 59-circuit receptacle and plug cable assemblies offering DMS-59 to various combinations of VGA, DVI-D and

DVI-I, meeting requirements for impedance, cross-talk and Skew.

- Void pin #58 ensures exclusive mating
- Low force Helix (LFH) contact interface
- 1.27mm pitch
- Various cable assembly configurations
- Applications include: Monitors, displays, graphic cards etc.
- VESA selected

454753

Description	Length	Mfrs. List No.	Order Code	1+	10+	+
DMS-59™ Receptacle, SMC Through Hole 90° Receptacle		75134-1001	132-2865●	7.29	6.27	--
Cable Assemblies (Male - Female)						
DMS to 2 x VGA	0.2m	88768-5200	132-2866●	13.18	11.34	--
DMS to 2 x DVI-I	0.2m	88768-5300	132-2867●	16.65	14.31	--
DMS to DVI-I + VGA	0.2m	88768-5400	132-2868●	12.67	10.89	--
Cable Assemblies (Male - Male)						
DMS to 2 x DVI-D	2m	88768-5500	132-2869●	16.65	14.31	--

MicroCross™ DVI Cables and Adaptors

molex



- Supports TMDS (Transmission Minimised Differential Signalling)
- Meets the Intel® DDWG (Digital Display Working Group) specification
- Crossing ground blade design provides video bandwidth of 1.7Gbps per differential pair for digital interface and 2.4GHz for analog interface
- Range of adaptors available to allow backwards compatibility to existing displays

Single link can support UXGA (1600 x 1200) displays
Dual link can support QXGA (2048 x 1536) displays
DVI-I version supports Analog and Digital (TMDS) transmission
DVI-D supports 1.6 Gbit/sec. TMDS transmission rates.
DVI-A version supports 2.5GHz Analog RGB bandwidths.

Mfrs. List No.	Description	Order Code
88741-8000	DVI-Digital to DVI-Digital Single Link 2.0m Cable	997-3893
88741-8020	DVI-Digital to DVI-Digital Single Link 5.0m Cable	871-8261
88741-8100	DVI-Digital to DVI-Digital Dual Link 2.0m Cable	972-7850
88741-8120	DVI-Digital to DVI-Digital Dual Link 5.0m Cable	871-8270
88741-8300	DVI-Analogue to VGA 2.0m Cable	997-3915
887418700	DVI-Analogue Plug to VGA Receptacle	997-3940
88741-9000	DVI-Digital/Analogue to DVI Digital /Analogue Single Link	997-3974
887419100	DVI-Digital/Analogue Receptacle to VGA Plug	997-3982

Digital Video (with / without audio) - continued

MicroCross™ DVI Cables and Adaptors - continued

210075

Order Code	1+	Price Each	10+
997-3893●	10.09		9.59
871-8261●	17.46		15.87
972-7850●	11.49		10.11
871-8270●	23.01		20.93
997-3915●	8.37		7.97
997-3940●	3.73		3.56
997-3974●	14.14		13.43
997-3982●	5.62		4.88

DVI Receptacles



- DVI PCB receptacles approved by the DDWG
- Suitable for both digital and analogue transmission (9.9Gbs and 2.5Ghz)
- Mates with both Molex DVI cables and adaptors
- Available in both right angle and vertical configurations

molex

227395.411388

Description	Mfrs. List No.	Order Code	1+	Price Each	10+
DVI-I Right angle	743201004	973-4139●	2.35		2.20
DVI-I Vertical	743203004	973-4147●	2.23		2.11
DVI-D Right angle	743204004	973-4163●	2.24		2.09
DVI-I Right angle forklock	74320-9014	101-2227●	2.24		2.11

DV2 Series I/O Connectors

JAE



The DV2 Series was designed to meet the needs for higher performance digital/analog interface between computer graphics input devices and computer monitor. The DV2 supports Transmission Differential Signalling (TMDS) and conforms to the standard (DDWG) Digital Display Working Group.

Current Rating Signal	3A	Dielectric Voltage	500V AC rms
Current Rating Coax	1A	Contact Resistance	25mΩ max
Insulation Resistance	1000MΩ	Wire Size - Signal Contact	28 AWG
Operating Temperature	-40°C to +85°C		

Mfrs. List No.	Description	Order Code
DV2R024N11E	Receptacle R/A with Screwlock to DVI-D 24 Pin	996-5149
DV2R029N11E	Receptacle R/A with Screwlock to DVI-I 24+4 Pin	996-5157
DV2R024U11E	Receptacle Straight with Screwlock to DVI-D 24 Pin	996-5165
DV2R029U11E	Receptacle Straight with Screwlock to DVI-I 24+4 Pin	996-5173
DV2P024M11E	Straight Cable Plug connector DVI-D 24 Pin	996-5181
DV2P029M11E	Straight Cable Plug connector DVI-I 29 Pin	996-5190

233305

Mfrs. List No.	Order Code	1+	Price Each	10+
DV2R024N11E	996-5149●	1.57		1.44
DV2R029N11E	996-5157●	1.71		1.54
DV2R024U11E	996-5165●	1.73		1.56
DV2R029U11E	996-5173●	1.93		1.76
DV2P024M11E	996-5181●	1.38		1.26
DV2P029M11E	996-5190●	1.49		1.41

DVI Cable Assembly

Tyco Electronics



- DVI-I supports Analog and digital (TMDS) transmission
- Industry standard Interface
- Board mount connector with interconnecting cable assembly
- For all monitor and video interconnections

Mfrs. List No.	Description	Order Code
1775075-1	Stacked VGA Receptacle over DVI-I	152-2192
1653929-2	2.0m DVI-I to DVI-I Cable	152-2193

496154

Order Code	1+	Price Each	10+	50+
152-2192●	2.73		2.38	2.22
152-2193●	12.51		10.87	10.21

HDMI

Connectors and cable assemblies

multicomp



Current Rating	0.5 A
Insulation Resistance	100 Mohm-m
Voltage Rating	40 AC
Operating Temperature	-25°C to 85°C

491673

Description	Order Code	1+	Price Each	10+	50+
Headers					
SMT Right Angle	142-8259●	0.68		0.62	0.53
SMT Right Angle with flange	142-8260●	0.72		0.65	0.58
SMT Right Angle with flange	142-8261●	0.72		0.65	0.58
Through Hole R/A with flange	142-8262●	0.78		0.69	0.61
SMT Vertical with flange	142-8264●	0.72		0.65	0.58
Cable Assembly					
1.5M	142-8265●	5.65		5.05	4.42
2M	142-8266●	6.04		5.39	4.71
3M	142-8267●	7.40		6.61	5.78
10M	142-8268●	23.52		21.38	19.25
15M	142-8269●	35.28		33.14	28.87
Adapter					
HDMI Female to DVI Male	142-8271●	3.98		3.56	3.11
HDMI Male to DVI Female	142-8272●	3.98		3.56	3.11
HDMI Female to DVI Female	142-8273●	4.19		3.74	3.27
HDMI Female to HDMI Female	142-8274●	4.19		3.74	3.27
HDMI Female to HDMI Female R/A	142-8276●	4.19		3.74	3.27
Extender	142-8270●	34.21		32.08	29.94

High Definition Multimedia Interface (HDMI) Connector System

molex



The new HDMI cable assemblies, adaptors and connectors provide an uncompressed digital link between consumer electronics equipment such as DVD players, set-top boxes and audio video monitors such as plasma display screens for high definition TVs.

- Eliminates the confusion of multiple cables used to connect current A/V systems
- 5 Gbps supports high definition video and multichannel digital audio in a single cable
- 10,000 mating cycles
- DVI backward compatible
- Fully shielded
- Lead-free plating

Mfrs. List No.	Description	Order Code
88768-9800	1.0m Cable HDMI to HDMI	874-9981
887689810	2.0m Cable HDMI to HDMI	489-5630
887689820/5920562033	3.0m Cable HDMI to HDMI	489-5642
88768-9830	5.0m Cable HDMI to HDMI	874-9990
88767-1010	10.0m Cable HDMI to HDMI*	875-0009
88767-1020	15.0m Cable HDMI to HDMI*	875-0017
88768-3500	1.0m Cable DVI to HDMI	875-0025
88768-3510	2.0m Cable DVI to HDMI	489-5654
88768-3520	3.0m Cable DVI to HDMI	489-5666
88768-3530	5.0m Cable DVI to HDMI	875-0033
88767-0910	10.0m Cable DVI to HDMI*	875-0041
88767-0920	15.0m Cable DVI to HDMI*	875-0050
5002541927	R/A Standard type Header	867-2822
500254-1931	R/A Flange type Header	112-5352
88764-5900	Adaptor HDMI (F) to P&D (M)	121-1005
88767-0600	Adaptor HDMI (F) to DVI (M)	121-1007
88764-2000	Adaptor HDMI (M) to DVI (F)	121-1008
47151-1001	Receptacle, Right Angle, Through Hole	151-6661
47151-1002	Receptacle, Right Angle with Screw Flange, Through Hole	151-6662
47266-0001	Receptacle, Right Angle, Black, Through Hole	151-6663

*10 and 15 metre cable length are not HDMI 1.1 compliant, however should function at 800 x 600 or 1024 x 768 resolution

338152/406751

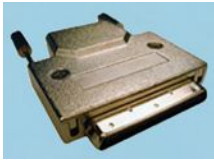
Order Code	1+	Price Each	10+	50+
874-9981●	9.36		8.71	8.07
489-5630●	11.29		8.79	8.56
489-5642●	16.20		14.65	13.43
874-9990●	16.28		15.31	14.82
875-0009●	27.27		24.80	22.73
875-0017●	36.99		33.62	30.82
875-0025●	9.49		8.94	8.63
489-5654●	14.16		11.03	10.22
489-5666●	11.02		10.35	10.04
875-0033●	10.91		10.26	9.95
875-0041●	21.23		19.28	17.69
875-0050●	26.16		24.59	23.82
867-2822●	1.97		1.86	1.41
112-5352●	3.15		2.94	2.86
121-1005●	8.12		7.40	6.76
121-1007●	13.00		12.23	11.83
121-1008●	7.13		6.71	6.49
151-6661●	1.22		1.13	1.08
151-6662●	1.22		1.13	1.08
151-6663●	0.92		0.86	0.82

VHDCI



VHDCI

Plugs and Sockets



Current Rating	0.3 A
Insulation Resistance	500 Mohm-m
Voltage Rating	30 AC
Operating Temperature	-25°C to 85°C

491672

Plugs	Order Code	1+	10+	50+
68 Way	142-8253●	5.32	4.75	4.18
68 Way without hood	142-8254●	5.43	4.86	4.24
Socket	Order Code	1+	10+	50+
Stacked 2 x 68 Way with screws	142-8255●	8.55	7.65	6.68
Stacked 2 x 68 Way without screws	142-8256●	8.43	7.53	6.59
68 Way	142-8257●	4.62	4.13	3.61

VHDCI

Connectors and cable assemblies



HONDA CONNECTORS



Cost effective shielded connectors and cable assemblies capable of ensuring data integrity at high speed. Supports ANSI/SFF-8411. 68 way single, 136 way dual stack RA PCB mount connectors and 3 ready made cable assemblies with die cast backshells and screwlocks.

Principle applications

- Data storage
- Four port PCI

- Notebook type PCs
- High Density I/O

Pitch	0.8mm
Rated Voltage	125v AC(rms)
Rated current	0.3A series 1A contact
Insulation resistance	≥500MΩ at 100V DC
Withstand Voltage	250v AC(rms)

Pitch	0.8mm
Contact resistance	68 Way ≤70mΩ
	136 Way ≤100mΩ
Mating cycles	5000

Mfrs. List No.	Order Code	Mfrs. List No.	Order Code
HDRA-EC68LFD7-SL+	119-3750	HH-68R200CB-009	398-3626
HDRA-E68WILFD71EC-SL+	119-3751	HH-68R500CB-009	398-3638
HH-68R100CB-009	398-3614	HDRA-E68LFD7	398-3640

238414

RA PCB Connectors	Order Code	1+	3+	5+
68 way single	119-3750●	5.09	4.63	4.34
136 way dual stack	119-3751●	15.97	14.55	13.60
Cable Assemblies	Order Code	1+	3+	5+
1m	398-3614	40.45	36.84	34.39
2m	398-3626	56.35	51.21	47.86
5m	398-3638	100.68	92.77	86.15
Accessories	Order Code	1+	3+	5+
Screw Locks (Pack 10)	398-3640	2.45	2.21	2.10

High Speed Data Connectors

Molex Triad™ Differential Pair Connectors

TDP / PCIe Cable Assemblies



The TDP (Triad Differential Pair) family uses the Triad design of differential signal and ground lines to achieve optimal bandwidths for cable-to-board interconnections. The Shielded, dual row interface offers high speed and 100Ω controlled impedance. Comprised of a fully shielded receptacle and plug to provide maximum EMI/RFI protection. Inline SMT receptacle optimizes PCB routing, low profile of 7.0mm (0.276"). Low Force Helix™ (LHF) contact design provides long term performance and reliability.

- Bandwidths up to 5.0Gbps
- Shielded for Maximum EMI/RFI protection
- Low profile (7.0mm) PCB receptacle

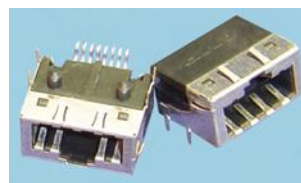
- High cycle Life: min: 5000 cycles
- Low Force Helix™ (LHF) contact design
- 18, 28 & 48 circuits

Voltage	40V	Mating Cycles	5000
Current Rating	1.5A	Differential Impedance	2.5Gbps: 100 +/- 10Ω @ 150psec risetime
Insulation Resistance	100Mohm		5.0Gbps: 100 +/- 18Ω @ 75psec risetime
Operating Temperature	-20 to +85°C	Contact Material	Copper Alloy
Contact Resistance	20mohm	Contact Plating	Selective Gold 0.76μ
Withstand Voltage	500	Shield	Deep-drawn Steel

450135

No. Ways	Mfrs. List No.	Order Code	1+	10+	50+
TDP PCB Receptacle					
18	74960-2018	129-2024●	6.450	6.020	5.530
28	0749602028	129-2025●	8.320	7.780	7.160
48	0749602048	129-2026●	10.070	9.420	8.660
Order Multiple=2			2+	10+	50+
Hex TDP Receptacle Jackpost					
4-40 UNC	74962-0001	129-2034●	0.146	0.136	0.124
			1+	10+	50+
TDP Cable Assemblies, Plug - Plug					
48 3m	0799250014	129-2037●	60.880	58.790	56.830
PCle PCB Receptacle					
18	74150-0001	129-2038●	13.140	12.290	11.300
PCle Cable Assemblies, Plug - Plug					
18 3m	74576-0003	129-2040●	52.190	48.800	44.880

High Speed Data Connector (HSSDC) Receptacle

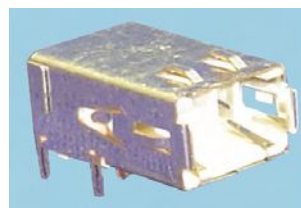


- Fully Shielded for high speed data transfer
- IEEE802.3Z (Gigabit Ethernet), NCITS T11 (FC) and T101.1 (SSA) approved
- Impedance controlled by design for 150 ohm differential systems
- Handles data transfer rates exceeding 2.125 Gbits/sec
- Champ .050 Series II style contacts

419688

Description	Mfrs. List No.	Order Code	1+	10+
Flanged With 4-40 threaded insert	1658250-1	107-6628●	2.70	2.51

High Speed Data Connector (HSSDC2) Receptacle



- Meets Infiniband™ 1.0 specification
- Data transfer rate of 2.5Gb/s
- Shielded
- Polarised for ease when mating
- PCB retention legs

419703

Used with	Mfrs. List No.	Order Code	1+	10+
Rectangular	1761069-1	107-6630●	9.48	8.82

18

Infiniband Receptacle



- Infiniband 1.0 specification
- High speed serial 2.125 Gb/s and beyond
- Shielded

Housing	LCP
Contacts	Gold over Nickel/Phosphor Bronze
Durability	Up to 250 Mating Cycles

451161

Mfrs. List No.	Order Code	1+	10+	25+	100+
1469662-1	128-4334●	11.21	10.35	9.81	9.42

High Speed Data Connector (HSSDC2)



Cable Assemblies, Plug - Plug



High Speed Data Connectors - continued

High Speed Data Connector (HSSDC2) - continued

Cable Assemblies, Plug - Plug - continued

450992

Length	Mftrs. List No.	Order Code	1+	5+	10+
0.5m	6364561-1	119-6411●	34.50	30.70	28.98
5m	6364561-6	119-6412●	98.28	88.32	84.52

Advanced Mezzanine Card Connector

AMC.0 B+



- Insert moulded wafer design provides excellent electrical performance enabling signal transmission up to 12.5 GBps, providing system scalability at no additional cost
- Press-fit contacts and high-speed footprint for simpler application to PCB and superior signal integrity

- Tin or Tin-Lead tail plating supports RoHS requirements and customer preferences for press-fit
- Reference PCB available for SI-measurement

Voltage	250V	Housing	Black Thermoplastic
Current Rating	1.5 A	Contact Plating	Copper Alloy
Contact Resistance	60mΩ	Temperature Range	-40°C to 105°C
Insulation Resistance	500V DC		

490450

No. of Ways	Mftrs. List No.	Order Code	1+	10+	20+	+
170	75800-0001	135-3569●	27.05	24.35	20.02	--

Har-link Connector System



Har-link is a unique modular metric I/O connector system that can transfer data rates up to 100 Mbits/s or alternatively 1 Gbit/s

Contact Rating	1.5A	Contact Material	Copper Alloy
Working voltage	750 V	Contact Plating	Gold
Temperature Range	-55°C to +125°C	Mating Cycles	250

528958

	Mftrs. List No.	Order Code	1+	5+	10+
Sockets					
Beige	27211218000	155-8678●	7.96	7.62	7.31
Red	27211218002	155-8679●	9.11	8.74	8.38
Yellow	27211218004	155-8680●	9.11	8.74	8.38
Green	27211218005	155-8681●	9.11	8.74	8.38
Blue	27211218006	155-8682●	9.11	8.74	8.38
Black	27211218010	155-8683●	9.11	8.74	8.38
Standard Cable Assembly					
0.5m	33272430500001	155-8684●	41.23	37.81	36.30
1m	33272431000002	155-8685●	43.03	39.46	37.88
2m	33272432000003	155-8686●	48.56	44.52	42.74
High End Cable Assembly					
0.5m	33272430500006	155-8688●	61.67	56.53	54.27
1m	33272431000007	155-8689●	66.43	60.90	58.45
2m	33272432000008	155-8690●	75.78	69.46	66.67
Accessories					
Bracket 4 Way	27710400001	155-8691●	3.45	3.32	3.18
Gasket 4 Way	27710400002	155-8692●	2.14	2.06	1.97

Infiniband

4X Cable Assemblies



Tyco Electronics' 4X series of cable assemblies are designed to meet the most demanding INFINIBAND™ Specification, Fibre Channel and Gigabit Ethernet (CX4) applications. This family of products exhibits high signal integrity capabilities.

Key Features :

- High signal integrity capabilities
- Fully shielded for EMI/RFI protection
- Built with robust strain relief and wire retention
- Available in lanyard latching style
- Reduced crosstalk (less than 3%)
- Available with standard 28, 26 and 24 AWG wire

Order Code
128-3193
128-3195
128-3196
122-2283

Cable Size
28AWG
26AWG
24AWG

415075

Type	Length	Mftrs. List No.	Order Code	Price Each 1+
Cable Assemblies (male/male)				
CX4, 4X to 4X	1m	6751546-2	128-3193●	68.53
CX4, 4X to 4X	5m	6751546-6	128-3195●	84.66
CX4, 4X to 4X	10m	1-6751546-2	128-3196●	113.97
CX4, 4X to 4X	15m	1-6751546-4	122-2283●	282.06

Camera Link

MDR Cable Assembly

High Speed Digital Data Transmission System - 26 way



- Supports new industrial Camera-Link™ in Automated Imaging Association for camera to frame grabber communications
- Fully shielded, matched impedance system using twin-ax cables for high speed applications
- Rugged thumbscrew retention
- Available in 3, 5 and 10 metre lengths

- Signal speed upto 1.5Gb over a 10-metre length

3M have designed and developed the Camera-Link™ interconnect standard based on a 26-pin mini delta ribbon (MDR) connector from 3M that uses LVDS technology (low voltage differential signalling). The assemblies provide the link between the digital cameras and the frame-grabbers becoming the Camera-Link™ standard interconnect solution. The assemblies are made up of 3M MDR connectors with backshells providing full shielding and are based on the LVDS technology. The twin-ax cable contains 11 high speed shielded pairs and 4 drain wires allowing multiple applications.

Voltage rating	30V	Withstand voltage	350 Vrms for 1 minute
Current	1A	Temperature rating	-20°C To 75°C
Conductor size	28AWG		

414226

Length	Mftrs. List No.	Order Code	Price Each 1+
1m	14B26-SZLB-100-OLC	142-8343●	85.02
2m	14B26-SZLB-200-OLC	142-8344●	111.18
3m	14B26-SZLB-300-OLC	991-1928●	136.88
5m	14B26-SZLB-500-OLC	991-1936●	157.35
10m	14B26-SZLB-A00-OLC	991-1944●	210.62

Mini D Ribbon (MDR) Cable Assemblies

1.27mm Right-Angle Digital Camera Cable - 26 position



- Mates to popular 3M MDR 26 position receptacle
- For machine vision camera to frame grabber communications in applications where full CameraLink™ configuration is not necessary
- 3 shielded quads with drains and 5 unshielded twisted pairs
- Entire cable bundle shielded with foil and braid for additional signal protection
- Rugged MDR ribbon type contact for reliable, repeatable connectivity
- Rugged thumbscrew retention
- EMI shielded junction shell



Specifications:-

Current Rating	1A	Voltage Rating	30V
Contact Plating	30 μm (0.76 μm) Min. Gold	Shell Material	Polyester Elastomer
Conductor Size	28 AWG	Withstanding Voltage	350Vrms
Operating Temp.	-55°C to 105°C	Flammability	AWM VW-1

527809

Mftrs. Part No.	Cable Length	Order Code	Price Each 1+	5+
14H26-SZ3M-200-03C	2m	166-8863●	97.95	88.71
14H26-SZ3M-500-03C	5m	166-8864●	129.70	117.91
14H26-SZ3M-A00-03C	10m	166-8865●	194.17	177.14

SDR (Shrunk D Ribbon) Receptacle

0.8mm High Speed Digital Data Transmission - 26 way



3M™ SDR Connectors with a .8mm contact pitch is a miniature version of the MDR input/output (I/O) ribbon contact system. SDR boardmount connectors in 14 and 26 positions are constructed of RoHS compliant, high temp plastic bodies, 30μ" gold contacts, polarised, stamped metal EMI/ESD interface with installed jack sockets and supporting boardmounting hardware. SDR applications are for high density I/O and the 26 position is for camera to Camera Link® frame grabber applications meeting the new AIA Industrial Mini Camera Link® standard".

- Wiper on wiper contact for reliable repetitive mating
- Full metal face for better EMI shielding
- 14, 26 and 50 ways
- On-board jack sockets
- 30μ" Gold Plate
- RoHS compliant

454437

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
90°, Surface Mount						
26	12226-8250-00FR	132-1032	9.45	8.55	8.16	7.65
90°, Through Hole						
26	12226-1150-00FR	132-1037	7.20	6.52	6.23	5.84
Vertical, Through Hole						
26	12226-5150-00FR	132-1034	8.54	7.73	7.37	6.90
Order Multiple=2						
Panel Thickness						
Price Each						
Screw Lock						
0.8mm	12600-S-08	132-1038	1.49	1.35	1.29	1.21
1.0mm	12600-S-10	132-1039	1.49	1.35	1.29	1.21
1.2mm	12600-S-12	132-1040	1.49	1.35	1.29	1.21

SDR (Shrunk D Ribbon) Cable Assemblies

0.8mm High Speed Digital Data Transmission - 26 way



- Supports new AIA Industrial Camera-Link™ standard for new Mini C/L camera to C/L frame grabber applications
- 11 shielded, twisted twinax pairs with four drain wires
- Double overall shield with inner foil and outer braid
- Rugged ribbon contact type
- Rugged thumbscrew retention
- RoHS compliant

454417

Type	Length	Mfrs. List No.	Order Code	1+	10+	+	+
Cable Assemblies (Male/Male)							
MDR - SDR	5m	1MF26-L560-00C-500	132-1041	228.53	207.77	--	--
R/A SDR - MDR	2m	1MF26-L576-00C-200	132-1042	197.01	179.10	--	--
SDR - R/A MDR	5m	1MF26-L586-00C-500	132-1044	212.98	193.62	--	--
SDR - SDR	5m	1SF26-L120-00C-500	132-1046	339.56	308.70	--	--
SDR - R/A SDR	2m	1SF26-L136-00C-200	132-1047	241.17	219.24	--	--
Cable Assemblies (Female / Male) Bulkhead / Extension							
MDR - SDR	2m	1MG26-LFW0-00C-200	132-1045	140.45	127.68	--	--

Miniature I/O Connectors

Input/Output Connector

MOBO™ - 1mm pitch



Plug with cover kit



Designed for portable equipment such as mobile phones, PDA's and docking/charging for any portable device.

The fixed SMT socket is designed to be housed within the portable device.

The plug/cover connector has sprung contacts and is designed for termination to accessory equipment.

- 15 & 19 signal contacts on a 1mm pitch, rated at 1.5A
- Switching RF option
- Patented 20° angled face on the sockets - self cleaning
- Metal latching area integral to socket - space saving
- SMT plug has unique location pyramids - positive alignment

346953/406758

Connector Description	Mfrs. List No.	Order Code	1+	10+	50+	100+
19 Way Plug - PCB						
PCB Wire	109157019000006	134-5490	2.18	1.88	1.78	1.57
15 Way Socket - PCB						
SMT no coax	209157015000006	972-8538	1.54	1.35	1.30	0.96
19 Way Socket - PCB						
SMT no coax	209157019000006	134-5489	2.86	2.45	2.32	2.02
15 Way Free Plug						
Solder no coax	109157015000006	972-8490	1.61	1.38	1.32	1.03
Solder with coax	109157015001006	972-8503	8.22	7.18	6.79	5.18
Cover Kit for Free Plug						
3.5mm ø cable	309157970000035	771-1034	1.82	1.62	1.51	1.14
5mm ø cable	309157970000050	771-1042	1.23	1.09	1.02	0.77

DA1 Series 0.6mm pitch I/O Connector



Receptacle / Cradle / Plug

The DA1 series connectors are low profile SMT compact interface connectors for use in compact and slim mobile information terminal devices such as PDAs HPCs mobile communication equipment.

- Mating height 3mm
- Metal shell provides shielding against EMI and static electricity
- Side locking system for positive mating between plug and receptacle
- Board mounting cradle for PCB-PCB applications

Current Rating - Signal	0.5A	Dielectric Voltage	250V AC rms
Current Rating - Power	1.0A	Mating Cycles	10000
Insulation Resistance	100MΩ	Applicable Wire Size	28AWG
Operating Temperature	-25°C to +75°C	Cable OD	10 Contacts 0.4mm
Contact Resistance	50mΩ		18 Contacts 0.5mm

233320

No. Contacts	Mfrs. List No.	Order Code	1+	100+	250+
Plug - Cable Mount					
10	DA1P010M94E	996-5084	3.64	3.39	3.24
18	DA1P018M91E	996-5092	3.82	3.55	3.23
Receptacle - PCB Mount					
10	DA1R010H91E	996-5106	1.93	1.79	1.35
18	DA1R018H91E	996-5114	2.11	1.96	1.79
Cradle - PCB Mount					
10	DA1B010H91E	996-5122	2.01	1.86	1.79
18	DA1B018H91E	996-5130	2.21	2.06	1.97

Micro Miniature Interface connectors



MQ172 Series



- Ultra miniature low profile SMT design
- Automatic mounting
- Reliable contact
- High current capacity
- Positive locking
- Keys for preventing incorrect insertion

Current Rating	2 A	Durability	5,000 cycles
Voltage Rating	40V AC	Contacts	Phosphor Bronze
Operating Temperature	-30°C to 75°C	Colour	Black

496475

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
Plug						
3	MQ172-3PA(55)	151-8736	1.87	1.75	1.64	1.50
4	MQ172X-4PA(55)	151-8738	1.41	1.31	1.23	1.13
Receptacle						
3	MQ172-3SA-CV(50)	151-8737	1.50	1.40	1.31	1.20
4	MQ172X-4SA-CV(50)	151-8739	1.79	1.67	1.56	1.42

Interface Connectors



ST Series



- Strong locking mechanism
- Prevention against reversed or angle insertion
- Small size and low profile
- EMI protection
- Wide variety of contact positions and mounting styles

Current Rating	0.5 A	Durability	10,000 cycles
Voltage Rating	100V AC	Contacts	Copper Alloy
Operating Temperature	-30°C to 80°C	Colour	Black

491386

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+
Plug					
10 Free	ST40-10S-CV(80)	142-5685	2.23	1.93	1.54
18 Free	ST40X-18S-CV(80)	142-5686	3.90	2.97	2.37
24 Free	ST40X-24S-CV(80)	142-5688	3.66	2.84	2.27
10 Cradle Verticle	ST80X-10S	142-5697	1.88	1.63	1.39
18 Cradle Verticle	ST80X-18S(50)	142-5698	3.28	2.61	2.00
24 Cradle Verticle	ST80X-24S(50)	142-5700	3.28	2.44	1.87
18 Cradle Right Angle	ST60X-18S	142-5702	2.94	2.19	1.67
36 Cradle Right Angle	ST60X-36S	142-5703	3.12	2.83	2.63
10 Free Shielded	ST40X-10S-CV(80)	142-5704	2.77	2.08	1.66
24 Free Reverse	ST40X-24S-CV1(80)	142-5706	4.79	3.68	2.93
36 Free Shielded	ST40X-36S-CV(80)	142-5707	4.29	3.30	2.37
R/A Receptacle					
10	ST60-10P	142-5693	1.17	0.99	0.76
18	ST60-18P(50)	142-5694	1.34	1.20	0.93
24	ST60-24P(50)	142-5696	1.82	1.50	1.15
36	ST60-36P	142-5701	2.19	1.71	1.31
Accessories					
Cable Bushing 4.0	ST40X-BS(4.0)	142-5690	0.32	0.29	0.26
Cable Bushing 5.8	ST40X-BS(5.8)	142-5689	0.54	0.49	0.38
Cable Bushing 6.8	ST40X-BS1(6.8)	142-5708	0.49	0.44	0.42
Clamp Bracket 4 - 5	ST40X-CM(4.0-5.0)	142-5691	0.32	0.29	0.26
Clamp Bracket 5.8	ST40X-CM(5.8)	142-5692	0.32	0.28	0.26
Clamp Bracket 6.8	ST40X-CM1(6.8)	142-5709	0.29	0.26	0.23



40,000 PRICES REDUCED



Miniature I/O Connectors - continued

Ultra Low Profile Interface Connectors

2mm Mounting Height - LX Series



- Low profile on the PCB
- Strong Construction
- High Durability
- Sequenced contact mating
- Incorrect insertion prevention
- Safety plug release

Current Rating
Voltage Rating
Operating Temperature

0.5 A
50V AC
-40°C to 70°C

Durability
Contacts
Colour

10,000 cycles
Copper Alloy
Black

491387

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+
Plug					
12	LX40-12P	142-5713●	3.15	2.75	2.19
16	LX40-16P	142-5714●	3.44	3.02	2.41
20	LX40-20P	142-5715●	3.69	3.30	2.63
Receptacles					
12	LX60-12S	142-5710●	1.47	1.34	1.15
16	LX60-16S	142-5711●	1.58	1.43	1.21
20	LX60-20S	142-5712●	1.66	1.50	1.28
Accessories					
Cable Bushing 4.0	LX40-12BS(4.0)	142-5716●	0.29	0.26	0.23
Cable Bushing 4.5	LX40-16BS(4.5)	142-5718●	0.29	0.26	0.23
Cable Bushing 5.0	LX40-20BS(5.0)	142-5719●	0.29	0.26	0.23

Shielded Data Link (SDL)



- Cost-effective shielded connector for data interconnection
- Miniature size saves PCB space
- UL & CSA approved

Housing Polyester, UL 94V-0

Current Rating 1.5A

Voltage Rating 30VAC, 42VDC

Temperature Range -20°C to 80°C

Durability Up to 3000 mating cycles

Shielding Effectiveness 20 dB min from 30 MHz to 500 MHz and 10 dB min from 500 MHz to 1 GHz

451261

No. of Ways	Key Code	Mfrs. List No.	Order Code	1+	10+	25+	50+
Side Entry Receptacles with Ground							
4	A	1-1761185-1	128-4380●	1.73	1.62	1.52	1.43
6	A	1-1761185-2	128-4382●	1.89	1.75	1.68	1.60
8	A	1-1761185-3	128-4383●	2.55	2.36	2.23	2.09
16	E	5-1761185-6	128-4384●	3.38	3.24	3.10	2.95
Top Entry Receptacles							
4	A	1-1761183-1	128-4385●	2.04	1.90	1.82	1.74
6	A	1-1761183-2	128-4386●	3.60	3.34	3.20	3.07
8	A	1-1761183-3	128-4387●	3.79	3.53	3.37	3.23
16	E	5-1761183-6	128-4388●	5.25	4.92	4.68	4.48
Plug Assemblies for Flat Cable - 24-26AWG							
4	A	1-1761184-1	128-4389●	1.26	1.17	1.12	1.07
6	A	1-1761184-2	128-4390●	1.50	1.41	1.35	1.29
8	A	1-1761184-3	128-4391●	2.86	2.68	2.56	2.45
16	E	5-1761184-6	128-4392●	5.25	4.92	4.68	4.48
Plug Assemblies for Round Cable - 24-26AWG							
4	A	1-520424-1	128-4394●	1.57	1.48	1.41	1.35
6	A	1-520424-2	128-4395●	1.50	1.40	1.34	1.29
8	A	1-520424-3	128-4396●	1.73	1.63	1.56	1.48
16	E	5-520424-6	128-4397●	2.08	1.95	1.87	1.79

Shielded Data Link (SDL)

Shells and Ferrules



Housing
Current Rating
Voltage Rating
Temperature Range
Durability

Carbon Steel
1.5A
30VAC, 42 VDC
-20°C to 80°C
500 mating cycles

514986

No. of Ways	Mfrs. List No.	Order Code	1+	10+	25+	50+
Shell Top Half						
4	520460-1	156-9935●	0.74	0.64	0.56	0.53
6	520462-1	156-9938●	0.88	0.75	0.66	0.62
8	520464-1	156-9941●	0.91	0.79	0.68	0.64
16	520466-1	156-9944●	1.16	1.01	0.89	0.84

No. of Ways	Mfrs. List No.	Order Code	1+	10+	25+	50+
Shell Bottom Half						
4	520461-1	156-9936●	0.88	0.75	0.66	0.62
6	520463-1	156-9939●	0.91	0.79	0.68	0.64
8	520465-1	156-9942●	0.91	0.79	0.68	0.64
16	520467-1	156-9945●	1.16	1.01	0.89	0.84

No. of Ways	Cable Diameter	Mfrs. List No.	Order Code	1+	10+	25+	50+
Ferrules							
4	4.72-5.08	520433-1	156-9937●	0.68	0.59	0.52	0.48
6	5.36-5.72	520435-1	156-9940●	0.91	0.79	0.68	0.64
8	5.69-6.20	520437-1	156-9943●	0.91	0.79	0.68	0.64
16	7.32-7.83	520441-1	156-9947●	1.16	1.01	0.89	0.84

Shielded Compact Ribbon connectors

361 and 363 Series



- Polarised to provide proper cable insertion
- Vibration resistant
- 10 contacts can carry signal or power (up to 1A per pin)
- 360° shielding for excellent EMI protection

Current Rating 1A
Voltage Rating 150 V_{AC}

Insulation resistance > 5 x 10⁸ Ω at 500 V_{DC}
Temperature Range -55°C to +85°C

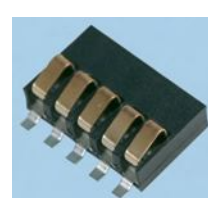
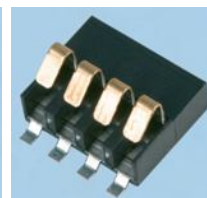
490482

No. of Ways	Mfrs. List No.	Order Code	1+	10+	50+	100+
Receptacle						
10 Straight	36210-0100PL	142-5609●	3.35	3.03	2.82	2.55
Plug						
10 Free	36110-3000FD	142-5611●	5.07	4.59	4.28	3.84
10 PCB Straight	36110-1110PL	142-5616●	6.28	5.68	5.30	4.76
10 PCB Right Angle	36110-2200PE	142-5617●	5.06	4.59	4.28	3.84
Shell Kit						
Receptacle	36310-3200-008	142-5610●	6.23	5.64	5.25	4.73
Plug	36310-F200-008	142-5613●	8.32	7.50	7.01	6.31

Battery Connectors

Battery Connector

MOBO™ - 2.5mm pitch



3 Way

4 Way

5 Way

- Specifically designed for mobile equipment
- Available in 3, 4 and 5 way configurations all on a 2.5mm pitch
- Insulator height provides a 3mm spacing
- Various contact nose heights from 1.2mm to 2.3mm provides flexibility in design
- Suitable for 5000 mechanical cycles
- Contacts are gold plated, stamped and rated to 3A
- Retaining brackets provide even greater strength when connected to the PCB

346938/406760

Contact Nose Height	Mfrs. List No.	Order Code	5+	50+	100+	250+
3 Way						
1.2mm	9155003001016	972-8350●	0.58	0.50	0.49	0.42
1.8mm	9155003002016	972-8376●	0.58	0.50	0.49	0.42
2.3mm	9155003003016	972-8384●	0.58	0.50	0.49	0.42
4 Way						
1.2mm	9155004001016	972-8392●	0.42	0.36	0.34	0.30
1.8mm	9155004002016	972-8406●	0.62	0.53	0.51	0.43
2.3mm	9155004003016	972-8414●	0.62	0.53	0.51	0.43
5 Way						
1.2mm	9155005001016	972-8422●	0.45	0.40	0.37	0.33
1.8mm	9155005002016	972-8430●	0.47	0.42	0.39	0.34
2.3mm	9155005003016	972-8449●	0.68	0.62	0.57	0.51



40,000 PRICES REDUCED

Ultra-Low Profile Battery Connector



- Available in 2 and 3 way configurations all on a 2.5mm pitch
- 1.3mm compressed "Z" axis height
- Integral end stop
- Suitable for 5000 mechanical cycles
- Contacts are gold plated and rated to 3A

464678

No. of Ways	Mfrs. List No.	Order Code	5+	50+	100+	200+
2	009155002101006	134-5487●	0.64	0.55	0.53	0.46
3	009155003101006	134-5488●	1.26	1.08	1.02	0.89

Reduced Size Battery Connector



MOBO™ - 2.5mm pitch



- Available in 2, 3, 4 and 5 way configurations all on a 2.5mm pitch
- 2.4mm Insulator height
- 1.2/1.5mm nose height
- Only 2.5mm total height when contacts fully deflected
- Suitable for 5000 mechanical cycles
- Contacts are gold plated, stamped and rated to 3A

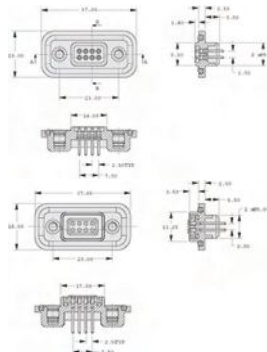
- End-to-End stackable

464664

No. of Ways	Mfrs. List No.	Order Code	5+	50+	100+	200+
2	009155002201006	134-5482●	0.71	0.63	0.59	0.53
3	009155003201006	134-5483●	0.54	0.47	0.44	0.39
4	009155004201006	134-5484●	0.92	0.80	0.75	0.66
5	009155005201006	134-5486●	0.63	0.55	0.53	0.46

Hot Shoe Connectors

Hot Shoe Connector



- 2.5mm pitch and row spacing
- Spring loaded contacts maintain positive force

- Tolerant to mating misalignment
- Ideal for use where separate battery modules are used and Data transfer docking stations

Mfrs. List No:

Female PC Tail
Male PC TailM90-601XX45
M90-701XX45

Where xx = No of pins

468728

No. of Ways	Order Code	1+	10+	50+
Female PC Tail - Spring Probe Assembly				
8	135-7711●	10.90	10.22	9.43
12	135-7713●	15.34	14.38	13.28
16	135-7714●	19.76	18.53	17.10
Male PC Tail - Fixed contact Assembly				
8	135-7715●	4.69	4.41	4.07
12	135-7716●	6.08	5.72	5.28
16	135-7717●	7.09	6.65	6.15

REACH - SVHCs



Products containing **Substances of Very High Concern** under REACH can now be easily identified online. Look for this logo to access supporting safety datasheets at www.farnell.co.uk

SIM Card Connectors

SIM Card Connector
MOBO 2.54mm pitch - Slide in

- For use with both full ISO and micro SIM cards
- Integral guides aid card insertion
- Rounded contact design avoids damage during and after card insertion
- Gold plated contacts rated to 0.5A
- 5000 mechanical cycles
- Insulator is moulded from high temperature plastic
- Can be used in convection or infra red soldering processes
- All plastic design prevents damage to the SIM card
- Two contact sizes:
Standard - 1.6 x 1.6mm
Narrow - 1.05 x 1.05mm

346943/406763

Contact description	Mfrs. List No.	Order Code	5+	50+	100+	250+
Standard	9162006206175	972-8473●	0.80	0.70	0.66	0.51
Narrow	9162006216175	972-8481●	0.90	0.78	0.73	0.56

SIM Card Connector
1.27mm Pitch

- The spring-ejection mechanism obtains stronger clicking feeling on insertion and ejection
- High durability for 5,000 cycle mating
- A wide range of variations are available such as 6 positions or 8 positions, with a lock or without a lock of the card retention mechanism that prevents SIM card coming off. The lock guarantees the durability against an excessive vibration or dropping impact, and 6 positions type services as a card detection switch that detects the existence of the card
- Metal shell is adopted for EMI protection

496266

Description	Mfrs. List No.	Order Code	1+	10+	50+	100+
6 Pin Push / Push with boss	04 5036 006 200 862 +	150-3772●	2.85	2.49	2.21	1.98
6 Pin Pushy Push without boss	04 5036 006 201 862 +	150-3773●	2.21	1.93	1.74	1.54
6 Pin Push / Push w. Slide Lock	05 5036 006 202 862 +	150-3774●	2.21	1.93	1.74	1.54
8 Pin Push / Push	04 5036 008 210 862 +	150-3775●	2.43	2.13	1.90	1.71

SIM Card Connectors
FMS - Series

- Typical applications include GSM phones and EPOS equipment
- Conform to GSM11.11 standard

FMS006Z-0000-BF

- Ultra low profile - 2.3mm
- Locking lid - one touch release

FMS006-0001

- Ultra low profile - 2.3mm
- Locking lid - one touch release
- Integrated card detection switch

FMS006-2000-0

- Push / Push insert / eject mechanism

FMS006Z-2001-1

- Push / Push insert / extract mechanism
- Integrated card detection switch

FMS006-2100-0

- Push / Push insert / extract mechanism
- Reverse mount

Insulation Resistance	500MΩ min	Current Rating	0.5A
Withstand Voltage	250V AC rms	Operating temperature range:	-55°C to +85°C
Contact Resistance	100mΩ max	Mating Cycles	5000
Voltage Rating	250V AC		

248976

Type	Mfrs. List No.	Order Code	1+	50+	100+
Cover Type - Standard PCB Mount					
Unswitched	FMS006Z-0000-BF	114-3954●	2.68	2.47	2.32
With Switch	FMS006-0001	114-5895●	6.10	5.65	5.27
Push / Push - Standard PCB Mount					
Unswitched	FMS006Z-2000-0	117-0398●	7.63	7.09	6.63
With Switch	FMS006Z-2001-1	114-3956●	3.53	3.18	3.02



SIM Card Connectors - continued

SIM Card Connector with Eject
2.54mm Pitch

- For use with ISO and Micro sim cards
- Standard 6-pin configuration on a 2.54mm pitch
- Push-push button enables easy extraction
- Polarization on card holder prevents mismatching of card
- Eject mechanism with card holder (91236-****)
- 5000 mating cycles (minimum)
- Contacts are gold plated and rated to 0.5A

molex

414026

	Mfrs. List No.	Order Code	1+	50+
Yellow P/B - With PCB locator peg	91228-3001	151-8961●	3.24	2.91
Black P/B - Without locator	91228-3002	151-8962●	2.93	2.64
SIM Card Holder				
With Slanted face	91236-0002	965-2345●	0.46	0.42
With Straight face	912360001	965-2329●	0.78	0.72

SIM Card
5 Direction SIM

- Suitable for reading SIM and UIM cards
- Tape mounted for pick and place manufacturing

Housing Thermoplastic, UL94V-0, Black
Contacts Gold
Durability Up to 5000 mating cycles

Tyco Electronics

451269

	Mfrs. List No.	Order Code	1+	10+	50+
Height 2.1mm	2-1705300-1	128-4399●	0.38	0.36	0.32

Security Access Modules (SAM)



- SIM/SAM
- Metal Locking Disk
- Includes Switch

Housing High Temperature Thermoplastic, Black
Contact Plating Gold
Durability Up to 10000 mating cycles

Tyco Electronics

SMD

451272

No. of Contacts	Mfrs. List No.	Order Code	1+	10+	50+	100+
6	5145299-1	128-4401●	1.90	1.77	1.69	1.60
8	5145299-2	128-4402●	1.65	1.53	1.47	1.39

18

Over 480,000 products online



Smart Card Connectors

- A range of chip card connector products, with wiping and landing contacts
- Provides electrical connection of chip cards according to ISO7810-7813
- Variants for different environments, friendly, harsh or space critical
- Wide range of application : data terminal, security, Epos payment, metering

FCI

Current rating	1A max 10µA min	HousingSelf extinguishing thermoplastic UL94V-0UL94V-0
Voltage rating	≥ 300Vrms	Contact Copper Alloy, Gold over Nickel
Dielectric withstand voltage	≥1000Vms	Pins Copper Alloy, Tin over Nickel
Contact resistance	≤100mΩ	
Insulation resistance	≥1000MΩ	
Operating temperature	-40°C to +90°C	

209839

L26 Series



- Wiping technology
- Protected contacts
- Suitable for all environments
- Sealed switch card detection
- PCB mounting
- 100,000 card insertions

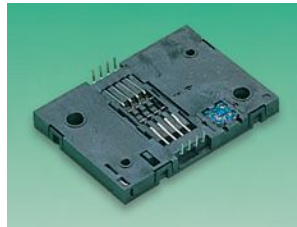
L=62, W=40, D=9

FCI

209844

Mfrs. List No.	Order Code	1+	25+	50+	100+	250+
7434L0825S01LF	109-8026●	2.37	1.79	1.70	1.51	1.42

Low Profile 5.8mm



- Landing Technology
- Suitable for all environments
- Sealed switch card detection
- PCB mounting
- Protected contacts
- 200,000 Card insertions

L=55.5, W=40, D=5.8

FCI

209843

Mfrs. List No.	Order Code	1+	25+	50+	100+	250+
7431E0225S01LF	109-8027●	4.22	3.52	3.17	2.79	2.57

Ultra Low Profile 3.4mm



- Wiping technology
- Suitable for all environments
- Blade switch card detection
- SMT mounting
- Protected contacts
- 100,000 card insertions

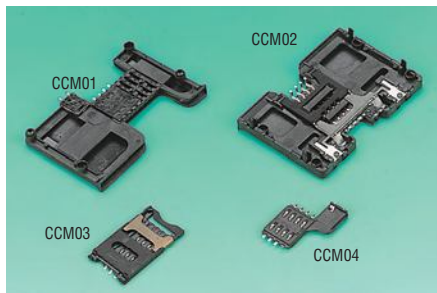
L=55.95, W=33.2, D=3.4

FCI

209840

Mfrs. List No.	Order Code	1+	25+	50+	100+	250+
7312P0225A13LF	109-8028●	2.31	2.12	2.02	1.85	1.71

CCM Series



- CCM01
 - CCM01
 - CCM03
 - CCM02mk2
 - CCM03
 - CCM04
- Through hole 8 or 16 way for low usage
Papillon SMT 8 way/sealed switch/narrow cover/reduced contact base sealed end travel switch
Landing style contacts 16 way for intensive use with sealed end travel switch
Advanced landing style contacts for long life in SMT and through hole versions
GSM style for mini smart cards for POS and mobile phones in 6 way and 8 way
SMT small package miniature connectors in 6 and 8 way for use in limited space applications

Operating life

Contacts
Contact plating

CCM01 100000
CCM02 200000
CCM03 10000
CCM04 100000
Copper Alloy
Gold over Nickel

Term plating
Cover/housing
Insulation resistance
Test voltage
Current
Contact resistance

Tin
Thermoplastic
>10MΩ
>1KV rms
10µA min 1A max
<100mΩ

ITT
Engineered for life

210058

Mfrs. List No.	Order Code	1+	500+	1K+
CCM01-2251 LFT	121-4864●	2.36	2.19	2.09
CCM01-2252ALFT	121-4865●	2.05	1.93	1.84
CCM02-2503LFT T30/	122-2711●	4.70	4.40	4.18
CCM02-2504 LFT	121-4867●	4.70	4.40	4.18
CCM03-3013LFT R102	NEW 165-0186●	2.02	1.88	1.78

Mfrs. List No.	
CCM03-3001LFT R102	6 way low profile 2.5mm high
CCM03-3003 LFT	8 way low profile 2.5mm high
CCM03-3505LFT R122	6 way profile fixed cover
CCM03-3504LFT R122	8 way low profile fixed cover
CCM04-1317 LFT	8 way moulding height 2.75mm sealed end travel switch

Order Code	1+	500+	1K+
122-2712●	1.01	0.94	0.89
121-4869●	1.10	1.03	0.97
122-2420●	0.92	0.86	0.81
122-2713●	0.99	0.92	0.87
121-4870●	2.02	1.88	1.78

Smart Card



128-4403

128-4406

128-4407

- Accept 0.76mm thick integrated circuit type Smartcard ISO 7816-7816 or ISOP8-AF-NOR standard and GSM 11.11 standards for SIM cards
- Include switch
- 30,000 mating cycles, with up to 300,000 mating cycles on high durability version

Housing Glass-Filled PBT, Black
Contact Plating Gold over Nickel

Mounting Style	Features	Mfrs. List No.	Order Code
Full Size Card			
Through Hole	Low Profile	5953398-1	128-4403
Through Hole	High Profile	5953438-1	128-4404
Panel Mount	60mm Ribbon Cable Termination	5953497-1	128-4406
Through Hole	High Durability	1705054-1	128-4407

2 x Full Size Cards			
Through Hole	Stacked, 2 x Ribbon Cable Termination	6379018-1	128-4408

451279

No. of Contacts	Mfrs. List No.	Order Code	1+	10+	50+	100+
Full Size Card						
8	5953398-1	128-4403●	1.32	1.10	1.05	0.99
8	5953438-1	128-4404●	1.18	1.10	1.05	0.99
8	5953497-1	128-4406●	3.12	2.90	2.78	2.62
8	1705054-1	128-4407●	4.27	3.97	3.80	3.59
2 x Full Size Card						
16	6379018-1	128-4408●	4.75	4.42	4.23	3.99

Memory Card Connectors

Micro SD TransFlash Memory Card Holders



Trans Flash is the world's smallest memory card storage system. Offering over 70% volume savings versus miniSD, Trans Flash will store up to 256MB of removable memory. Molex offer two types of Trans Flash connectors, a hinged version intended for one-time card insertion applications and a push-push design for scenarios where the card will be removed more frequently.

- Hinged and push-push types
- Solder tails on inside of design
- Gold plated bevelled contacts
- Metal shielding with shell tabs

Voltage rating	10V
Current rating	0.5A
Contact resistance	80mΩ max
Withstand voltage	500V
Insulation resistance	1000MΩ min
Operating temperature range:	-25°C to +85°C
Mating cycles	1000
Housing Material	LCP Liquid Crystal Polymer
Contact Material	Phosphor Bronze- Gold

383439

Mfrs. List No.	Order Code	1+	10+	25+	50+
Push-Push Card Holder					
500873-0806	157-2016●	1.65	1.55	1.45	1.40
Push-Push Card Holder with Detect Switch - Reverse Mount					
49225-0821	136-6700●	1.77	1.65	1.55	1.50
Hinged Card Holder					
500901-0801	134-4008●	2.13	1.60	1.44	1.40

MicroSD/SIM Combo Socket
2.75mm Height

Molex's new microSD/SIM card combo connector offers the smallest overall size of any combo version in the market today. Molex developed its microSD/SIM combo connector to meet the continuing downsizing and low height requirements of its mobile phone customers. By combining two connectors in one, this combo design provides significant PCB space savings. This connector was originally introduced for 3G MegaSIM phone applications, but the different pin-out options make it suitable for various mobile device applications.

Features:-

- Ultra low profile and compact; combines two socketports into one footprint
- Visible solder tails
- Reliable mate/un-mate cycling
- Card polarization
- Solder tails on two sides
- Space savings for mobile device applications

Specifications:-

Current Rating	0.5A	Voltage Rating	100V micro SD / 5V SIM
Contact Plating	Gold	Contact Resistance	100mohm
Insulation Resistance	1000mohm	Dielectric Strength	500V AC
Operating Temp.	-25°C to 85°C	Flammability Rating	UL94V-0

527908

Mfrs. List No.	No. of Ways	Order Code	1+	10+	25+	50+	100+
49362-1411	8/6	168-6209●	2.56	2.25	2.02	1.70	1.54

Micro SD Card Header

Push-Pull block type with Detect Switch



These simple push-pull block type connectors are designed for cell phones and other mobile devices that use removable flash memory to store data. The MicroSD standard has evolved from the previous Transflash standard.

- Card detect switch
- Low Profile compact size
- Metal shield



Voltage	5V DC	Withstand Voltage	500V AC
Current rating	0.5A	Contact Resistance	25mR
Contacts	Phosphor Bronze	Insulation Resistance	100mR
Operating temperature	-40°C to +85°C		

510462

Mfrs. List No.	Height	Order Code	1+	10+	25+	50+
47309-2651	2.65mm	156-8092●	0.62	0.52	0.46	0.41
47309-3351	3.35mm	156-8093●	0.67	0.56	0.49	0.43
47309-3751	3.75mm	156-8094●	0.68	0.57	0.50	0.44

Micro SD and SIM
1.27mm Pitch

This connector is an integration of SIM and micro SD™ within a compact structure to minimise mounting space yet allowing the 2 cards to be inserted at the same time. This is achieved by the orientation of the cards, their insertion being at 90° to each other allows both cards to be inserted without interference from the other card. There is a slide insertion for the SIM and a Push/ Push operation for the micro SD™

Temperature Range	-25°C to +85°C	Contact Plating	Gold
Contact Material	Nickel	Mating Cycles	6000

505789

Description	Mfrs. List No.	Order Code	1+	10+	50+
Micro SD / SIM	00 9162 006 501 150	156-5198●	2.58	2.26	2.15

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Memory Card Connectors - continued

Micro SD
Hinged

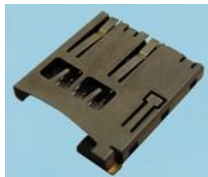
- Steel Shell
- Low Profile 1.9mm height
- 10,000 Card insertions

Voltage 10V
Current rating 0.5 A
Contacts Copper Alloy
Insulator Thermal plastic
Operating temperature -25°C to +85°C
Insulation Resistance 1000 Mohms

474471

Mfrs. List No.	Order Code	1+	25+	50+	100+
460DA40013	136-8136●	0.79	0.63	0.52	0.45

Micro SD Card Connector



Contact resistance 100mΩ
Voltage Rating 100V AC
Current Rating 0.5A AC/DC Max
Temperature range -25°C To +90°C

496604

Description	Order Code	1+	10+	25+	50+
Micro SD	151-4403●	1.55	1.35	1.14	1.01

Mini SD Memory Card Connector



Contact resistance 100mΩ
Voltage Rating 100V AC
Current Rating 0.5A AC/DC Max
Temperature range -25°C To +90°C

496605

Description	Order Code	1+	10+	25+	50+
Mini SD	151-4405●	1.66	1.46	1.23	1.08

SD Memory Card Connectors (Header)



- 2.5mm pitch
- 9 circuits
- Push - Push eject

Order Code	L	W	H
131-8471	29.80	27.90	3.10
978-6430	29.80	27.90	3.10

249748

Mounting Type	Mfrs. List No.	Order Code	1+	10+	25+	50+
Shielded - Standard						
Normal	5009980900	131-8471●	4.45	3.63	3.08	2.86
Reverse	54768-0977	978-6430●	5.13	5.00	4.87	4.74

SD I/O Memory Card Connectors



Molex's new SD I/O Card connectors are similar to the standard push-push type SD Card connectors, but also includes grounding arms to provide frame grounding to the metal tab on the SD I/O Cards.

- Accepts SD and SD I/O memory cards
- Push-push card ejector system
- Reverse and normal surface mount versions available
- Stand-offs provide trading space under connector (reverse mount only)

Voltage rating	100V	Operating temperature range:	-40°C to +85°C
Current rating	0.5A	Mating cycles	10000
Contact resistance	100mΩ max	Housing Material	LCP Liquid Crystal Polymer
Withstand voltage	500V	Contact Material	Copper Alloy- Tin Plated
Insulation resistance	100MΩ min		

387050

Mfrs. List No.	Order Code	1+	10+	50+	+
Normal Mount					
679938001	121-6731●	3.18	2.97	2.83	--
Reverse Mount					
67955-8001	121-4511●	3.18	2.97	2.83	--

Card Connectors SMT

Secure Digital



SG1 - Secure Digital

- Push-Push card insertion and extraction
- 3.3mm height when mounted
- First mate last break contacts
- MMC can be inserted

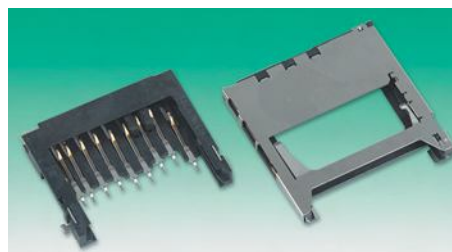
Applications

DSC, DVC, PDA, HPC, portable audio, game machines and other compact portable devices

Current Rating	SG1
D W Voltage	0.5A max
Insulation Resistance	500V AC rms 1 min
Contact Resistance	1000MΩ min
Contact Spacing	100mΩ max
Withstand Voltage	2.5mm
Operating Temperature	500V rms per minute
	-25°C to +85°C

233418

No. Contacts	Mfrs. List No.	Order Code	1+	100+	250+	500+
13	SG5S009V1A1	996-5076●	2.42	2.25	2.15	2.03

Secure Digital / Multi Media Card Connectors
FPS - Series

- Connector for both SD and MMC cards
- Cryptographic security feature built into the SD card makes it ideal for use in secure transactions
- Premium quality ensures 10,000 mating cycles

Insulation Resistance	1000MΩ min	Current Rating	0.5A
Withstand Voltage	500V AC rms	Operating temperature range:	-25°C to +85°C
Contact Resistance	100mΩ max	Mating Cycles	10,000
Voltage Rating	250V AC	Coplanarity	≤0.1mm

	Type	Card Detector	SMT	Write Protection
FPS009-3000	Simple Eject	YES	-	YES
FPS009-3001	Simple Eject	YES	YES	YES
FPS009-3003	Manual	-	YES	-
FPS009-2405-0	Push/Push	YES	YES	YES

248984

Mfrs. List No.	Order Code	1+	50+	100+
FPS009-3001-BL	114-3952●	6.54	6.06	5.67
FPS009-3003-BL	114-3953●	5.91	5.48	5.13
FPS009-2405-0	114-5893●	4.87	4.75	4.62

Coming soon



Register your interest for items that are 'Coming Soon' at www.farnell.co.uk and we'll email you to let you know that they're in stock.

Memory Card Connectors



5138



5738



5338



5738 Series

The 5738 series is a range of SDIO connectors that comply with the SDIO specifications as defined by the SDA I/O working group that recommends SD memory cards. These memory card connectors can be used in a wide range of applications such as cellular phones, PHS, PDA, Notebook-PC and Digital AV apparatus.

Features:-

- The spring-eject mechanism gives a strong clicking feeling in insertion and ejection
- Two tail types are available - outer tail type suitable for notebook PCs and digital audio-visual equipment, and inner tail type suitable for cellular phones and PDA
- Low profile design on the board achieved due to low range of stacking heights - 2.7 - 2.9mm
- Equipped with the write protection switch and card detection switch

Heat Resistance Plastic	Copper Alloy	Au (0.25μm Min.)	10000	-25°C to 90°C
No. of		Current	Voltage	Withstanding
Ways	Pitch	Rating	Rating	Voltage
9	2.5 / 1.7 mm	0.5A	5V AC/DC	500Vrms/min

Mfrs. List No.	Tail Type	Stack Height	Order Code	1+	10+	50+
14 5738 009 784 859+	Outer Tail	2.8mm	155-8174●	1.95	1.85	1.77
14 5738 009 302 859+	Inner Tail	2.9mm	155-8175●	1.95	1.85	1.77
14 5738 009 210 859+	Outer Tail	2.7mm	155-8176●	2.02	1.91	1.83

5338 Series

The 5338 series conforms to the miniSDTM™ standard provided by SD association. This product can be used in a wide range of applications such as hand-held equipment and mobile phones.

Features:-

- A miniSDTM card is turned upside down when being inserted
- The user-friendly spring-eject mechanism is adopted to obtain the strong clicking feeling on insertion and ejection
- Volume is 52.2% smaller than the conventional SD card (5738 series)
- Equipped with card detection switch

Insulator	Contact	Contact	No. of Mating	Operating
Material	Material	Plating	Cycles	Temperature
Heat Resistance Plastic	Copper Alloy	Au (0.5μm Min.)	10000	-25°C to 85°C
No. of		Current	Voltage	Withstanding
Positions	Pitch	Rating	Rating	Voltage
11	1.3mm	0.5A	5V AC/DC	500Vrms/min

Mfrs. List No.	Stack Height	Order Code	1+	10+	50+
14 5338 011 110 862+	2.15mm	155-8177●	1.75	1.66	1.59

5138 Series

The 5138 series is compliant with the microSDTM™ standards specified by the SD Card Association. This microSDTM card connector has the lowest profile in the industry at 1.6mm in height, and was developed for equipment requiring portability such as cellular phones and mobile equipment.

Features:-

- The spring-eject mechanism gives a strong clicking feeling in insertion and ejection
- Equipped with the card detection switch
- Equipped with card locking mechanism to prevent the card from jumping out
- The outer lead frame enables rework after mounted easily

Insulator	Contact	Contact	No. of Mating	Operating
Material	Material	Plating	Cycles	Temperature
Heat Resistance Plastic	Copper Alloy	Au (0.5μm Min.)	10000	-25°C to 85°C
No. of		Current	Voltage	Withstanding
Positions	Pitch	Rating	Rating	Voltage
8	1.1mm	0.5A	5V AC/DC	500Vrms/min

523628

Mfrs. List No.	Stack Height	Order Code	1+	10+	50+
04 5138 008 010 890+	1.6mm	155-8178●	1.04	0.99	0.95

Secure Digital Card Connectors



- 10,000 insertion cycles
- With or without cover
- For Secure Digital and Multi Media use

Contacts	Copper Alloy	Voltage Rating	250V AC
Insulation resistance	1000MΩ	Current Rating	0.5A AC/DC Max
Contact resistance	40mΩ	Temperature range	-25°C To +85°C

270109.342987

	Order Code	1+	50+	100+
Without Cover	918-6140●	0.88	0.84	0.80
Metal Cover	918-6158●	0.88	0.85	0.80
2.0mm Standoff, Metal Cover	918-6166●	1.02	0.94	0.90
Push in / Push out	918-6174●	1.44	1.37	1.32

Multimedia Card Connector



- Low Profile - 3mm height
- Surface Mount
- "Push-Push" mechanism. One push to card edge for smooth insertion and extraction
- 2.5mm pitch

Current Rating	0.5A AC DC	Contacts	Phosphor Bronze
Voltage	5V AC DC	Plating	Gold over Nickel
Contact Resistance	Initial/Max 30mΩ	Housing	LCP
Dielectric Voltage	500V AC 1 min	Mating Cycles	10000
Insulation Resistance	Min 1000MΩ at 500V dc	Temperature Range	-25°C to +85°C

231736

No. of Contacts	Mfrs. List No.	Order Code	1+	5+	25+	100+
7	MMC-7S-412R(LF)(SN)	949-1996●	3.00	2.93	2.85	2.68

Multi Media Card Connector



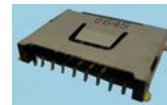
- MMC use only
- 10,000 insertion cycles

Contact	Copper Alloy	Current	0.5A AC/DCmax
Voltage Rating	250V AC	Contact resistance	40mΩ
Insulation resistance	1000MΩ	Temperature Range	-25°C To +85°C

270110.343058

	Order Code	1+	50+	100+
Without Cover	918-6182●	0.88	0.84	0.79
Metal Cover	918-6190●	0.92	0.89	0.86
2.0mm Stand Off Metal Cover	918-6204●	0.98	0.94	0.90
Push in / Push out	918-6212●	1.49	1.46	1.44

Memory Card Connectors



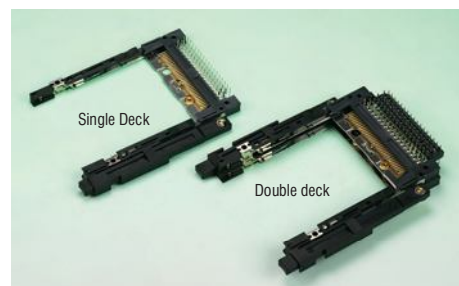
Contact resistance	20mΩ	Current Rating	1A AC/DC Max
Voltage Rating	50V AC	Temperature range	-25°C To +85°C

496597

Description	Order Code	1+	10+	25+	50+
10 in 1 combo	151-4399●	3.78	3.29	2.81	1.19
6 in 1 combo	151-4400●	1.83	1.60	1.36	1.19
5 in 1 combo	151-4401●	4.23	3.68	3.15	2.74
4 in 1 combo	151-4402●	2.40	2.10	1.78	1.56

Eject Headers

Card Bus and Type III



Memory Card Connectors - continued

Eject Headers - continued

Card Bus and Type III - continued

- Conforms to PCMCIA and JEIDA standards
- 10,000 mating cycles when using Berg headers and card kits
- Polarised to prevent incorrect card insertion
- Eject headers provide enhanced ESD protection
- Type III eject headers accepts Type 1, 11 and 111 cards

Current rating	0.5A dc max (per contact)
Housing: Header	High temperature plastic
Housing: Eject Mechanism	High temperature plastic
Plating: Contact area	Gold Flash over Palladium-Nickel Alloy
Mfrs. List No. 72206-100CA = 634-499, 92193-100CA = 634-505, 92194-000CA = 634-517	

209969

R/A Cardbus	Order Code	1+	10+	25+	50+	100+
Single Deck Card Bus	109-8023●	7.95	7.71	7.41	7.01	6.20
Type III Eject Headers - 68 position (without stand off)						
Single Deck Eject Header	109-8024●	10.21	9.88	9.49	9.02	7.98
Double deck	109-8025●	17.80	17.25	16.54	15.73	13.88

PC Card Headers



- Accepts Type I, II and III PC Cards
- UL and CSA Approved

Current rating	0.5A dc max (per contact)
Plating: Contact area	Tin

496182

Mfrs. List No.	Description	Order Code	1+	10+	50+
5338933-1	Flush Left Eject, 5V	152-2104●	2.89	2.51	2.31
1705349-1	Stacked Right Eject, 5V	152-2105●	5.72	4.97	4.58
5338934-1	Flush Right Eject, 5V	152-2106●	2.89	2.51	2.31

ROCARD™ -Rugged Original CARD



- Complies to PC card and JEIDA standards
- Rugged concept with unique SnapFit latches
- Integrated frame bar within shield
- 4; 15 position I/O connectors: closed end
- Standard, 3.3V, 5V and Cardbus options
- Designed for automated-or hand assembly

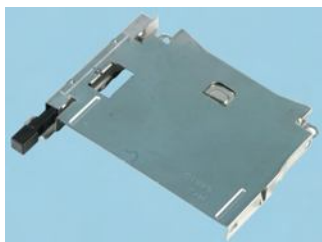
Withstanding voltage	500V rms
Current rating	A0.5A per contact
Contact resistance	40mΩ initial; mΩ after cycling
Temperature range	Operating: -20/+60°C; Storage -55/+85°C
Body material	Stainless Steel, LCP
Contact material/plating	68 pos receptacle: Beryllium Copper plating Au 0.1µm min over PdNi 0.5µm min
I/O connectors:	Phosphor Bronze, plating Au 0.1µm min over PdNi 0.5µm min

Mfrs. List No.	10014744-002SLF = 121-1674	83808-21110LF = 117-6527
10014744-002SLF = 121-1674	61512-002 = 134-594	83808-21111LF = 117-6529
10014747-002SLF = 121-1676	83808-21111 = 134-685	

209966

68 Posn. Receptacles	Order Code	1+	10+	25+	50+	100+
Standard SMT IL 0.3mm PCB off-set	121-1674●	7.52	6.82	6.21	5.64	5.27
Card Shields - Type 2						
1 I/O, label recess, insulator, Non Card Bus	117-6527●	3.63	3.41	3.17	3.02	2.68
1 I/O, label recess, insulator, Card Bus	117-6529●	2.72	2.55	2.38	2.26	2.01

Compact Flash (CF) Memory Card Connectors



Ejector



Header



CF Adaptor

- CF memory cards available with storage capacities up to around 12GB
 - Type I and II CF cards accepted
 - Using the adaptor a CF card can be connected to a standard Type II PC Card slot
- Note: Card ejector mechanism supplied separately to card connector (header)

Voltage rating	100V	Mating cycles	10000
Current rating	0.5A	Material- Header	Steel
Contact resistance	40mΩ max	Material- Ejector	Steel
Withstand voltage	100V	Material- Adaptor	Steel
Insulation resistance	1000MΩ min	Contact Material	
Operating temperature range:	-20°C to +90°C		

387125

Type	Mfrs. List No.	Order Code	1+	10+	50+
Header					
Top Mounting	55358-5029	121-1009●	5.83	5.54	5.25
Bottom Mounting	553595029	121-1011●	4.56	4.33	4.10
Ejector					
Left Side Button	0553640011	121-1010●	5.37	4.83	4.39
Right Side Button	55365-0011	121-4095●	5.37	4.83	4.39

Compact Flash™ Interconnectors



- Ejector, (SMT) card headers and PC card adaptor to support compact flash card
- Total interconnect solution for compact flash
- Light, compact eject mechanism
- Standard header = 6.64mm height, Low profile header = 4.00mm
- Adaptor converts compact flash card to PC card

Current rating (Header)	0.5A	Ejector	PBT UL94V-0
Insulation resistance (Header)	1 x MΩ		
Temperature range Header	-55°C to ++85°C		
Ejector	-55°C to ++85°C		
Material Header	Liquid crystal polyester UL94V-0		

Mfrs. List No.	N7E50-7516-VY-20 = 634-529, D7E50-7316-03 = 634-530, 20468-0000-11 = 634-542
N7E50-7516 PK-20 = 1034424, N7E50-E516PK-30 = 1034423	

209970

Type 1	Order Code	1+	10+	50+	100+	250+
Header	SMD 103-4424●	3.13	2.92	2.79	2.64	2.60
Ejector	117-6694●	1.74	1.63	1.56	1.47	1.41
Embase Bas Profil	SMD 103-4423●	6.63	5.06	3.88	3.40	3.09
Low Profile Ejector	126-7440●	2.80	2.49	2.24	—	—

Compact Flash™ Interconnectors



Type II



Current rating (Header)	0.5A	Material Header	High Temperature Thermoplastic
Insulation resistance (Header)	10MΩ	Ejector	PBT UL94V-0
Temperature range Header	-40°C to ++85°C		
Ejector	-55°C to ++85°C		
Adaptor	-40°C to ++85°C		

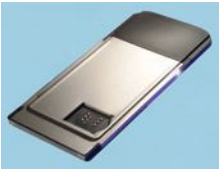
- Headers mate with Type I & II
- Top or bottom boardmount
- Optional 2mm board stand off
- Standard header = 6.64mm height, Low profile header = 4.00mm
- Adaptor converts compact flash card to PC card

Headers					Accepts
Order Code	Mfr. No.	PCB Mounting Type	2mm Stand off	Long Guides	Ejector
126-7441	N7E50-Q516RB-40	Top	-	-	-
126-7442	N7E50-R516RB-50	Bottom	YES	-	-
126-7443	N7E50-Q516RB-50	Top	-	YES	YES
103-4422	N7E50-M516RB-50	Top	YES	YES	YES
126-7444	N7E50-Q516RB-50	Top	YES	-	-
126-7445	N7E50-Q516RB-50	Bottom	YES	YES	YES

449956

Type II	Order Code	1+	10+	50+	100+	250+
Header	126-7441●	2.71	2.41	2.16	--	--
Header	126-7442●	2.29	2.04	1.82	--	--
Header	126-7443●	2.82	2.52	2.25	--	--
Header	103-4422●	5.77	5.36	5.10	5.00	4.84
Header	126-7444●	1.78	1.59	1.42	--	--
Header	126-7445●	2.82	2.52	2.25	--	--
Ejector, Right But-						
ton	126-7446●	0.75	0.51	0.42	--	--
Ejector, Left Button	126-7447●	1.15	1.06	0.93	--	--
CF to PC Adaptor	126-7439●	13.87	12.32	11.09	10.84	10.72

PCMCIA With SIM 9180 Series



- Extremely robust design
- Offers maximum PCB board layout
- The kit can be assembled using a very simple bench press tool
- Can also be modified to incorporate plastic extension and holes for LEDs
- Top and bottom covers are made from high grade stainless steel and offers excellent RF shielding

496226

Extension	Mfrs. List No.	Order Code	1+	10+	50+
5mm	06 9180 5001 02 000	143-7470●	23.78	22.31	21.40
10mm	06 9108 5002 02 000	143-7472●	23.78	22.31	21.40

PCI Express

PCI Express™ Connectors 1mm Pitch



These 1.0mm pitch, vertical card edge connectors are used to implement the PCI Express™ strategy in ATX or ATX-based desktop PCs and server systems. The connector family offers 1, 4 & 16 high-speed serial PCI Express Lanes. Each serial lane supports 2.5 Gbps data rate (per direction).

- 1, 4, & 16 serial PCI Express links to suit different bandwidth requirements
- Supports 2.36mm thick motherboards
- Through-mount solder details are offset to form four rows on 2.0mm pitch
- Molded polarisation key prevents misalignment when mating
- A retention clip may be mounted on the add-in card and latched over the ridge of the connector

Withstand Voltage	300Vac	Mating force	1.15N
Insulation resistance	1000MΩ	Host PCB thickness	2.36mm
Mating cycles	50	Add-in PCB thickness	1.56mm
Contact finish	Gold over Nickel		

Housing Glass Filled High Temp. Nylon
Current rating 1.1A for 8 specified power contacts and 8 nearest ground contacts

Mfrs. List No.
10018783-11110TLF = 114-4435 10018783-10113TLF = 114-4437
10018783-11111TLF = 114-4436 10042618-002LF = 114-4438

430143

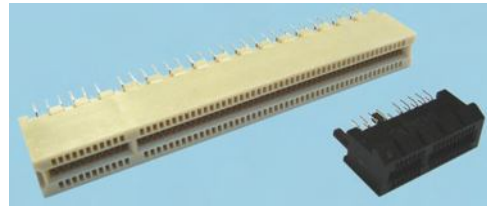
Double Sided	Order Code	1+	50+	100+	500+
No of Ways					
2 x 18	114-4435●	0.240	0.210	0.200	0.198
2 x 32	114-4436●	0.590	0.530	0.430	0.380
2 x 82	114-4437●	0.770	0.710	0.670	0.650
Accessory					
Retention Clip	114-4438●	0.173	0.158	0.150	0.144

Troubleshooting tips



Chat live online to one of our technical engineers at
www.farnell.co.uk

PCI Connectors Standard Edge .050 Series



- High Density .050 (1.27mm) centreline contact spacing
- Easy mating of high circuit count daughter boards
- Polarising web for positive board-to-connector registration

Housing High Temperature Thermoplastic
Contacts Gold Plated

451237

No. of Dual Positions	Total No. of Ways	Mfrs. List No.	Order Code	1+	50+	100+	+
18	36	1612163-1	128-4363●	0.43	0.39	0.35	--
32	64	1612163-2	128-4364●	0.62	0.55	0.49	--
49	98	1612163-3	128-4365●	0.60	0.53	0.48	--
60	120	5145154-4	128-4366●	1.60	1.43	1.28	--
82	164	1612163-4	128-4367●	1.20	1.07	0.96	--

PCI Express Card Edge Connector 6325 Series 1mm Pitch



- Molded polarisation key to prevent misalignment
- Ejector Latch (size 164 only)
- Tails are offset to form 4 rows on a 2.00mm pitch
- Conforms to PCI Express specification

496219

No. of Ways	Mfrs. List No.	Order Code	1+	50+	100+
Sockets					
36	20 6325 036 001 006	143-7475●	0.68	0.63	0.56
64	20 6325 064 001 006	143-7476●	0.97	0.89	0.79
98	20 6325 098 001 006	143-7477●	1.36	1.21	1.06
164	20 6325 164 001 006	143-7478●	1.82	1.65	1.52
PCI Express Card					
34mm Width	06 9186 5000 02 000	143-7473●	14.58	13.65	13.11
54mm Width	06 9187 5000 02 000	143-7474●	15.18	14.25	13.65
PCI Express Header Kit					
34mm Width	06 9185 5000 02 000	143-7479●	9.31	8.91	8.35
54mm Width	06 9185 5001 02 000	143-7480●	8.87	8.50	7.96

Memory Sockets

DDR2 MiniDIMM Memory Sockets



- Small pitch of 0.6mm permits maximum use of space available on the PCB
- Small form factor allows DIMM to fit into slim enclosures
- All are pick and place process capable
- Surface mount technology for easy processing and ability to utilize both sides of PCB

- Designed to accept DDR2 miniDIMM memory modules (JEDEC MO-244 and MO-258)

Description	Mfrs. List No.	Order Code	Description	Mfrs. List No.	Order Code
Reverse Right Angle	78001-1200	151-9216	Right Angle	87918-0201	151-9224
Reverse Right Angle	78001-2200	151-9217	Right Angle	87918-0202	151-9225
Reverse Right Angle	78001-1244	151-9218	22.5° Angle	87783-0001	151-9226
Reverse Right Angle	78001-2244	151-9221	22.5° Angle	87783-0002	151-9227
Right Angle	87918-0001	151-9222	22.5° Angle	87783-0201	151-9228
Right Angle	87918-0002	151-9223	22.5° Angle	87783-0202	151-9229

493699

Order Code	1+	50+	25+
151-9216●	7.87	7.25	6.72
151-9217●	7.87	7.25	6.72
151-9218●	9.00	8.28	7.68
151-9221●	9.05	8.33	7.72
151-9222●	9.00	8.28	7.68
151-9223●	9.00	8.28	7.68
151-9224●	7.84	7.23	6.70
151-9225●	7.84	7.23	6.70
151-9226●	7.26	6.69	6.20
151-9227●	7.26	6.69	6.20
151-9228●	6.79	6.25	5.79
151-9229●	6.79	6.25	5.79

Over 480,000 products online



DIN 41612 Selection Chart

Contact Rating	Body Style	No. of Ways	Contact Arrangement	Comments
2A @ 250Vac/dc	B	32		2 row body
		32		
		64		
	1/2B	16		Half length 'B' body
		32		
	C	32		3 row body
		64		
		96		
	1/2C	32		Half length 'C' body
		48		
6A @ 125Vac/dc	D	32		
	F	48		
15A @ 500Vac/dc	H	15		
6A @ 125Vac/dc 15A @ 500Vac/dc	MH	24+7		Mixed contact bodies
Signal 3A @ 350V ac/dc Power 10A Coax 50Ω	M	42+6		
		60+4		
		78+2		
2A @ 250Vac/dc	Q	64		Reverse sex 'B' body
	1/2Q	32		Half length 'Q' body
	R	64		Reverse sex 'C' body
		96		
	1/2R	32		Half length 'R' body
		48		

● = Populated, + = Unpopulated, ○ = Mounting hole

209682

DIN41612 Performance Levels

Classes 1, 2 and 3 are the performance levels as specified in **DIN41612, part 5**. Connectors appearing in this catalogue will meet the minimum performance levels as shown below and will often exceed them. See individual connector specifications.

Class 1

Service life
250 mating cycles
10 day gas test
250 mating cycles

500 mating cycles min.
Measurement of contact resistance. Visual inspection.
No abrasion of the contact finish through to base material.
No functional impairment.

Class 2

Service life
200 mating cycles
4 day gas test
200 mating cycles

400 mating cycles min.
Measurement of contact resistance. Visual inspection.
No abrasion of the contact finish through to base material.
No functional impairment.

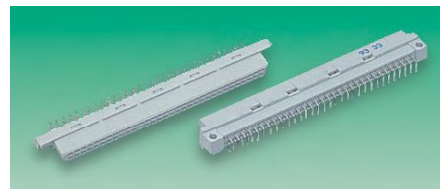
Class 3

Service life

50 mating cycles min.
Visual inspection. No gas test. No functional impairment.

209757

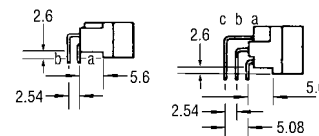
DIN41612 Class 1,2 and 3



	Class 1	Class 2	Class 3
Mating cycles	500	400	400
Industrial atmospheres	10 days	4 days	
Gold plating thickness	0.8μ	0.3μ	Female 0.3μ/ Male 0.1μ
Contact rating	2A @ 20°C	Insertion/ extraction force	96 contacts≤90N/≥15N
Contact resistance	15mΩ max		64 contacts≤60N/≥10N
Working voltage	330Vac/470Vdc		32 contacts≤30N/≥5N
Insulation resistance	1Ω	Housing Colour	Polyester, 32
Test voltage	1000Vrms	Contact material	Light Grey
between contacts	1500Vrms	Female	Phosphor Bronze
contacts and earth	-65°C to +125°C	Male	Brass
Temperature range		Contact plating	Gold over Nickel
		Termination	Tin/Lead over Nickel

209761

90° PCB Plugs 'B' and 'C' Body

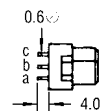
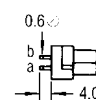


PCB hole dia.=1.0, Mounting holes=2.85 dia. x 88.9, Pin spacing=2.54

209762

No. of Ways	Rows Loaded	Order Code	1+	10+	Price Each 50+	100+	250+
Class 1							
2 Row 'B' Body							
32	a	109-7917●	2.70	2.48	2.37	2.26	2.16
64	a+b	109-7918●	3.11	2.84	2.70	2.57	2.46
3 Row 'C' Body							
32	a+c (even)	109-7919●	2.49	2.20	1.96	1.74	1.68
64	a+c	109-7920●	3.46	3.18	3.01	2.88	2.76
96	a+b+c	109-7922●	4.91	4.54	4.32	4.07	3.92
Class 2							
2 Row 'B' Body							
32	a	109-7923●	2.72	2.53	2.23	2.04	1.85
64	a+b	109-7924●	3.66	2.52	2.24	2.04	1.86
3 Row 'C' Body							
64	a+c	109-7925●	2.66	2.47	2.19	2.00	1.80
96	a+b+c	109-7926●	2.95	1.65	1.38	1.23	1.13
Class 3 (5 Per Pack)							
2 Row 'B' Body							
64	a+b	109-7927●	9.88	8.96	8.57	8.14	7.86
3 Row 'B' Body							
64	a+c	109-7928●	7.00	6.36	6.09	5.79	5.54
96	a+b+c	109-7929●	12.18	11.94	11.47	11.14	9.82

PCB Sockets 'B' and 'C' Body



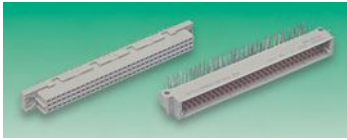
PCB hole dia.=1.0, Mounting holes=2.85 dia.x90.0, Pin spacing=2.54

209763

No. of Ways	Rows Loaded	Order Code	1+	10+	Price Each 50+	100+	250+
Class 1							
2 Row 'B' Body							
32	a	121-1660●	3.06	2.83	2.68	2.53	2.28
32	a+b (Even)	121-1671●	14.35	13.00	12.44	11.83	11.37
64	a+b	121-1661●	5.97	5.52	5.20	4.97	4.21
3 Row 'C' Body							
32	a+c (Even)	121-1662●	2.98	2.75	2.61	2.47	2.21
64	a+c	121-1664●	4.38	3.99	3.83	3.60	3.30
96	a+b+c	121-1665●	4.66	4.25	4.05	3.86	3.69
Class 2							
2 Row 'B' Body							
32	a	121-1666●	2.32	2.18	1.94	1.74	1.68
64	a+b	121-1667●	4.44	2.61	2.23	1.89	1.85
3 Row 'C' Body							
64	a+c	121-1668●	1.87	1.17	1.07	1.04	1.01
96	a+b+c	121-1669●	4.98	4.57	4.10	3.69	3.39
Class 3 (5 Per Pack)							
2 Row 'B' Body							
32	a	121-1670●	10.27	9.32	8.91	8.48	8.14
32	a+b	121-1671●	14.35	13.00	12.44	11.83	11.37
3 Row 'C' Body							
64	a+c	121-1672●	9.38	8.50	8.12	7.74	7.45
96	a+b+c	121-1673●	12.59	11.41	10.91	10.35	9.98

CECC Approved

Tyco Electronics



Mating cycles
Industrial atmospheres

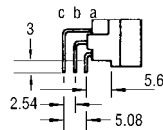
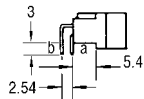
Contact rating 1.5A @ 85°C
Contact resistance 20mΩ max
Insulation resistance 100MΩ min.
Test voltage between contacts 1000V
contacts and earth 1500V
Temperature range -55°C to +125°C

	Class 1	Class 2	Class 3
Mating cycles	500	400	400
Industrial atmospheres	21	21	—
Insertion/ extraction force		96 contacts≤90N/≥15N 64 contacts≤60N/≥10N	
Housing Colour		32 contacts≤17N Polyester, UL94V-0 Pebble Grey	
Contact material	Female	Phosphor Bronze	
	Male	Brass	
Contact plating	Active	Gold over Palladium over Nickel	
Termination		Tin/lead alloy	

209772

90° PCB Plugs 'B' and 'C' Body

Tyco Electronics



PCB hole dia.=1±0.1, PCB mounting hole=2.5 dia x 88.9, Pin spacing=2.54

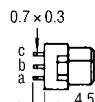
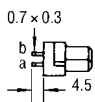
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209773

No. of Ways	Rows Loaded	Order Code	1+	10+	Price Each	50+	100+	250+
Class 1								
3 Row 'C' Body								
64	a+c	112-2921●	4.32	3.82	2.65	2.33	2.21	
96	a+b+c	112-2922●	5.98	5.31	3.67	3.19	3.08	
Class 2								
2 Row 'B' Body								
64	a+b	112-2923●	2.88	2.55	1.92	1.64	1.58	
3 Row 'C' Body								
64	a+c	112-2925●	2.43	2.13	1.61	1.38	1.35	
96	a+b+c	112-2926●	3.60	3.21	2.40	2.07	1.98	

PCB Sockets 'B' and 'C' Body

Tyco Electronics



PCB hole dia.=1 0.1. PCB mounting hole=2.8 dia x 78.74, Pin spacing=2.54

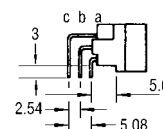
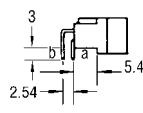
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V42254-B2102-C960=112-2930 V42254-B2202-C960=112-2933

209774

No. of Ways	Rows Loaded	Order Code	1+	10+	Price Each	50+	100+	250+
Class 1								
2 Row 'B' Body								
64	a+b	112-2928●	6.08	5.43	3.73	3.26	3.12	
3 Row 'C' Body								
64	a+c	112-2929●	6.08	5.43	3.73	3.26	3.12	
96	a+b+c	112-2930●	6.38	5.62	3.90	3.40	3.24	
Class 2								
3 Row 'C' Body								
64	a+c (Even)	112-2932●	5.13	4.55	3.39	2.90	2.77	
96	a+b+c	112-2933●	6.78	6.12	4.75	4.08	3.88	

Half Size 'B' and 'C' Body
90 PCB Plugs

Tyco Electronics



PCB hole dia.=1 0.1, PCB mounting hole=2.8 dia x 48.26, Pin spacing=2.54

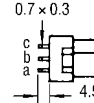
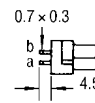
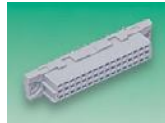
Mfrs. List No. V42254-B1200-C483=112-2935 V42254-B1200-C480=122-2936

209775

No. of Ways	Rows Loaded	Order Code	1+	10+	Price Each	50+	100+	250+
Class 2								
3 Row 'C/2' Body								
32	a+c	112-2935●	3.83	3.36	2.30	2.01	1.92	
48	a+b+c	112-2936●	4.26	3.71	2.54	2.22	2.14	

Half Size 'B' and 'C' Body
PCB Sockets

Tyco Electronics



PCB hole dia.=1 0.1. PCB mounting hole=2.8 dia x 48.26, Pin spacing=2.54

Mfrs. List No. V42254-B2200-B321=112-2937 V42254-B2202-C483=112-2941
V42254-B2202-B320=112-2938 V42254-B2200-C480=112-2942

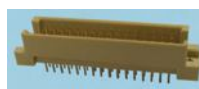
209776

No. of Ways	Rows Loaded	Order Code	1+	10+	Price Each	50+	100+	250+
Class 2								
2 Row 'B/2' Body								
16	a	112-2937●	3.90	3.44	2.63	2.24	2.13	
32	a+b	112-2938●	4.20	3.74	2.58	2.28	2.14	
3 Row 'C/2' Body								
32	a+c	112-2941●	4.27	3.81	2.64	2.33	2.18	
48	a+b+c	112-2942●	4.89	4.33	3.00	2.58	2.51	

Din 41612 Plugs & Sockets

multicomp

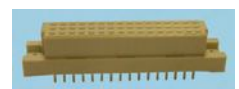
1/2B / B / 1/2C / C Body



Plug, Vertical



Plug, Right Angle



Socket, Vertical

- Vertical and Right Angle Plugs available
- Pitch - 2.54mm
- Pitch Row - 2.54mm
- Flammability Rating - UL94V-0
- Operating Temperature - -25°C to 125°C

New

	Current Rating	Voltage Rating	Contact Material	Contact Plating	Insulator Material
Plug	2A	250V AC/DC	Copper Alloy	Gold	PBT
Socket	2A	250V AC/DC	Phosphor Bronze	Gold	PBT

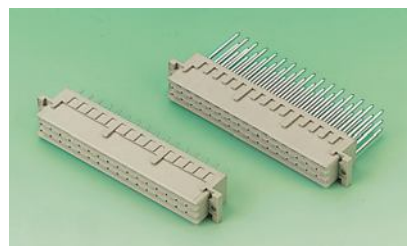
527820

Body Style	No. of Ways	Order Code	1+	25+	Price Each	50+	100+	250+
Plug, Vertical								
1/2B	32	166-1145●	1.50	1.30	1.22	1.14	1.06	
B	64	166-1151●	2.10	1.82	1.71	1.60	1.47	
Plug, Right Angle								
1/2B	32	166-1147●	1.58	1.37	1.29	1.21	1.11	
B	64	166-1154●	2.10	1.82	1.71	1.60	1.47	
Plug, Vertical								
1/2C	48	166-1148●	1.87	1.63	1.53	1.44	1.32	
C	96	166-1155●	2.64	2.29	2.14	2.02	1.85	
Plug, Right Angle								
1/2C	48	166-1150●	1.84	1.59	1.49	1.40	1.29	
C	96	166-1157●	2.72	2.36	2.21	2.08	1.91	
Socket, Vertical								
1/2B	32	166-1146●	1.66	1.44	1.35	1.27	1.17	
B	64	166-1153●	2.21	1.92	1.80	1.69	1.56	
Socket, Vertical								
1/2C	48	166-1149●	1.94	1.68	1.58	1.48	1.37	
C	96	166-1156●	2.87	2.49	2.33	2.20	2.02	

Type F

Class 2

Tyco Electronics



Mfrs. List No.	Type	Description	Positions	Rows z,b,d	Pin Length(mm)	Order Code
2-164045-4	F	R/Angled PCB Plug	48	z,b,d	2.8	105-6345
166733-4	F	Straight PCB Skirt	48	z,b,d	4	105-6346

18



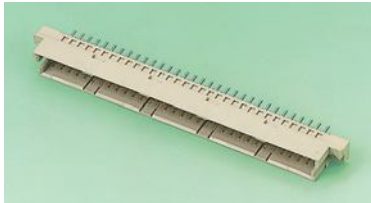
DIN41612 Class 1,2 and 3 - continued

Type F - continued

Class 2 - continued

210037

Order Code	1+	10+	50+	100+	500+
105-6345●	4.70	4.17	3.73	3.56	3.39
105-6346●	6.02	5.17	4.66	4.46	4.21

Type Q
Class 3

Tyco Electronics

Mfrs. List No.	Type	Size	Description	Positions	Rows	Pin Length(mm)	Order Code
5174254-2	Q	std	Straight PCB Plug	64	a,b	4	966-2626

209849

Order Code	1+	10+	50+	100+	500+
966-2626●	3.85	3.55	3.15	3.02	2.84

DIN 41612 - Eurocard

Tyco Electronics



- Industry standard 2 piece backplane connector
- DIN Level II
- 64 way connectors have rows A + C loaded, 96 way connectors have rows A + B + C loaded

Current Rating 1A Durability 400 mating cycles

451139

No. of Ways	Term. Style	Mfrs. List No.	Order Code	1+	10+	50+	100+	500+
Type C Socket - Straight								
64	Solder Post	9-1393640-3	128-4322●	1.87	1.66	1.59	1.50	1.44
96	Solder Post	9-1393640-2	128-4323●	1.87	1.66	1.59	1.50	1.44
Type R Socket - Right Angle								
96	Solder Post	3-1393656-4	128-4324●	3.50	3.12	2.98	2.79	2.69
Type R Plug - Straight								
96	Solder Post	650889-5	128-4325●	2.07	1.85	1.76	1.66	1.59
96	Press Fit	2-1393659-8	128-4326●	1.92	1.70	1.64	1.54	1.49

Eurocard Connectors

Tyco Electronics

- Meets DIN 41612 and IEC 603-2
- Two-piece reliability
- Polarised housings
- Flame retardant
- Action Pin (press fit)
- Various pin lengths
- UL and CSA listed

Temperature Rating 55°C to 125°C

210034

Types B and C

Standard and Half Size Class 2

Tyco Electronics



Mfrs. List No.	Type	Size	Description	Positions	Rows	Pin length (mm)	Order Code
5536052-5	B	std	R/Angled PCB Plug	64	a,b	2.64	109-8669
5650860-5	B	std	Straight PCB Skirt	64	a,b	3.3	109-8670
5650473-5	B	std	R/Angled PCB Plug	96	a,b,c	2.64	109-8671
5650945-5	B	std	R/Angled PCB Plug	64	a,c	2.64	109-8672
5650478-5	C	half	R/Angled PCB Plug	48	a,b,c	2.64	109-8673

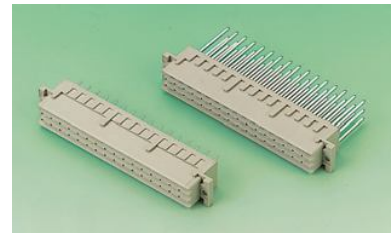
Mfrs. List No.	Type	Size	Description	Positions	Rows	Pin Length(mm)	Order Code
5535089-5	C	std	Straight PCB Skirt	96	a,b,c	2.49	109-8674
5650458-5	C	std	Straight PCB Skirt	64	a,c	2.49	109-8675
5535091-5	C	half	Straight PCB Skirt	48	a,b,c	2.49	109-8677
5535032-5	C	std	Straight PCB Skirt with Action Pin	96	a,b,c	4.83	109-8678
5148057-5	C	std	Straight Wire Wrap Skirt	96	a,b,c	13	109-8679

210035

Order Code	1+	10+	50+	100+	500+
109-8669●	3.010	2.700	2.420	2.230	2.050
109-8670●	3.670	3.150	2.890	2.740	2.600
109-8671●	3.250	2.960	2.800	2.650	2.510
109-8672●	2.300	2.050	1.820	1.710	1.640
109-8673●	2.176	—	—	—	—
109-8674●	3.680	3.440	3.190	3.030	2.870
109-8675●	3.160	2.680	2.430	2.340	2.160
109-8677●	2.850	2.480	2.230	2.130	2.030
109-8678●	3.260	2.840	2.580	2.440	2.300
109-8679●	5.680	4.790	4.350	4.110	3.860

Type R
Class 2

Tyco Electronics



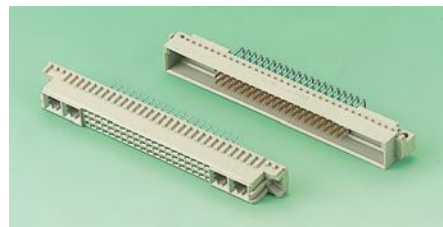
Mfrs. List No.	Type	Size	Description	Positions	Rows	Pin Length(mm)	Order Code
5650908-5	R	std	Straight PCB Plug	96	a,b,c	3.3	109-8680
5650479-5	R	half	Straight PCB Plug	48	a,b,c	3.3	109-8681
5650461-5	R	std	Std R/A PCB Skirt	96	a,b,c	2.79	109-8682
5650868-5	R	half	Half Right Angled PCB Skirt	48	a,b,c	2.79	109-8683

210038

Order Code	1+	10+	50+	100+	500+
109-8680●	3.22	2.77	2.50	2.38	2.22
109-8681●	1.93	1.61	1.38	1.26	1.16
109-8682●	3.55	3.05	2.79	2.64	2.51
109-8683●	2.46	2.10	1.95	1.83	1.73

Type M with Power and/or Coaxial Contacts

Tyco Electronics



Mfrs List No.	Type	Size	Description	Positions	Rows	Pin Length(mm)	Order Code
148412-5	M	std	r/angled pcb plug	60 + 4SC	a,b,c	2.8	105-6348
148414-5	M	std	r/angled pcb plug	24 + 8SC	a,b,c	2.8	105-6349
148417-5	M	std	Straight pcb skt with action pins	78 + 2SC	a,b,c	6	497-022
148420-5	M	std	Straight pcb skt with action pins	60 - 4SC	a,b,c	6	105-6350
148384-5	M	std	Straight pcb skt with action pins	24 + 8SC	a,b,c	6	105-6351

High current and coaxial solder contacts for M type connectors

Mfrs List No.	Type	Style	Size	Order Code
1393589-1	pin	power	8AWG	369-6248
1392019-1	skt	coaxial		369-6273
1392020-1	pin	coaxial		369-6261

210036

Order Code	1+	10+	50+	100+	500+
105-6348●	5.05	4.25	3.83	3.74	3.55
105-6349●	2.86	2.46	2.19	2.05	1.93
105-6350●	4.41	4.05	3.91	3.65	3.48
105-6351●	3.06	2.59	2.37	2.18	2.11
369-6273●	9.75	8.36	7.63	7.25	6.88

Gds A Series DIN41612 Class 3



HARTING®

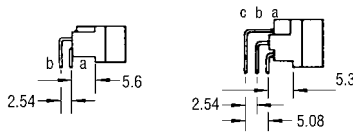
Pushing Performance

Pin spacing=2.54
PCB hole dia=1.0

Contact rating (individual contact in isolation)	2A @ 20°C	Insertion & extraction force	96 contacts $\approx$ 90N 64 contacts $\leq$ 80N
Contact resistance	15m Ω max.	Housing	32 contacts $\leq$ 30N
Working voltage	250V dc/ac peak	Colour	Polyester, UL94V-0
Insulation resistance	$\geq 10^{12}\Omega$ max.	Contacts	Pebble grey (RAL7032)
Test voltage	1000V rms	Terminals	Brass, Gold over Nickel plating
Temperature range	-65°C to +125°C		Tinned
Mating cycles	50, no gas test		

209683

90° PCB Plugs

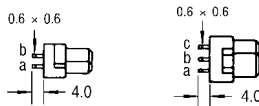


Mfrs. List No	0903 164 7921 = 109-6831	0903 196 7921 = 109-6832
0902 132 7931 = 110-6718	0902 164 7921 = 109-6830	0903 132 7921 = 109-6838

209684

No. of Ways	Rows Loaded	Order Code	1+	10+	50+	100+	500+	1K+
2 Row 'B' Body								
32	a	110-6718	1.50	1.35	1.34	1.28	1.22	1.13
64	a+b	109-6830	1.95	1.83	1.76	1.69	1.61	1.55
3 Row 'C' Body								
32	a+c (even)	109-6838	2.15	1.85	1.71	1.50	1.27	1.16
64	a+c	109-6831	1.90	1.79	1.73	1.65	1.58	1.51
96	a+b+c	109-6832	2.65	2.48	2.38	2.27	2.16	2.06

PCB Sockets



Mfrs. List No	0903 232 7825 = 109-6839	0903 264 7825 = 109-6833	0903 296 7825 = 109-6834
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209685

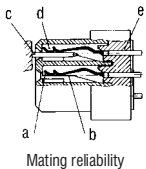
No. of Ways	Rows Loaded	Order Code	1+	10+	50+	100+	500+	1K+
3 Row 'C' Body								
32	a+c (even)	109-6839	3.04	2.68	2.40	2.14	1.82	1.66
64	a+c	109-6833	3.06	2.85	2.71	2.61	2.46	2.35
96	a+b+c	109-6834	4.16	3.89	3.71	3.55	3.38	3.24

Gds A Series DIN41612 Class 2



A range of connectors manufactured to the specifications of DIN41612 Part 1, BS9525, VG and BT222 requirements.

Superior Design Features



- a) Contact design prevents incorrect mating
- b) Moulded shoulder pre-loads contact springs
- c) Electro-polished male contact minimises insertion forces
- d) Sequential contact mating reducing insertion forces
- e) Force fit staking ensures firmly held contacts and prevents ingress

Dual Cantilever Single Sided Contact Providing

- Reduced insertion forces
- Added reliability
- Improved vibration resistance

Body material	Glass filled polyester, UL94V-0
Mating force	$\approx$ 90N
Vibration resistance	to VG95324 / DIN53480 / IEC112
Creepage resistance	VG95324 / DIN53480 / IEC112Polyester K225
Chemically resistant	to Trichloroethylene, carbon tetrachloride, petrol, ethanol and menthanol
Temperature range	-65°C to +125°C. Short term +220°C suitable for vapourphase soldering
Electrical specifications	quoted on individual devices

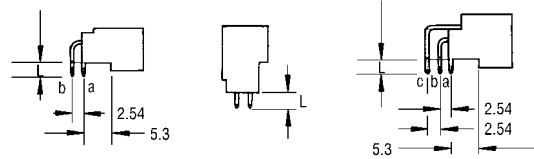
209687



40,000 PRICES REDUCED



PCB and Wire Wrap Plug



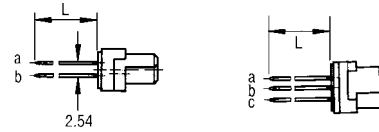
Pin spacing=2.54, PCB hole dia.=1.0

Contact rating	2A @ 20°C	Contact material	Copper Alloy, Gold plating
Working voltage	250 V ac/dc	Mating cycles	400
Mfrs. List No		0902 164 6921 = 109-6900	0903 196 6921 = 109-6905
0902 132 6931 = 114-2808		0903 164 6921 = 109-6903	0903 196 6922 = 109-7072
0903 132 6921 = 109-6902		0902 164 6922 = 109-6901	0903 164 6922 = 109-7073

209688

No. of Ways	Rows Loaded	Pin Length 'L'	Order Code	1+	10+	50+	100+	250+
2 Row 'B' Body 90° PCB Pins								
32	a	3	114-2808	2.27	2.16	2.11	2.05	1.98
64	a+b	3	109-6900	2.91	2.72	2.58	2.47	2.38
2 Row 'B' Body PCB Pins								
64	a+b	3	109-6901	4.42	3.90	3.52	3.10	2.84
3 Row 'C' Body 90° PCB Pins								
32	a+c (even)	3	109-6902	2.58	2.27	2.06	1.80	1.65
64	a+c	3	109-6903	2.77	2.57	2.46	2.37	2.27
96	a+b+c	3	109-6905	3.93	3.65	3.51	3.35	3.19
3 Row 'C' Body Straight PCB Pins								
96	a+b+c	3	109-7072	4.81	4.34	4.19	3.86	3.62
64	a+b+c	3	109-7073	3.21	2.88	2.79	2.57	2.39

Solder and Wire Wrap Sockets



Pin spacing=2.54 (except 'C' body 32 way=5.08), PCB hole dia.=1.0

Contact rating	2A @ 20°C	Contact material	Phosphor Bronze, Gold plating
Working voltage	250 V ac/dc	Mating cycles	400
Mfrs. List No	0903 296 6825 = 109-6910	0902 264 6821 = 110-6771	
0902 264 6824 = 109-6906	0902 264 6421 = 118-9273	0903 264 6821 = 109-6911	
0903 232 6825 = 109-6908	0903 264 6825 = 109-6909	0903 264 6421 = 118-9271	
0902 264 6825 = 109-6907			

209689

No. of Ways	Rows Loaded	Pin Length 'L'	Order Code	1+	10+	50+	100+	250+
2 Row 'B' Body PCB Pins								
64	a+b	2.5	109-6906	4.30	3.79	3.40	3.00	2.77
64	a+b	4	109-6907	3.88	3.61	3.46	3.31	3.16
2 Row 'B' Body Wire Wrap Pins								
64	a+b	13	110-6771	4.45	4.14	3.95	3.79	3.62
2 Row 'B' Body Solder Pins								
64	a+b	13	118-9273	4.47	3.93	3.59	3.15	3.07
3 Row 'C' PCB Pins								
32	a+c (even)	4	109-6908	3.43	3.00	2.75	2.40	2.23
64	a+c	4	109-6909	4.10	3.82	3.65	3.48	3.33
96	a+b+c	4	109-6910	5.46	5.08	4.85	4.63	4.43
3 Row 'C' Wire Wrap Pins								
64	a+c	13	109-6911	4.14	3.86	3.67	3.50	3.36
3 Row 'C' Solder Pins								
64	a+c	13	118-9271	4.50	3.96	3.61	3.16	2.98

Coded PCB Plugs



- Avoids accidental mating of adjacent connectors
- Coding facility integral part of the connector
- Code keys are push fit into plug and socket connectors

Contact rating	2A @ 20°C	Contact material	Copper Alloy, Gold plating
Working voltage	250 V ac/dc	Mating cycles	400

Gds A Series DIN41612 Class 2 - continued

Coded PCB Plugs - continued

Mfrs. List No 0902 664 6921 = 114-2810 0903 664 6921 = 109-6951 0902 000 9928 = 109-6952
0903 696 6921 = 114-2812

209831

No. of Ways	Rows Loaded	Pin Length 'L'	Order Code	1+	10+	Price Each			
						50+	100+	250+	
2 Row 'B' Body	90° PCB Pins								
64	a+b	3	114-2810●	4.14	3.65	3.21	2.69	2.45	
3 Row 'C' Body	90° PCB Pins								
64	a+c	3	109-6951●	4.14	3.65	3.23	2.69	2.48	
96	a+b+c	3	114-2812●	5.81	5.14	4.53	3.76	3.42	
					Price Per Rack				
Coding Keys				1+	10+	50+	100+	250+	
60 per pack			109-6952●	3.11	2.72	2.43	2.18	1.88	

Coded PCB Sockets



Contact rating 2A @ 20°C Contact material Copper Alloy, Gold plating
Working voltage 250 V ac/dc Mating cycles 400

219841

No. of Ways	Rows Loaded	Pin Length 'L'	Mfrs. List No.	Order Code	1+	10+	50+	100+	250+
3 Row 'C' Body PCB Pins									
64 a+c	3	0903 764 6825	110-6827●	6.20	5.43	4.84	4.01	3.67	
96 a+b+c	3	0903 796 6825	110-6828●	8.86	7.81	6.93	5.73	5.24	

PCB Plugs with Snap in Clips



Pin spacing=2.54, PCB hole dia.=1.0

For PCB thickness 1.6±0.2mm, PCB hole dia.=2.8+0.1mm for snap-in fixing

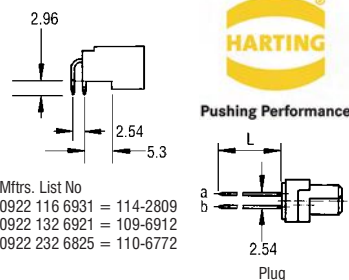
- Snap in clips tinned, for solderability

Contact rating 2A @ 20°C Contact material Copper Alloy, Gold plating
Working voltage 250 V ac/dc Mating cycles 400

209832

No. of Ways	Rows Loaded	Pin Length 'L'	Mfrs. List No.	Order Code	1+	10+	50+	100+	250+
3 Row 'C' Body PCB Pins									
64 a+c	3	0903 364 6921	109-6949●	3.51	3.11	2.79	2.34	2.17	
96 a+b+c	3	0903 396 6921	109-6950●	4.37	4.02	3.82	3.65	3.49	

Half Size 2 Row 'B' Body



Contact rating 2A @ 20°C Working voltage 250 V ac/dc Contact material Copper Alloy, Gold plating Mating cycles 400

Mfrs. List No 0922 116 6931 = 114-2809
0922 132 6921 = 109-6912
0922 232 6825 = 110-6772

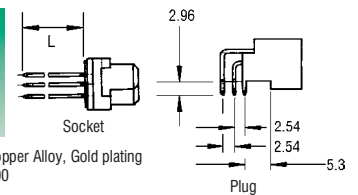
209690

No. of Ways	Rows Loaded	Pin Length 'L'	Order Code	1+	10+	50+	100+	250+
Plugs 90° PCB Solder Pin								
16 a	3	114-2809●	1.90	1.67	1.49	1.35	1.21	
32 a+b	3	109-6912●	2.93	2.70	2.55	2.44	2.35	
Socket								
32 a+b	4	110-6772●	3.24	2.99	2.86	2.73	2.60	

Half Size 3 Row 'C' Body



Pushing Performance



Contact rating 2A @ 20°C Contact material Copper Alloy, Gold plating
Working voltage 250 V ac/dc Mating cycles 400

Mfrs. List No 0923 132 6921 = 109-6913

Mfrs. List No 0923 148 6921 = 109-6914

Mfrs. List No 0923 248 6825 = 109-6915

209691

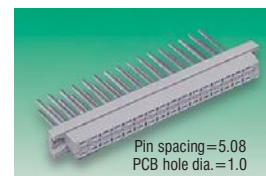
No. of Ways	Rows Loaded	Pin Length 'L'	Order Code	1+	10+	50+	100+	250+
90° PCB Solder Pin								
32 a+c	2.96	109-6913●	2.34	2.16	2.05	1.97	1.89	
48 a+b+c	2.96	109-6914●	2.61	2.40	2.30	2.20	2.10	
Straight PCB Solder Pin								
48 a+b+c	4	109-6915●	3.86	3.58	3.45	3.29	3.14	

'D' Body Plug and Sockets

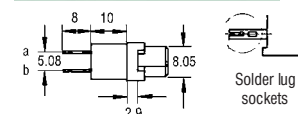
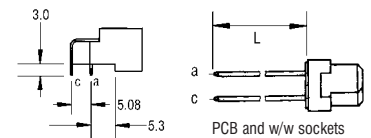


Pushing Performance

32 Way, Rows a+c Loaded



Pin spacing=5.08
PCB hole dia.=1.0



Contact rating 6A @ 20°C Working voltage 125 V ac/dc Housing Polyester Contact material Copper Alloy, Gold plating Mating cycles 400

Mfrs. List No 0904 132 6921 = 109-6917

0904 232 6823 = 109-6872

0904 232 6821 = 109-6880

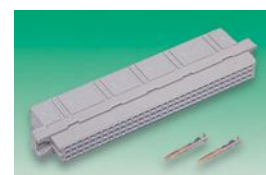
209692

	Pin Length 'L'	Order Code	1+	10+	50+	100+	250+
Plugs							
90° PCB pins	3	109-6917●	3.90	3.60	3.44	3.28	2.42
Socket							
PCB pins	4	110-6773●	7.86	7.23	6.90	6.61	6.08
Wire wrap pins	8	109-6872●	6.05	5.32	4.84	4.27	3.90
Wire wrap pins	20	109-6880●	6.21	5.73	5.47	5.22	4.12

Crimp Contact Socket Housings



Pushing Performance



Contact rating B+C 2A @ 20°C D+F 6A @ 20°C Working voltage B+C 250 V ac/dc Working voltage D+F 125 V ac/dc Housing Polycarbonate (B, C and D) Polycarbonate (F) Contact material Copper Alloy, Gold plating Mating cycles 400

Housing & Contacts 'B'+ 'C' 0.14—0.5mm₂ 'D'+ 'F' 0.14—0.5mm₂ 'D'+ 'F' 0.5—1.5mm₂

(A) Crimp Tool 466-3688 466-3688 466-3688

Mfrs. List No 0902 064 3214 = 110-6774 0903 096 3214 = 109-6918 0906 248 3201 = 109-7077

0906 000 6432 = 109-6947 0903 096 3214 = 109-6918 0902 000 8474 = 109-6945

0904 032 3213 = 109-6919 0906 000 6431 = 109-6946

No. of Ways	Rows Loaded	Order Code	1+	10+	50+	100+	250+
Socket Housings							
'B' 64 a+b	110-6774●	6.40	5.55	4.72	4.27	3.55	
'C' 96 a+b+c	109-6918●	4.85	4.26	3.85	3.38	3.08	
'D' 32 a+c	109-6919●	5.38	4.92	4.04	3.42	3.15	
'F' 48 d+b+z	109-7077●	2.63	2.35	2.27	2.14	1.97	

209693

Contacts (100 Per Pack)		Order Code	Price Per Pack				
Size			1+	5+	10+	25+	50+
'B' + 'C'	0.14 - 0.5mm ²	109-6945●	27.93	24.10	20.58	18.59	15.46
'D' + 'F'	0.14 - 0.5mm ²	109-6946●	42.69	36.88	31.47	28.45	23.64
'D' + 'F'	0.14 - 0.5mm ²	109-6947●	42.69	36.88	31.47	28.45	23.64

Tooling for Crimp Contacts



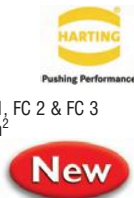
337966

	Mfrs. List No.	Order Code	Price Each
Crimp Tool			1+
B+C and D+F	09 99 000 0620	466-3688	183.09
Crimp Set Including crimp insert and locator			
B+C	09 99 000 0621	466-3690	118.98
D+F 0.14 ² - 0.56mm ²	09 99 000 0622	466-3706	118.98
D+F 0.50 ² - 1.50mm ²	09 99 000 0623	466-3718	118.98
Contact Removal Tools			
B+C	0999 000 0101	316-477	15.15
D+F	0999 000 0087	316-489	6.19

Crimping Tool



- For individual contacts FC 1, FC 2 & FC 3
- Wire gauge - 0.14 - 1.5mm²

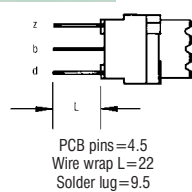
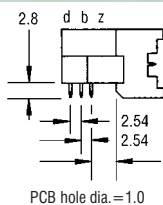


527816

Mfrs. List No.	Order Code	Price Each
09 99 000 0191	167-0787●	182.69
		3+
		172.54

'F' Body Plug and Sockets

48 Way, Rows d+b+z Loaded



Contact rating 6A @ 20°C
Working voltage 125 V ac/dc

Contact material Mating cycles
Copper Alloy, Gold plating 400

0906 148 6901 = 109-6873

0906 248 6823 = 109-6920

0906 248 6821 = 109-6921

0906 000 8471 = 109-7078

0906 000 8472 = 109-7079

209695

	Order Code	1+	10+	50+	100+	250+
Plugs						
90° PCB pins	109-6873●	5.670	5.230	5.000	4.750	4.170
Socket						
PCB pins	110-6775●	6.590	5.950	5.880	5.640	5.260
Solder lug	109-6920●	7.150	6.570	6.290	6.020	4.730
Wire wrap pins	109-6921●	6.360	5.870	5.590	5.320	4.910
Order Multiple = 10						
Crimp Contacts		10+	50+	100+	500+	1K+
0.14mm-0.56mm	109-7078●	0.250	0.240	0.220	0.210	0.195
0.14mm-0.56mm	109-7079●	0.280	0.260	0.240	0.220	0.200



40,000 PRICES REDUCED

RoHS Compliant
Non-compliant

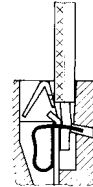
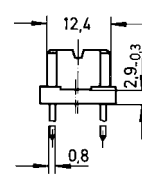
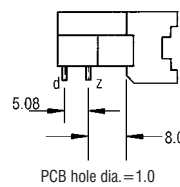
08447 11 11 11

Fax: 08447 11 11 12 1933

'H' Body Plugs and Sockets

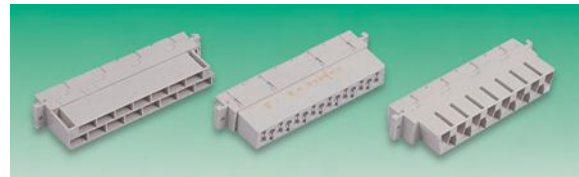


15 Way, Rows d+z Loaded



Cage clamp
(0.14-1.5mm²)
(015-2813H)

Socket rear views



Horizontal
faston terminals (6.3 x 0.8)

Cage clamp
terminals

Vertical faston terminals
(6.3 x 0.8)

Contact rating 15A @ 20°C
Working voltage 500 V ac/dc
Housing Polyester (0906 115/215 Series)

Contact material Polyester (0906 015 Series)
Copper Alloy, Silver plating

Mfrs. List No
0906 115 2932 = 109-6871
0906 115 2933 = 109-6871
0906 215 2811 = 109-6878

0906 015 2931 = 109-6922
0906 015 2813 = 109-6923

0906 215 2871 = 109-6879
0906 215 2821 = 109-6948

209696

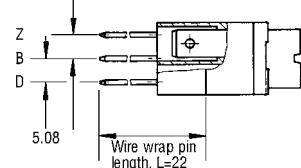
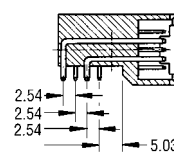
	Order Code	1+	10+	50+	100+	250+
Plugs						
90° PCB pins	109-6871●	8.12	7.47	7.16	6.81	5.95
Faston terminals (horiz)	109-6922●	8.16	7.51	7.19	6.88	6.12
Sockets						
Faston terminals (horiz)	109-6879●	11.99	11.17	10.68	10.22	9.74
Faston terminals (vert)	109-6878●	11.14	10.25	9.80	9.37	8.37
Cage clamp terminals	109-6923●	11.42	10.62	10.15	9.71	9.29
PCB pins	109-6948●	6.34	5.92	5.64	5.39	5.13

Note: The plugs have a leading earth pin in position Z32. 225-940 will not accept 'H' body backshell

'MH' Body Plugs and Socket



24 Way, Rows d+b+z Loaded and 7 Way, Rows d+z Loaded



Contact rating 24 way 6A @ 20°C
7 way 15A @ 20°C
Working voltage 24 way 125 V ac/dc
7 way 125 V ac/dc

Housing Polyester (0906 131/231 Series)
Polyester (0906 031 Series)
Contact material 24 way Copper Alloy, Silver plating
7 way Copper Alloy, Silver plating

Mfrs. List No.

0906 131 6922 = 109-6881
0906 031 6921 = 109-6924

0906 231 6821 = 109-6882

0906 231 6822 = 109-7075

Gds A Series DIN41612 Class 2 - continued

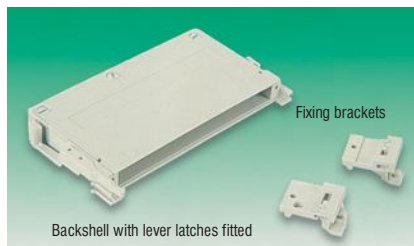
'MH' Body Plugs and Socket - continued

24 Way, Rows d+b+z Loaded and 7 Way, Rows d+z Loaded - continued

209697

	Order Code	1+	10+	50+	100+	250+
Plugs						
90° Solder pins	109-6881●	8.71	7.67	6.92	6.09	5.55
90° PCB pins + straight fastons	109-6924●	8.71	8.02	7.66	7.33	6.21
Socket						
Straight wire wrap + straight fastons	109-6882●	8.94	8.41	8.09	7.62	7.48
Straight PCB pins + straight fastons	109-7075●	10.22	9.21	8.88	8.22	7.66

B, C, D, F, H and MH Accessories



Mfrs. List No 0902 064 0501 = 110-6777 0903 096 0501 = 109-6925 0906 048 0504 = 109-6926

	Order Code	1+	10+	50+	100+	250+
Backshells						
'B' Body	110-6777●	6.73	6.19	5.93	5.66	4.73
'C' + 'D' Body	109-6925●	8.95	8.32	7.97	7.61	7.16
'F' + 'H' + 'MH' Body	109-6926●	6.33	5.90	5.64	5.40	5.17

Mfrs. List No 0902 000 9902 = 109-6927 0902 000 9903 = 109-6929

	Order Code	1+	10+	50+	100+	250+
Lever Latches						
'B', 'C' + 'D' Body left hand	109-6927●	0.99	0.85	0.73	0.65	0.54
'B', 'C' + 'D' Body left hand	109-6929●	0.99	0.85	0.73	0.65	0.54

Mfrs. List No 0902 000 9922 = 109-6932 0906 000 9910 = 109-6934
0902 000 9921 = 109-6931 0906 000 9909 = 109-6933

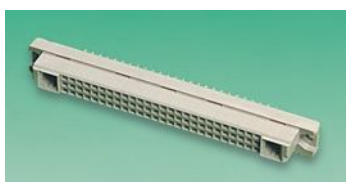
	Order Code	1+	10+	50+	100+	250+
Fixing Brackets						
'B', 'C' + 'D' left hand	109-6931●	2.01	1.75	1.51	1.22	1.09
'B', 'C' + 'D' left hand	109-6932●	3.05	2.66	2.26	1.84	1.69
'F', 'H' + 'MH' left hand	109-6933●	1.63	1.43	1.41	1.01	0.90
'F', 'H' + 'MH' right hand	109-6934●	1.63	1.43	1.23	1.01	0.90

Mfrs. List No 0903 000 9912 = 109-6956

209698

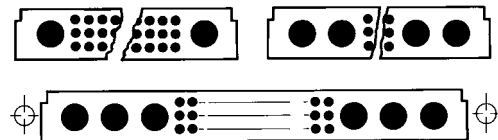
	Order Code	1+	10+	50+	100+	250+
Rear Shrouds for W/W Connectors						
	109-6956●	4.67	4.07	3.64	3.01	2.81

'M' Body Plugs and Sockets



Contact configurations

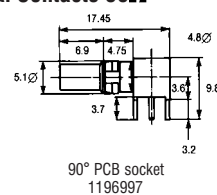
- Connectors offering low frequency
- contacts and cavities for high power/coaxial format
- Power and coaxial contacts are ordered separately
- Class 2 plating



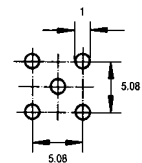
209834

Style	Mfrs. List No.	Order Code	1+	10+	50+	100+	250+
78 + 2 Contacts							
90° plug	0903 178 6901	109-6957●	10.66	9.41	8.31	6.91	6.31
PCB 4mm socket	0903 278 6805	109-6958●	5.86	5.15	4.58	3.77	3.48
60 + 4 Contacts							
90° plug	0903 160 6901	109-6959●	6.57	5.78	5.13	4.29	3.88
PCB 4mm socket	0903 260 6805	109-6960●	5.85	5.15	4.59	3.83	3.49
42 + 6 Contacts							
90° plug	0903 142 6901	114-2814●	3.29	3.08	2.94	2.82	2.73
PCB 4mm socket	0903 242 6805	109-6961●	6.38	5.63	4.99	4.11	3.78
24 + 8 Contacts							
90° plug	0903 124 6901	109-6962●	4.36	3.84	3.41	2.83	2.60
PCB 4mm socket	0903 224 6805	749-783	2.50	2.20	1.94	1.62	1.48
PCB 4mm socket	0903 224 6805	109-6963●	5.39	4.74	4.20	3.51	3.21

Coaxial Contacts 50Ω



90° PCB socket 1196997



PCB drilling pattern

A range of power and RF contacts for DIN41612 'M' body.

Contacts	Temperature range	-55°C to +125°C
Coax	Mating cycles	100
Contact rating	Material	Copper Alloy, Gold over Nickel plating
Contact resistance	Terminals	Tinned
Working voltage	Housing material	White polyester

219835

Style	Order Code	1+	25+	50+	100+	500+
Coaxial Contacts						
Straight crimp plug	119-6995●	7.55	6.80	6.44	5.91	5.55
90° crimp plug	119-6998●	9.31	8.38	7.93	7.27	6.85
90° PCB socket	119-6997●	8.55	7.72	7.31	6.74	6.29

Power Contacts



0903 000 6103 Plug
0903 000 6203 Socket
0903 000 6104 90° PCB Plug

239184

10 Per Pack

Mfrs List No.	Current Rating (A)	Order Code	1+	Price Per Pack	10+	50+
Plug Contact						
0903 000 6101	10	120-7606●	25.68	22.22	19.85	
903000610200	20	812-924	6.91	—	—	
0903 000 6102	20	120-7607●	18.49	16.07	14.54	
09030006103	40	120-0498●	23.62	20.52	18.55	
90° PCB Plug						
09030006104	10	120-0499●	37.67	32.94	29.90	
Socket Contact						
903000620200	20	812-961	9.36	—	—	
0903 000 6201	10	120-7609●	37.11	32.41	29.48	
0903 000 6202	20	120-7610●	35.02	30.87	28.09	
09030006203	40	120-0500●	38.56	33.98	30.92	

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'Q' Body Plugs and Socket (Reverse 'B')



64 Way, Rows a+b Loaded



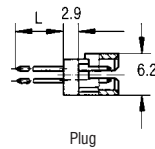
Contact rating 2A @ 20°C
Working voltage 250 V ac/dc
Contact material Copper Alloy, Gold plating
Mating cycles 400

Mfrs. List No.
0972 164 6903 = 110-6779
0972 164 6907 = 110-6780
0972 164 6577 = 118-9275
0972 264 6801 = 109-7074

209700

	Pin Length 'L'	Order Code	1+	10+	50+	100+	250+
Plugs							
Str PCB pins	4mm	110-6779●	3.51	3.24	3.09	2.96	2.40
Str wire wrap pins	13mm	110-6780●	3.90	3.42	3.09	2.75	2.49
Str Solder pins	13mm	118-9276●	4.92	4.33	3.76	3.55	3.44
Socket		109-7074●	4.34	3.91	3.76	3.49	3.26

Half Size 2 Row 'Q' Body



Contact rating 2A @ 20°C
Working voltage 250 V ac/dc
Contact material Copper Alloy, Hard Gold plating
Mating cycles 400

Mfrs. List No. 0927 132 6903 = 109-6935

209701

No. of Ways	Rows Loaded	Pin Length 'L'	Order Code	1+	10+	50+	100+	250+
Plugs								
Straight PCB Solder Pin	32 a+b	4	109-6935●	4.80	4.24	3.85	3.40	3.07
Socket								
90° PCB Solder Pin	32 a+b	3	131-3796●	4.32	4.12	3.65	3.41	3.10

'R' Body Plugs and Sockets (Reverse 'C')



Contact rating 2A @ 20°C
Working voltage 250 V ac/dc
Contact material Copper Alloy, Gold plating
Mating cycles 400

Mfrs. List No.
0973 164 6903 = 109-6936
0973 196 6903 = 109-6937
0973 164 6907 = 109-6938

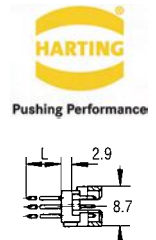
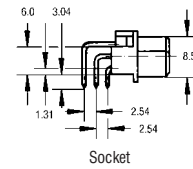
0973 164 6577 = 118-9276
0973 196 6907 = 109-6939

0973 264 6801 = 109-6940
0973 296 6801 = 109-6942

209702

No. of Ways	Rows Loaded	Pin Length 'L'	Order Code	1+	10+	50+	100+	250+
Plugs								
Straight PCB Pin	64 a+c	4	109-6936●	3.48	3.21	3.07	2.94	2.30
	96 a+b+c	4	109-6937●	4.45	4.09	3.92	3.75	3.10
Straight Wire Wrap Pins								
64 a+c	13	109-6938●	4.42	4.03	3.84	3.65	2.54	
96 a+b+c	13	109-6939●	5.67	5.16	4.92	4.69	3.46	
64 a+c	13	118-9276●	4.92	4.33	3.76	3.55	3.44	
96 a+b+c	13	118-9272●	6.32	5.48	4.83	4.62	4.46	
Sockets								
90° PCB Pins								
64 a+c	3	109-6940●	6.50	5.91	5.66	5.42	3.62	
96 a+b+c	3	109-6942●	7.63	6.94	6.65	6.33	4.26	

Half Size 3 Row 'R' Body



Contact rating 2A (max)
Working voltage 250 V ac/dc
Contact material Copper Alloy, Gold plating
Mating cycles 400

Mfrs. List No.
0928 248 6801 = 109-6943

0928 148 6903 = 109-6944
0928 132 6903 = 110-6781

0928 148 6907 = 110-6778

209703

No. of Ways	Rows Loaded	Pin Length 'L'	Order Code	1+	10+	50+	100+	250+
Socket								
90° PCB Solder Pin	48 a+b+c	3	109-6943●	5.83	5.05	4.31	3.54	3.21
Plugs								
Straight PCB Solder Pin	32 a+c	4	110-6781●	3.57	3.05	2.64	2.16	1.97
	48 a+b+c	4	109-6944●	4.27	3.69	3.05	2.59	2.35
Straight Wire Wrap Pin	48 a+b+c	13	110-6778●	4.55	3.95	3.36	2.78	2.51

DIN41612 Har-bus 64

har-bus® 64 Connectors
2.54mm Pitch



- Additional contacts for I/O and system upgrade
- New voltage supplies for 3.3 V and 48 V system components
- Improved signal/ground ratio for reliable signal data transfer at rates up to 320 MByte/s
- Live Insertion for replacing processor or memory cards without closing down the system
- User defined pins for test and maintenance bus lines
- 4 / 5 rows available

Specifications:-

Current Rating 1A
Contact Material Copper Alloy
Insulation Resistance 10¹⁰Ω

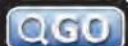
Moulding Material LCP
Contact Plating Gold over Nickel
Contact Resistance a, b, c - 20mΩ
z, d - 30mΩ

Flammability Rating UL94V-0
Operating Temp. -55°C to 125°C

528756

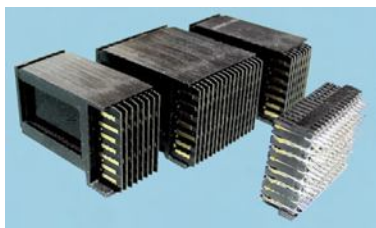
No. of Ways	Rows Loaded	Termination Length	Mfrs. List No.	Order Code	1+	5+	10+	25+
Socket Backplane, Class 2, 4 Row, with Flange								
128 z, a, b, c	4.5 / 5mm	02 02 128 2201	168-4837●	14.02	13.09	12.53	12.02	
Socket Backplanes, Class 2, 5 Row, without Flange								
160 z, a, b, c, d	5mm	02 02 160 2202	168-4839●	12.86	12.00	11.49	11.02	
160 z, a, b, c, d	17mm	02 02 160 2302	168-4842●	15.95	14.89	14.26	13.67	
Socket Backplanes, Class 2, 5 Row, with Flange								
160 z, a, b, c, d	4.5 / 5mm	02 03 160 2201	168-4843●	36.43	34.20	32.86	31.62	
No. of Ways	Rows Loaded	Position	Mfrs. List No.	Order Code	1+	5+	10+	25+
Cable Connectors, 5 Row								
160 a, b, c, d, e	32, 32 to 2, 1	02 05 000 0003	168-4844●	8.90	8.31	7.96	7.63	
160 z, a, b, c, d	32, 32 to 2, 1	02 05 000 0004	168-4845●	8.90	8.31	7.96	7.63	
Cable Connector, Type R, 5 Row								
160 a, b, c, d, e	1, 2 to 31, 32	02 05 000 0005	168-4846●	8.90	8.31	7.96	7.63	
No. of Ways	Rows Loaded		Mfrs. List No.	Order Code	1+	5+	10+	25+
Extender Card, Class 1, 5 Row								
160 z, a, b, c, d		02 07 160 1101	168-4847●	86.83	81.73	78.64	75.78	
No. of Ways	Rows Loaded	PCB Thickness	Mfrs. List No.	Order Code	1+	5+	10+	25+
Pin Shrouds, 5 Row, Wrap Post Length 17mm								
160 z, a, b, c, d	3.4mm	02 44 000 0001	168-4848●	3.14	2.93	2.81	2.69	
160 z, a, b, c, d	4mm	02 44 000 0002	168-4849●	3.14	2.93	2.81	2.69	
160 z, a, b, c, d	4.6mm	02 44 000 0003	168-4850●	3.14	2.93	2.81	2.69	

Over 480,000 products online



High Speed Differential

Multigig RT Interconnect



MultiGig RT is a pinless backplane interconnect family comprised of modular components which can be used in a variety of combinations. The connectors in this flexible platform can be combined to provide the density, data throughput and signal integrity required for most applications within computer, comms., military, medical and industrial control industries.

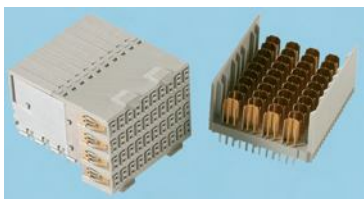
- Backplane connector system with "pinless" interface
- Press fit
- 20.3 card pitch
- Optimised footprints for signal integrity and ease of board design
- Superior crosstalk performance
- Single ended and differential
- MultiGig RT1 - 141 signals/inch, data rates up to 3.125 Gbs
- MultiGig RT2 - 113 signals/inch, data rates of 3.125 Gb/s to 6.4 Gb/s+ (10 Gb/s Tested)

Mfrs.					
List No.	Spec.	Style	Position	Mounting	Order Code
1410135-1	Vita 41	Backplane	Centre Module	Vertical	132-9922
1410140-1	Vita 41/46	Backplane	Centre Module	Vertical	132-9926
1410142-1	Vita 41/46	Backplane	Right Hand Module	Vertical	132-9927
1410186-1	Vita 46	Backplane	Left End Half Module	Vertical	132-9928
1410137-1	Vita 41	Backplane	Centre Module	Right Angle	132-9929
1410147-1	Vita 41	Backplane	Centre Module	Right Angle	132-9930
1410187-3	Vita 46	Backplane	Centre Module	Right Angle	132-9934
1410190-3	Vita 46	Backplane	Centre Module	Right Angle	132-9936
1410189-3	Vita 46	Backplane	Left End Half Module	Right Angle	132-9937

460061

No. of Spec.	Mfrs. List No.	Order Code	1+	Price Each	5+	10+
Backplane Connector						
Vita 41	1410135-1	132-9922●	18.56	16.50	14.85	
Vita 41/46	1410140-1	132-9926●	20.74	18.43	16.59	
Vita 41/46	1410142-1	132-9927●	20.74	18.43	16.59	
Vita 46	1410186-1	132-9928●	11.20	9.96	8.97	
Daughter Card Connector						
Vita 41	1410137-1	132-9929●	49.10	43.66	39.29	
Vita 41	1410147-1	132-9930●	39.24	34.88	31.39	
Vita 46	1410187-3	132-9934●	55.22	49.09	44.18	
Vita 46	1410190-3	132-9936●	55.22	49.09	44.18	
Vita 46	1410189-3	132-9937●	30.81	27.41	24.65	

Z-Pack HM-Zd - 4 Pair



Z-Pack HM-Zd is a high speed, differential connector system, which is compatible with the Z-PACK 2mm HM connector line. Z-PACK HM-Zd provides Z-PACK 2mm HM users with a migration path for serial switching applications from 3.125Gbps to 5.0Gbps.

- Z-PACK HM-Zd is an extension of the Z-PACK 2mm HM product line Designed specifically for high speed differential applications
- A modular connector system with a standard module size of 25mm Contact pitch is 1.5mm within a pair and 3.0mm pair to pair within a column; column to column pitch is 2.5mm
- 4 signal contact pairs per column (40 pairs per 25mm) compatible with 8 row Z-PACK 2mm HM
- Available in vertical press fit pin headers and right angle press fit receptacles
- Optimized footprint for improved electrical performance and ease of routing channels on both daughter card and backplane

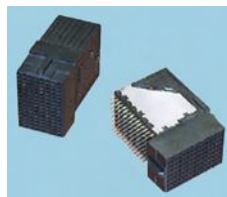
414976

No. of Pairs	Mfrs. List No.	Order Code	1+	Price Each	5+	10+
Header - Vertical						
40	6469002-1	963-6730●	14.82	13.78	13.19	
Receptacle - Right Angle						
40	6469001-1	963-6714●	21.91	20.38	19.50	
90° Keyed Guide Modules, 2 Pin						
Male	1-1469372-1	122-6256●	4.93	4.39	3.94	
Female	1-1469373-1	122-6257●	4.24	3.78	3.40	

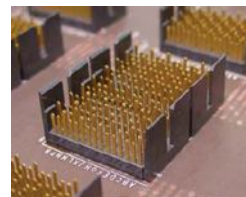
Z-PACK High Speed, High Density Backplane Connectors



New



Receptacle Assembly



Header Assembly

- 10+ Gbps performance
- 100 ohm Impedance for Differential Pair configuration
- 5 pair version offers 26 pairs/10mm [66 differential pairs/inch] fitting within a 25.40mm card slot pitch
- 4 pair version offers 21 pairs/10mm [53 differential pairs/inch] fitting within a 20.30mm card slot pitch
- Reliable, redundant contact design
- Low crosstalk and high through-put performance levels
- Meets Industry reliability requirements of Bellcore/ Telcordia
- Sequencing for ground and signal contacts

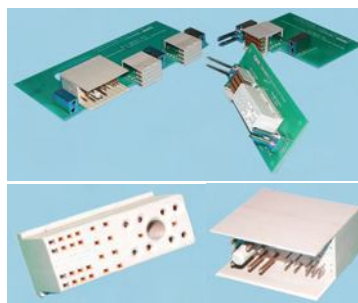
Specifications:-

Current Rating	0.5A	Voltage Rating	250V
Contact Material	Copper Alloy	Contact Plating	Nickel
Housing Material	LCP	Impedance	100ohm
No. of Mating Cycles	200	Operating Temp.	-65°C to 90°C

528893

No. of Ways	Rows	Columns	Mfrs. List No.	Order Code	1+	10+	25+	50+
Receptacle Assemblies, 5 Pair, Right Angle Mount								
120	15	8	1934218-1	168-6020●	12.40	11.23	10.63	9.92
240	15	16	1934221-1	168-6022●	21.33	19.32	18.29	17.07
Receptacle Assembly, 4 Pair, Right Angle Mount								
96	12	8	1934222-1	168-6023●	12.19	11.04	10.45	9.75
Header Assemblies, 5 Pair, Vertical Mount								
120	15	8	1934269-1	168-6024●	6.73	6.09	5.77	5.38
240	15	16	1934331-1	168-6025●	13.46	12.19	11.54	10.77
Header Assembly, 4 Pair, Vertical Mount								
96	12	8	1934305-1	168-6026●	5.52	5.00	4.73	4.42
Header Assemblies, 5 Pair, Vertical Mount, 2 End Walls								
120	15	8	1934271-1	168-6027●	6.73	6.09	5.77	5.38
240	15	16	1934332-1	168-6028●	13.46	12.19	11.54	10.77
Header Assembly, 4 Pair, Vertical Mount, 2 End Walls								
96	12	8	1934306-1	168-6029●	5.52	5.00	4.73	4.42

AdvancedTCA© Zone 1 (Z1)



1226252

1226255

AdvancedTCA Z1 Power connector is designed to PICMG 3.0 specification for Zone 1 connector requirements offering four levels of sequential mating to ensure system functionality during live insertion or extraction of line-cards.

- Rugged contact design and post-plated 30 micro-inch gold plating ensures long-term reliability in demanding environments
- High Precision formed contacts
- Housing lead-in on receptacle to prevent stubbing of signal contacts
- 22 size 22 signal contacts
- 8 size 16 power contacts
- Positions 1-4 not populated and reserved for future use

Positions	Current ratings	Rating	Dielectric withstanding voltage	V rms
1-24,27,32		1A	1-16	1000
25,26,28-31, 34		16A	17-34	2000

440379

No. of Pairs	Mfrs. List No.	Order Code	1+	Price Each	5+	10+
Header - Right Angle						
34	1766500-1	122-6255●	34.48	31.03	29.31	
Receptacle - Vertical						
34	1766501-1	122-6252●	26.21	23.59	22.28	

MicroTCA

Vertical AdvancedMC Connector



MicroTCA is complementary to AdvancedTCA. The basic premise of MicroTCA is to support the mezzanine boards, conform to the AdvancedMC standard, and connect to the back plane, eliminating the need to use an additional carrier board.

- Pressfit connector per MicroTCA.0 specification
- 170 lines
- Connector designed so that custom load patterns are easily created
- Single overmoulded wafer design
- 0.75MM Pitch

497408

Mfrs. List No.	Order Code	1+	5+	10+
1-1469820-2	152-7877●	21.43	20.41	19.05

AdvancedMC Connector

PICMG AMC B+ Style



The PICMG AMC B+ Card Edge Connector has two rows of contacts spaced on 0.75mm centrelines. There are 170 contacts on the mating face. It is designed to mate to a 1.6 ±0.16mm thick printed circuit board with contact pads on 0.75mm centrelines. The interface to the back plane is through compliant tails.

- Targeted for high-speed differential applications (3.125 Gb/s to 10+ Gb/s)
- Suitable for assembly processes using flat-rock tooling

497490

Mfrs. List No.	Description	Order Code	1+	5+	10+
1-1367703-2	B+ with insert, without pegs	152-7878●	80.38	76.55	71.44
3-1367703-2	B+ with insert, with pegs	152-7879●	80.38	76.55	71.44

MicroTCA

Minipak HD Power Connector



The MINIPAK HD Connector is a 2-piece board-to-board connector designed to meet the PICMG MicroTCA specification. The connector consists of 24 power contacts and 72 high density signal contacts.

- High current density
- Hot Plug contact design controls arc during hot mate/unmate cycles
- Long term reliability in demanding environments

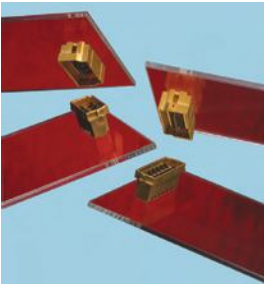
Description	Mfrs. List No.	Order Code
Vertical Receptacle, tin-lead PCB tails	1469920-1	152-7880
Right Angle Plug, solder tail	1469921-1	152-7881
Right Angle Plug, Press fit	1469922-1	152-7882

497505

Order Code	1+	5+	10+
152-7880●	35.64	33.94	31.68
152-7881●	33.61	32.01	29.88
152-7882●	33.23	31.66	29.55

Plateau HS Mezz™

High Speed Mezzanine for 10.0Gbps Bandwidth



Advanced gold-plated plastic housing with integrated shielding system support high-speed differential signaling in excess of 10.0 Gbps. These Mezzanine Connectors are ideal for servers, mainframe computers, workstations, test equipment and telecommunications equipment such as switches and routers.

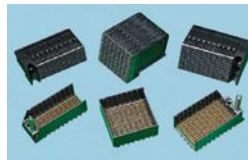
- Two points of contact on each signal ensure high reliability
- Contacts on 1.20mm pitch arranged in isolated differential pairs on 3.50mm pitch for controlled impedance
- Current: 1.5A max.
- Operating Temp: -20 to +85°C

492412

Mfrs. List No.	No. of Ways	Order Code	1+	5+	10+	25+
Plugs						
75003-0005	24	151-6729●	8.20	6.57	5.73	
75003-0008	24	151-6730●	10.38	9.79	9.10	
75003-0010	24	151-6731●	10.63	9.87	9.45	
75003-0105	48	151-6732●	12.79	12.02	11.48	
75003-0110	48	151-6733●	16.58	15.55	15.01	
75003-0305	12	151-6734●	8.71	8.13	7.42	
75003-0308	12	151-6736●	4.50	4.15	4.00	
75003-0310	12	151-6737●	9.14	8.53	7.42	
Receptacles						
75005-0004	24	151-6738●	5.91	5.51	5.26	
75005-0006	24	151-6739●	6.21	5.89	5.62	
75005-0014	24	151-6740●	6.50	6.04	5.77	
75005-0104	48	151-6741●	8.43	7.73	7.40	
75005-0304	12	151-6742●	5.86	5.45	5.20	
75005-0306	12	151-6743●	6.10	5.66	5.42	



i-Trac™ Backplane Connectors



The i-Trac™ is a broad-side coupled, skew-equalized design that handles speeds up to 12.5 Gbps with superior impedance control and lower cross-talk for traditional and orthogonal backplane applications. It is a press-fit, flexible, mono-block system with integrated guidance, power and signals that can be stacked end-to-end to meet specific pin-out requirements. Open-field design permits assigning high speed differential pairs, low

speed signals, power and ground contacts anywhere within the pin field. 11 Row i-Trac™ has 24.8mm slot width, 55 Pairs/Inch of 36 (6x6) Pairs/Node.

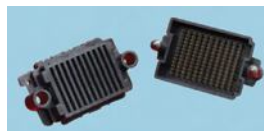
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No. of Ways	Description	Mfrs. List No.	Order Code	1+	5+	10+	25+
11 Row Headers							
110	5 Columns, Unguided	75705-1503	154-8367●	4.95	4.39	3.95	
110	5 Columns, Dual End Wall	75705-1523	154-8368●	5.10	4.54	4.08	
110	5 Columns, Guide Left	75705-3503	154-8373●	5.82	5.18	4.65	
110	5 Columns, Guide Right	75705-5503	154-8376●	5.82	5.18	4.65	
110	5 Columns, Guide Left Wall Right	75705-7503	154-8379●	5.90	5.24	4.72	
110	5 Columns, Guide Right Wall Left	75705-9503	154-8382●	5.90	5.24	4.72	
132	6 Columns, Unguided	75705-1603	154-8369●	5.93	5.27	4.74	
132	6 Columns, Dual End Wall	75705-1623	154-8370●	6.10	5.40	4.87	
132	6 Columns, Guide Left	75705-3603	154-8374●	6.81	6.04	5.45	
132	6 Columns, Guide Right	75705-5603	154-8377●	6.81	6.04	5.45	
132	6 Columns, Guide Left Wall Right	75705-7603	154-8380●	6.89	6.13	5.52	
132	6 Columns, Guide Right Wall Left	75705-9603	154-8383●	6.89	6.13	5.52	
220	10 Columns, Unguided	75705-1103	154-8365●	9.87	8.77	7.91	
220	10 Columns, Dual Endwall	75705-1123	154-8366●	10.03	8.91	8.03	
220	10 Columns, Guide Left	75705-3103	154-8371●	10.76	9.55	8.60	
220	10 Columns, Guide Right	75705-5103	154-8375●	10.76	9.55	8.60	
220	10 Columns, Guide Left Wall Right	75705-7103	154-8378●	10.84	9.63	8.67	
220	10 Columns, Guide Right Wall Left	75705-9103	154-8381●	10.84	9.63	8.67	
11 Row Daughter Cards							
110	5 Columns, Unguided	75710-1005	154-8385●	7.40	6.58	5.92	
110	5 Columns, Guide Left	75710-3005	154-8388●	7.96	7.07	6.38	
110	5 Columns, Guide Right	75710-5005	154-8391●	7.96	7.07	6.38	
132	6 Columns, Unguided	75710-1006	154-8386●	8.88	7.89	7.09	
132	6 Columns, Guide Left	75710-3006	154-8389●	14.90	14.51	14.13	
132	6 Columns, Guide Right	75710-5006	154-8392●	9.44	8.39	7.55	
220	10 Columns, Unguided	75710-1010	154-8387●	14.81	13.16	11.84	
220	10 Columns, Guide Left	75710-3010	154-8390●	15.37	13.65	12.29	
220	10 Columns, Guide Right	75710-5010	154-8393●	15.37	13.65	12.29	

Description	Mfrs. List No.	Order Code	Price Each 1+
Press Fit Tool - 11x5	62201-8601	154-8362●	314.62
Press Fit Tool - 11x6	62201-8602	154-8363●	314.62
Press Fit Tool - 11x10	62201-8603	154-8364●	356.57

HD Mezz™ Board-to-Board Receptacles and Plugs

1.20 x 2.00mm Pitch



- High speed, high density
- RoHS Compliant solder charge for SMT
- Dual contact interface points
- Guide pins for gross alignment
- 8 and 18mm stacking heights available for receptacles
- 8, 10 and 18mm stacking heights available for plugs
- 143 to 351 circuits available
- 12.5 Gbps
- Mating Force: 51g nom. per contact
- Unmating Force: 25g nom. per contact
- Normal Force: 51g nom. per contact



Housing Material	Contact Material	Contact Plating	Voltage	Current Rating	Mating Cycles	Operating Temperature
LCP Glass Filled	High Performance Alloy	0.75µm Gold min.	250V	2A	100	-55°C to 105°C

519875

Mfrs. List No.	Stacking Height	No. of Circuits	No. of Rows	Order Code	1+	5+	10+	25+	50+
Receptacles									
45802-0215	8 mm	195	15	161-7523●	18.22	16.66	14.95	13.88	
45802-0223	8 mm	299	23	161-7524●	25.05	22.91	20.56	19.09	
45802-0227	8 mm	651	27	161-7525●	32.00	29.24	26.26	24.38	
45802-1211	18 mm	143	11	161-7526●	15.51	14.18	12.74	11.82	
45802-1223	18 mm	299	23	161-7528●	26.30	24.03	21.57	20.03	
45802-1225	18 mm	325	25	161-7529●	29.84	27.28	24.48	22.74	
Plugs									
45830-0215	8 mm	195	15	161-7530●	21.01	19.22	17.24	16.01	
45830-0223	8 mm	299	23	161-7531●	29.79	27.23	24.45	22.71	
45830-0227	8 mm	351	27	161-7532●	32.81	30.01	26.93	25.00	
45830-2211	10 mm	143	11	161-7533●	17.80	16.27	14.61	13.56	
45830-2223	10 mm	299	23	161-7534●	30.65	28.02	25.14	23.35	
45830-2225	10 mm	325	25	161-7535●	32.79	29.99	26.91	24.98	
45830-1211	18 mm	143	11	161-7536●	19.41	17.75	15.93	14.79	
45830-1215	18 mm	195	15	161-7537●	21.80	19.92	17.88	16.61	
45830-1223	18 mm	299	23	161-7538●	30.59	27.97	25.09	23.31	



High Speed Differential - continued

Airmax VS® Power Connectors



High power connectors from the FCI Airmax virtual shield high-speed signal connector offering.

The unique insulator design includes openings to help air flow around the contacts to improve heat dissipation and with flat contacts to enable the use of high conductivity base metal, these design features contribute to the connectors higher current-carrying capacity.

The right-angle headers and vertical receptacles enable power connections at a backplane-to-daughtcard interface.

Each header offers 2, 4 or 6 individual power contacts positioned in 1x2, 2x2 or 2x3 arrays.

The backplane receptacles are offered in 2x2 or 2x3 configurations, the 2x2 receptacle mates to either the 1x2 or 2x2 header configuration.

Features:

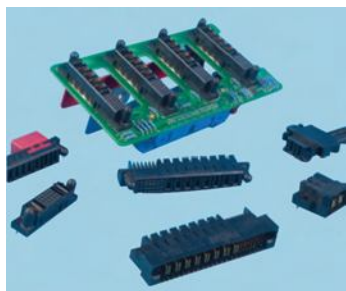
- Current rating to 80 amps for 1x2 and 2x2 modules.
- Hard Metric (HM) equipment practise.
- Standard profile and lower profile options.

Mfrs. List No.	No. of Contacts	Contact Array	Height Above PCB	Contact Material	Contact Plating
10028918-001LF	2	1 x 2	14.7 mm	Copper Alloy	Au over Ni
10028917-001LF	4	2 x 2	14.7 mm	Copper Alloy	Au over Ni
10073379-001LF	4	2 x 2	11.5 mm	Copper Alloy	Au over Ni
10061289-001LF	6	2 x 3	11.5 mm	Copper Alloy	Au over Ni
10028916-4555P00LF	4	2 x 2	11.5 mm	Copper Alloy	Au over Ni
10061290-554555PLF	6	2 x 3	11.5 mm	Copper Alloy	Au over Ni

515484

Mfrs. List No.	Description	Order Code	1+	25+	100+	250+
10028918-001LF	Header, R/A	156-8212●	3.58	3.45	3.26	3.15
10028917-001LF	Header, R/A	156-8213●	3.85	3.72	3.50	3.39
10073379-001LF	Header, R/A	156-8214●	3.06	2.95	2.79	2.68
10061289-001LF	Header, R/A	156-8215●	3.69	3.56	3.36	3.24
10028916-4555P00LF	Receptacle, Vertical	156-8216●	4.74	4.57	4.32	4.15
10061290-554555PLF	Receptacle, Vertical	156-8217●	5.68	5.46	5.16	4.98

PwrBlade™ Power Distribution Connector System



The PwrBlade™ power distribution connector system from FCI includes power and signal contacts to provide power distribution and power control in a single connector.

Verticle or right angle versions are available for both headers and receptacles to deliver support for coplanar, backplane or mezzanine connections.

The connectors are ideal for robust power connections to embedded AC/DC power supplies or for board-to-board

connections in servers, storage enclosures and communications equipment.

Features and Benefits:-

- Provides contacts for power distribution and power control.
- Robust 2.54mm pitch for signal contacts.
- Rugged blind-mate design.
- 48A individual power contact; 30A contact for 10 contacts at 30°C rise in still air.
- Capability for up to 20 power contacts and 148 signal contacts in up to 8 inches.
- Options for solder or press-fit termination of PCB-mount connectors.
- Board retention devices provided to secure connectors during processing.

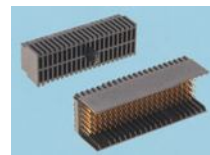
Housing Material	Contact Material	Contact Plating	No. of Mating Cycles	Operating Temperature
Glass Filled High Temp Thermoplastic (UL-94 V-0)	Copper Alloy	0.76 μm (30 μ") Gold	100	-20°C to 105°C

517420

Description	Mfrs. List No.	Order Code	1+	10+	50+	100+
Distributed Power Supply						
(1 Power + 24 Signal + 1 Power configuration)						
Receptacle, R/A	51416-001LF	162-1084●	2.97	2.85	2.74	2.65
Receptacle, Verticle Press-Fit	51666-001LF	162-1085●	3.66	3.53	3.40	3.27
Header, R/A	51415-001LF	162-1086●	3.55	3.42	3.30	3.17
Header, Verticle	51952-001LF	162-1088●	3.46	3.32	3.20	3.08
Header, Verticle Press-Fit	51952-002LF	162-1089●	7.86	7.55	7.27	7.02
Mid-Range Power Supply						
(6 Power + 24 Signal + 5 Power configuration)						
Receptacle, R/A	51625-XX001LF	162-1090●	7.06	6.79	6.54	6.30
Receptacle, Verticle Press-Fit	51667-XX001LF	162-1091●	6.93	6.66	6.41	6.19
Header, R/A	51624-XX001LF	162-1092●	7.09	6.82	6.57	6.33
Header, Verticle	51860-001LF	162-1093●	15.01	14.43	13.90	13.40
Header, Verticle Press-Fit	51860-002LF	162-1094●	20.10	19.33	18.63	17.95

MetPak™ HSHM Press-Fit Headers & Sockets
2mm Pitch, Type B19, B22

New



- Up to 5 Gb/s data rates
- Low crosstalk at high frequencies
- 50/100 Ohm (single-ended / differential) impedance
- Modular / scalable format IEC 61076-4-101
- Press-fit headers and receptacles
- 63 mated lines per linear inch
- Sockets have dual beam contact construction for high reliability
- End-to-end stackable
- 5 Rows

Specifications:-

Current Rating	1A	Flammability Rating	UL 94V-0
Contact Material	Copper Alloy	Contact Plating	Gold over Nickel
Insulation Resistance	1000Mohm	Insulation Material	LCP
Pitch	2mm	Pitch Row	2mm
Operating Temp.	-55°C to 125°C	Withstanding Voltage	750Vrms

527677

Mfrs. Part No.	No. of Ways	Order Code	1+	5+	10+	25+
Type B19 Socket						
HSHM-S095B4-5AP1-TG30	95	167-2000●	69.30	65.23	62.76	59.40
Type B19 Header						
HSHM-H095B4-5CP1-TG30	95	167-2001●	37.35	35.14	33.82	32.01
Type B22 Socket						
HSHM-S110B4-5AP1-TG30	110	167-2002●	45.20	42.54	40.94	38.74
Type B22 Header						
HSHM-H110B4-5CP1-TG30	110	167-2003●	25.74	24.22	23.31	22.06

HD Mezz Elevated Array
HDAF, HDAM series

HDAF



HDAM

New

- Open pin field for Single-Ended or Differential Pair configurations
- Intermateable with Molex HD Mezz
- Male and female versions available
- Pitch - 2.00mm
- Elevated stack heights of 20mm, 25mm, 30mm and 35mm
- 143, 195 & 299 pins versions
- 13 rows

NB- The suffix '1' and '2' from the mfrs. list no. refers to the solder charge material. '1' = 63% Tin / 37% Lead. '2' = 95.5% Tin / 3.8% Silver / 0.7% Copper.

Insulator Material LCP	Contact Material Copper Alloy	Contact Plating Gold	Current Rating 2.3A	Operating Temperature -55°C to 125°C
Mated Heights*				
HDAM Profile Height	HDAF Profile Height			
	-08.0** (10.51mm)		-18.0** (20.51mm)	
-12.0** (14.41mm)	20mm		30mm	
-17.0** (19.41mm)	25mm		35mm	
*Processing conditions will affect mated height				
**Lead style taken from Mfrs. List No.- Measurements in brackets give the unmated profile height.				

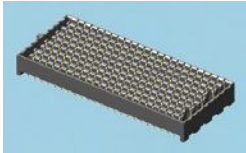
527306

Mfrs. List No.	No. of Ways	Order Code	1+	10+	50+	+	+
HDAF, Female Version, Profile Height = 10.51mm							
HDAF-11-08.0-S-13-1	143	166-7783▲	14.09	10.88	8.88	--	--
HDAF-11-08.0-S-13-2	143	166-7784▲	14.09	10.88	8.88	--	--
HDAF-15-08.0-S-13-1	195	166-7788▲	17.61	13.60	11.10	--	--
HDAF-15-08.0-S-13-2	195	166-7789▲	17.61	13.60	11.10	--	--
HDAF-23-08.0-S-13-1	299	166-7792▲	23.94	18.61	15.47	--	--
HDAF-23-08.0-S-13-2	299	166-7793▲	23.94	18.61	15.47	--	--
HDAF, Female Version, Profile Height = 20.51mm							
HDAF-11-18.0-S-13-1	143	166-7785▲	14.51	11.20	9.14	--	--
HDAF-11-18.0-S-13-2	143	166-7787▲	14.51	11.20	9.14	--	--
HDAF-15-18.0-S-13-1	195	166-7790▲	18.13	14.00	11.42	--	--
HDAF-15-18.0-S-13-2	195	166-7791▲	18.13	14.00	11.42	--	--
HDAF-23-18.0-S-13-1	299	166-7794▲	24.64	19.15	15.92	--	--
HDAF-23-18.0-S-13-2	299	166-7795▲	24.64	19.15	15.92	--	--
HDAM, Male Version, Profile Height = 14.41mm							
HDAM-11-12.0-S-13-1	143	166-7796▲	14.36	11.09	9.05	--	--
HDAM-11-12.0-S-13-2	143	166-7797▲	14.36	11.09	9.05	--	--
HDAM-15-12.0-S-13-1	195	166-7801▲	17.96	13.87	11.32	--	--

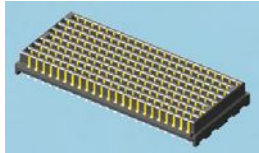


Mfrs. List No.	No. of Ways	Order Code	1+	10+	Price Each	50+	+	+
HDAM, Male Version, Profile Height = 14.41mm								
HDAM-15-12.0-S-13-2	195	166-7802●	17.96	13.87	11.32	--	--	--
HDAM-23-12.0-S-13-1	299	166-7806▲	24.40	18.97	15.77	--	--	--
HDAM-23-12.0-S-13-2	299	166-7807●	24.40	18.97	15.77	--	--	--
HDAM, Male Version, Profile Height = 19.41mm								
HDAM-11-17.0-S-13-1	143	166-7799▲	14.67	11.33	9.25	--	--	--
HDAM-11-17.0-S-13-2	143	166-7800●	14.67	11.33	9.25	--	--	--
HDAM-15-17.0-S-13-1	195	166-7803▲	18.34	14.16	11.55	--	--	--
HDAM-15-17.0-S-13-2	195	166-7805●	18.34	14.16	11.55	--	--	--
HDAM-23-17.0-S-13-1	299	166-7808▲	24.94	19.38	16.11	--	--	--
HDAM-23-17.0-S-13-2	299	166-7809●	24.94	19.38	16.11	--	--	--

Differential Pair Array DPAF, DPAM series



DPAF



DPAM

- Staggered layout reduces grounds required
- Performance of up to a terabit per connector
- Low insertion / extraction forces
- Male and female versions available
- Pitch - 2.16mm
- Pitch row - 2.54mm

Insulator Material	Contact Material	Contact Plating	Current Rating	Operating Temperature
LCP	Copper Alloy	Gold	2.9A	-55°C to +125°C

527241



Mfrs. List No.	No. of Ways	Order Code	1+	10+	Price Each	50+	+	+
DPAF, Female Version								
DPAF-08-03.0-H-3-2-A	48	SMD-166-7593●	8.81	8.58	8.35	--	--	--
DPAF-08-03.0-H-8-2-A	128	SMD-166-7594●	14.61	14.22	13.85	--	--	--
DPAF-15-03.0-H-3-2-A	90	SMD-166-7595●	12.66	12.32	12.00	--	--	--
DPAF-15-03.0-H-8-2-A	240	SMD-166-7596●	20.89	20.34	19.79	--	--	--
DPAF-23-03.0-H-3-2-A	78	SMD-166-7597●	16.87	16.42	15.99	--	--	--
DPAF-23-03.0-H-8-2-A	368	SMD-166-7598●	28.50	27.74	27.00	--	--	--
DPAM, Male Version								
DPAM-08-07.0-H-3-2-A	48	SMD-166-7599●	9.33	9.09	8.84	--	--	--
DPAM-08-07.0-H-8-2-A	128	SMD-166-7600●	14.73	14.34	13.95	--	--	--
DPAM-15-07.0-H-3-2-A	90	SMD-166-7601●	13.41	13.05	12.71	--	--	--
DPAM-15-07.0-H-8-2-A	240	SMD-166-7602●	22.12	21.53	20.96	--	--	--
DPAM-23-07.0-H-3-2-A	78	SMD-166-7603●	17.86	17.39	16.92	--	--	--
DPAM-23-07.0-H-8-2-A	368	SMD-166-7604●	30.17	29.37	28.58	--	--	--

MEG-array® Connector System



The MEG-Array® connector is designed to meet the needs of 10Gb/s applications requiring up to 528 signal pins per connector. The combination of multiple stack heights (4mm to 14mm) and multiple sizes (81 signals to 528 signals) allows for optimal design flexibility while yielding less than 1% cross-talk performance when configured differentially.

Features & Benefits:-

- Ball Grid Array (BGA) termination for process friendly attachment
- 1.27 x 1.27mm BGA interface pitch optimizes routing and electrical performance
- Stack Heights available from 4mm to 14mm (2mm increments)
- Connector sizes of 100 signals to 400 signals providing 80 usable signals per linear cm (205 signals per linear inch) allow for optimization of board space and signal requirements
- 10 Gb/s differential pair performance at less than 1% cross-talk meets the needs of high speed mezzanine applications
- Demonstrated solder joint reliability of greater than 22 years life (per IPC-SM-785) is unmatched for a BGA mezzanine connector
- Polarized design assures proper mating of the connector
- RoHS Compliant (Lead-Free)

Housing Material	Contact Material	Contact Plating	Voltage Rating	Current Rating	Operating Temperature
LCP	Copper Alloy	0.76 µm (30 µ") Gold over 0.76 µm (30 µ") Nickel	200V	0.45A	-40°C to 85°C

NB- The contact plating is different for p/n 162-3934. It is 50 µin. Gold and meets Telcordia GR-1217-CORE and NPS25298-2 specifications for utilisation in telecom applications.

522142



Mfrs. List No.	Stack Height	No. of Ways	Order Code	1+	Price Each	25+	50+
Plugs							
84512-102LF	0mm	100	162-3942●	10.85	8.42	7.78	
84516-102LF	0mm	200	162-3924●	11.22	8.72	7.21	
84500-102LF	0mm	300	162-3925●	17.56	13.61	11.85	
84578-102LF	6mm	300	162-3926●	17.47	13.59	11.83	
84740-102LF	0mm	400	162-3927●	17.55	13.66	11.92	
84520-102LF	6mm	400	162-3929●	18.26	14.19	12.39	
Receptacles							
84513-101LF	4mm	100	162-3944●	11.94	9.28	8.56	
84517-101LF	4mm	200	162-3931●	12.49	9.71	8.05	
55724-101LF	6mm	200	162-3932●	14.08	10.96	9.29	
84535-101LF	8mm	200	162-3933●	12.76	9.94	8.41	
84535-201LF	8mm	200	162-3934●	19.82	15.41	13.88	
84501-101LF	4mm	300	162-3935●	18.25	14.20	12.37	
84502-101LF	5.5mm	300	162-3936●	20.88	16.24	14.60	
84553-101LF	8mm	300	162-3937●	20.31	15.79	14.20	
74221-101LF	4mm	400	162-3938●	18.10	14.07	12.26	
74388-101LF	6mm	400	162-3939●	21.25	16.54	14.86	
74390-101LF	8mm	400	162-3940●	20.19	15.69	14.13	

2.0mm Backpanel Systems



Millipacs 1 2.0mm System

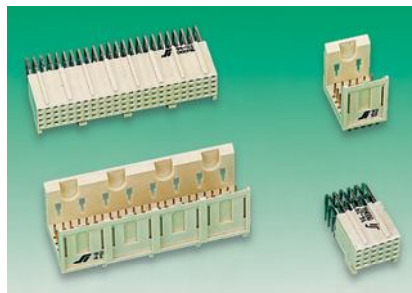
- Board to board modular connector on a 2 x 2mm grid
- Developed for design requirements where high speed and pin density are required
- Conforms to requirements of IEC917 and meets IEEE Futurebus standard

Contact rating	1.5A(signal) 3A(power)	Housing	High temperature GF Thermoplastic UL94V-0 Contacts, female male Phosphor Bronze Gold over Nickel
Temperature range -55°C to +125°C Plating			

209932



PCB Plugs and Sockets



PCB hole sizes:
Male = 0.7mm ±0.1
Female = 0.6mm ±0.1

- Sockets have push fit retention pegs

209933

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each	50+	100+	250+
Straight PCB Pins							
96 (4 x 24)	88953-101LF	121-1677●	3.36	3.05	2.77	2.53	
90° PCB Sockets							
24 (4 x 6)	HM1F41TAP000H6LF	109-8029●	1.37	1.24	1.12	1.05	
96 (4 x 24)	HM1F43TAP000H6LF	109-8030●	2.53	2.31	2.09	1.90	
192 (4x48)	HM1F44TAP000H6LF	109-8031●	13.25	12.03	10.96	9.95	

Power/Signal

- Power modules have a current rating of 3A
- The two modules have 4 rows of 2 pins
- Female has push fit retention peg

209935

No. of Ways	Mfrs. List No.	Order Code	1+	Price Each	50+	100+	250+
90° PCB Sockets							
8	89039-102LF	109-7973●	1.85	1.66	1.58	1.52	

Z-PACK 2mm FB (Futurebus+)



- High density connections: four-row and five-row, 2mm x 2mm circuit grid
- Modular design, end to end stackable
- UL recognised & CSA approved
- Press-Fit termination

Current Rating	1A
Housing	High Temperature Liquid crystal polymer
Contacts	Phosphor Bronze, Gold plated



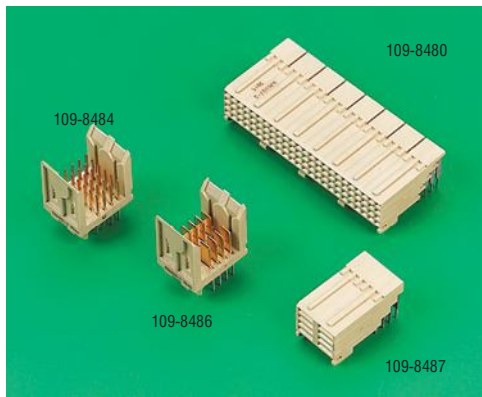
2.0mm Backpanel Systems - continued

Z-PACK 2mm FB (Futurebus+) - continued

451130

No. of Ways	Mfrs. List No.	Order Code	1+	50+	100+
Four Row - Plug - Vertical					
24	5536511-1	128-4305	1.70	1.53	1.37
48	5536504-2	128-4306	2.56	2.28	2.05
96	5536504-3	128-4308	4.88	4.34	3.90
192	5536504-4	128-4309	6.43	5.72	5.14
Four Row - Socket - Right-Angle					
24	5536511-1	128-4310	1.10	0.98	0.88
48	5536511-2	128-4311	1.34	1.19	1.07
192	5536511-4	128-4313	4.61	4.10	3.69
Five Row - Plug - Vertical					
30	5223016-1	128-4314	2.88	2.56	2.30
60	5223016-2	128-4315	3.45	3.06	2.75
Five Row - Socket - Right-Angle					
30	5223008-1	128-4317	2.34	2.09	1.88

Z-Pack 2mm FB (Futurebus+) Connectors



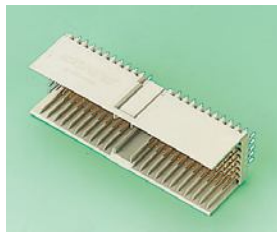
- High density, high speed signal and power connectors
- Modular design, end to end stackable
- Complies with **Futurebus+**, **EIASP3179** and **IEC1076-4-0X(48B)**
- Approvals UL and CSA

Contact rating 1A(signal) 3A(power) Contacts sockets Pins Housing Liquid crystal polymer Phosphor Bronze, Gold plating Gold, Phosphor Bronze plating

209973

No. of Ways	Tail Length (mm)	Mfrs. List No.	Order Code	1+	50+	100+	500+	1K+
Straight PCB Pins - Signal								
24	2.73	5536501-1	109-8484	1.84	1.71	1.64	1.57	1.51
48	2.73	5536501-2	109-8485	3.93	3.66	3.51	3.37	3.23
90° PCB Sockets - Signal								
24	2.73	5536507-1	109-8478	2.38	2.21	2.11	2.02	1.92
48	2.73	5536507-2	109-8479	4.05	3.76	3.61	3.47	3.32
96	2.73	5536507-3	109-8480	5.87	5.48	5.23	5.01	4.78
192	2.73	5536507-4	109-8481	7.93	7.38	7.07	6.76	6.49
Power Modules								
90° PCB Sockets								
8 (Solder)	2.73	5536607-1	109-8487	3.97	3.79	3.63	3.38	3.07

Z-Pack 2.0mm Hard Metric



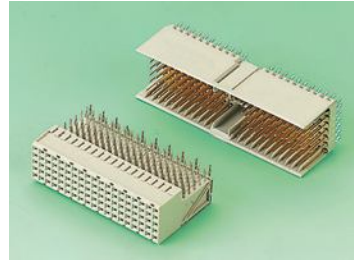
- Meets needs of telecommunications, computer and instrumentation applications
- Comply with **IEC917** and **IEC 1076-4-101**
- 5 row versions.
- Type A have 110 signal pins, center guiding and keying facility
- Type B have 125 signal pins Type C have 55 signal pins and guiding features
- High density system
- All lines impedance matched to 50Ω single ended and 100Ω differential pair
- Press fit

Signal pin rating, all contracts loaded Normal resistance Housing Contacts 1.5 @ 70°C ≥13.5mΩ Grey, Glass filled Polyester UL94V-0 Phosphor Bronze plated Gold over Nickel over Nickel

210014

No. of Ways	Type	Mfrs. List No.	Order Code	1+	100+	250+	500+	1K+
Male Straight								
110	A	5100143-1	109-8655	4.50	4.18	4.02	3.85	3.69
55	C	5100159-1	109-8657	2.90	2.47	2.26	2.16	2.03
Female 90°								
110	A	5100147-1	109-8658	7.92	7.36	7.07	6.77	6.51
55	C	5100161-1	109-8660	5.17	4.44	3.98	3.65	3.45
Male Coding Keys								
Pastel Orange		6-100525-3	487-867	0.79	0.75	0.72	0.69	0.64

Compact PCI Backplane



- Meets needs of telecommunications, computer and instrumentation applications
- Comply with **IEC917** and **IEC1076-4-101**
- Press fit
- C-PCI can use 32 bit or 64 bits on 3U cards and 6U cards using standard and special length connectors

C-PCI Components for Backplane

22 column type A header hot swap

22 column type B header

22 column type A header

System slot (I) and peripheral slot(0) adapters

22 column type A shielded receptacle

22 column type B shielded receptacle

19 column type B shielded receptacle

Mfrs. List No.

5352332-1

5188835-1

5188834-1

5352068-1

5352152-1

5352171-1

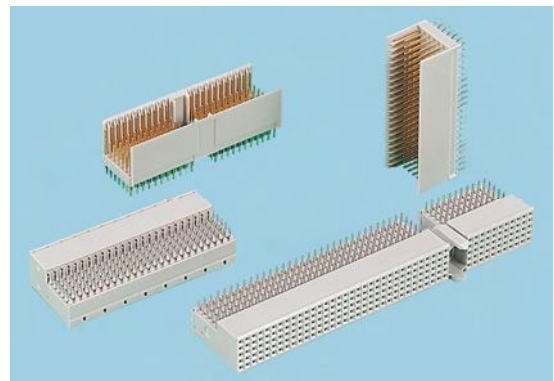
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Mfrs. List No.	Order Code	1+	100+	250+
5352332-1	109-8661	5.97	5.57	5.34
5188835-1	109-8662	5.72	5.34	5.11
5188834-1	109-8665	5.42	5.04	4.84
5352068-1	109-8666	11.50	10.59	10.11
5352152-1	109-8667	9.74	9.07	8.67
5352171-1	109-8668	9.63	8.85	8.48

Har. bus HM 2.0mm



Pushing Performance



- Specified for Compact PCI/VME bus
- Complies with **IEC 61076-4-101**
- Pre-leading contacts
- Pre-installed upper shields on the sockets
- Specific colour code keys for board insertion identification
- 32/64 Bit Transfer Rate

Test Voltage 750Vrms Contact rating 1.5A dc(signal) Contact resistance 20mohmΩ max Temperature range -55°C to +125°C Mating cycles 250 Housing Thermoplastic Resin glass-fibre filled UL94V-0 Contacts Copper Alloy/Gold plated Press in force 100N/pin (max) Retention force 20N/pin (max)

227394

No. of Ways	Type	Mfrs. List No.	Order Code	1+	10+	100+	250+	500+
Straight Plug								
110	B	1701 110 2201	110-6794	4.80	4.46	4.27	4.10	3.93
110	B	1704 110 2201	110-6796	5.89	5.30	4.77	3.99	3.80
125	C	1702 125 2201	110-6795	5.30	4.93	4.73	4.51	4.36
55	C	1703 055 2201	110-6798	2.95	2.75	2.63	2.51	2.40
90° Sockets								
110	With upperShield	1721 110 2101	110-6799	6.13	5.71	5.47	5.22	5.00
110	B	1721 110 2102	110-6800	8.19	7.62	7.30	6.97	6.72
95	With upperShield	1725 095 2101	110-6802	5.48	5.10	4.87	4.61	4.54
95	B	1725 095 2102	110-6803	8.02	7.47	7.13	6.79	6.52
110	With upperShield	1724 110 2101	110-6804	7.45	6.70	6.02	5.04	4.80

No. of Ways	Type	Mfrs. List No.	Order Code	1+	10+	100+	250+	500+
90° Sockets								
110	B	1724 110 2102	110-6805 ●	8.47	7.86	7.54	7.21	6.92
125	C	1722 125 2102	110-6801 ●	7.60	6.84	6.15	5.14	4.89
55	47 Monobloc	1723 055 2101	110-6807 ●	3.75	3.49	3.34	3.20	3.09
220	With upperShield	1726 220 2102	110-6809 ●	19.14	17.19	15.49	12.90	12.32
Code Keys - 90° Sockets								
Brilliant Blue		1779 000 0025	110-6810 ●	0.76	0.68	0.63	0.57	0.49

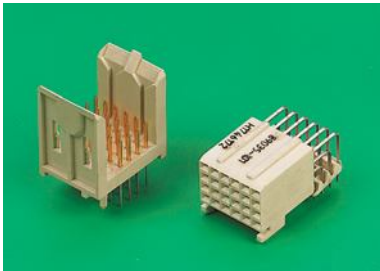
Metral

- Modular high density, 2mm interconnect system
- Flexibility of design
- Ideal for Futurebus+ and SCI (IEEE P1596) users
- Stackable end to end, without loss of poles
- Solder to board and press fit versions
- 4 and 5 row versions

Current 1A(signal) 3A(power) Contacts Phosphor Bronze Gold(in contact over) Withstand voltage 1kV rms (@sea level) Housing Liquid Crystal Polymer(LCP),

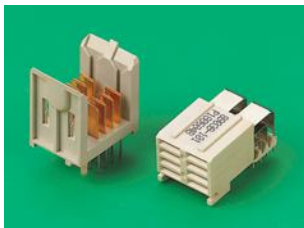


209968

Solder to Board Plugs and Sockets, 4 Row Class II

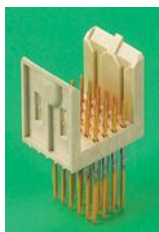
209967

No. of Ways	Tail Length (mm)	Mfrs. List No.	Order Code	1+	10+	50+	100+
Straight PCB Pins							
24 (4 x 6)	4.25	88951-101LF	109-7998 ●	1.51	1.49	1.46	1.44
24 (4 x 6)	3.45	88951-131LF	109-7999 ●	1.33	1.30	1.28	1.23
96 (4 x 24)	3.45	88953-131LF	109-8000 ●	6.66	6.53	6.42	6.22
192 (4x48)	3.45	88954-131LF	109-8001 ●	9.67	9.50	9.28	8.96
90° PCB Sockets							
24	3.53	89035-112LF	163-6594 ●	3.09	3.00	2.91	2.81
96 (4 x 24)	2.73	89037-101LF	109-8004 ●	6.75	6.57	6.32	5.94
96 (4 x 24)	3.53	89037-111LF	109-8005 ●	6.08	5.89	5.67	5.32
192 (4x48)	2.73	89038-101LF	109-8006 ●	12.43	12.19	11.94	11.72

Power Modules, 4 Row

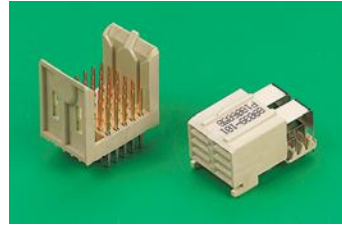
209966

No. of Ways	Tail Length (mm)	Mfrs. List No.	Order Code	1+	10+	50+	100+
Straight PCB Pins							
8(4 x 2)	4.25	88960-101LF	109-8008 ●	3.68	3.61	3.55	3.48

Press Fit Plugs, 4 Row Class II

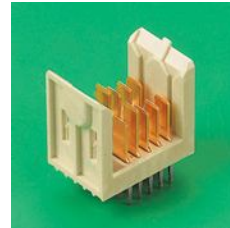
227531

No. of Ways	Tail Length (mm)	Mfrs. List No.	Order Code	1+	10+	50+	100+
Straight PCB Pins							
24 (4 x 6)	4.3	70232-111LF	109-8009 ●	1.01	1.00	0.98	0.94
24 (4 x 6)	13.6	70232-121LF	109-8010 ●	2.82	2.77	2.71	2.62

Press Fit Plugs and Solder to Board Sockets 5 Row

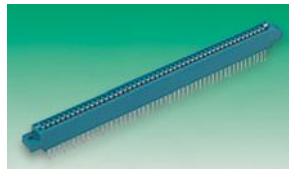
209963

No. of Ways	Tail Length (mm)	Mfrs. List No.	Order Code	1+	10+	50+	100+
Straight PCB Pins - Press Fit							
30 (5 x 6)	4.3	89006-111LF	109-8012 ●	1.98	1.86	1.71	1.58
90° PCB Sockets - Solder to Board							
30 (5 x 6)	3.53	85863-112LF	109-8015 ●	1.52	1.40	1.30	1.19
60 (5 x 12)	3.53	85864-112LF	109-8016 ●	2.43	2.25	2.06	1.93
120 (5x24)	3.53	85865-112LF	109-8017 ●	7.57	7.02	6.50	5.98

Press Fit and Solder to Board Power Modules 5 Row

209962

No. of Ways	Tail Length (mm)	Mfrs. List No.	Order Code	1+	10+	50+	100+	250+
Straight PCB Pins - Press Fit								
240 (5 x 48)	4.3	89099-112LF	109-8022 ●	2.51	2.29	2.20	2.11	--
90° PCB Socket - Solder to Board								
240 (5 x 48)	2.73	85876-112LF	109-8021 ●	2.13	1.99	1.83	1.69	1.59

Card Edge Connectors**0.125" Pitch Double Sided (\$100)**

- A 50 way double sided edge connector with 0.125" pitch gold inlay contacts suitable for \$100 based system board
- The connector has pins (0.635mm sqx8.9mm) with 6.35mm row spacing
- Mounting holes 3.25mm diameter
- Current rating 3A.

209709

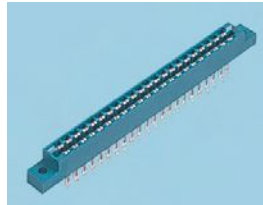
Double Sided	Order Code	1+	10+	25+	50+	100+	250+
No. of Ways 50+50	145-147 ●	13.10	11.67	10.32	8.72	8.08	7.46

0.156" Pitch Single Sided

- An 18 way single sided edge connector with 0.156" gold over nickel plated contacts
- Connector has PCB pins (1.23 x 0.33 x 5.41mm) with 5.08mm row spacing
- Mounting holes 3.25mm dia.
- Current rating 5A.

209711

Single Sided	Order Code	1+	10+	50+	100+	250+	500+
No. of Ways 18	145-149 ●	5.77	5.16	4.56	3.85	3.56	3.20

0.156" Pitch Double Sided

- A 22 way double sided edge connector with 0.156" gold inlay contacts suitable for use with video games and PCB's.
- connector has solder eyelet terminals with a 3.55mm row spacing
- Mounting holes 3.25mm diameter.
- Current rating 5A.

18



Card Edge Connectors - continued

0.156" Pitch Double Sided - continued

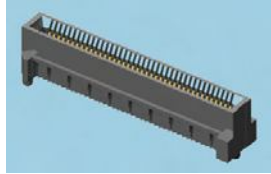
209712

Double Sided	Order Code	1+	10+	50+	100+	250+
No. of Ways						
22 + 22	145-148●	6.23	5.51	4.94	4.20	4.00

0.8mm Hi-Speed Sockets

HSEC8 series

samtec



- Low profile - 7.8mm
- Alignment pins
- Card thickness - 1.6mm
- Double row
- Pitch - 0.8mm

New

Insulator Material	Contact Material	Contact Plating	Current Rating	Operating Temperature
LCP	Beryllium Copper	Gold	3.1A	-55°C to 125°C

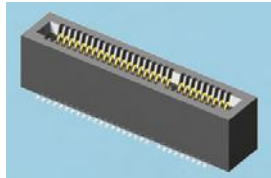
527334

Mfrs. List No.	No. of Ways	Order Code	1+	10+	50+	100+	250+
HSEC8-110-01-SM-DV-A	20	166-7810●	5.13	4.46	2.96	2.57	2.40
HSEC8-120-01-SM-DV-A	40	166-7811●	5.96	5.07	3.38	2.99	2.74
HSEC8-130-01-SM-DV-A	60	166-7812●	6.20	4.39	3.66	3.24	2.97
HSEC8-140-01-SM-DV-A	80	166-7813●	7.07	5.01	4.18	3.69	3.38
HSEC8-150-01-SM-DV-A	100	166-7814●	7.68	5.52	4.73	4.11	3.83
HSEC8-160-01-SM-DV-A	120	166-7815●	8.45	6.07	5.20	4.52	4.22

Mini Edge Card Sockets

MEC1 series

samtec



- Body is polarized
- Alignment pins
- Card thickness - 1.60mm
- Double row
- Pitch - 1.0mm
- Mates with 1.60mm card

New

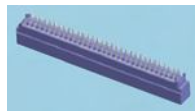
Insulator Material	Contact Material	Contact Plating	Current Rating	Operating Temperature
LCP	Beryllium Copper	Gold	2A	-55°C to 125°C

527342

Mfrs. List No.	No. of Ways	Order Code	1+	10+	50+	100+	250+
MEC1-105-02-S-D-A	10	166-7837●	4.89	3.42	2.83	2.45	2.24
MEC1-108-02-S-D-A	16	166-7838●	5.21	3.64	3.01	2.61	2.39
MEC1-120-02-S-D-A	40	166-7839●	6.14	4.36	3.63	3.21	2.94
MEC1-130-02-S-D-A	60	166-7840●	6.65	4.71	3.92	3.47	3.12
MEC1-140-02-S-D-A	80	166-7842●	7.27	5.23	4.48	3.89	3.56
MEC1-150-02-S-D-A	100	166-7843●	8.25	5.93	5.08	4.41	4.04
MEC1-160-02-S-D-A	120	166-7844●	8.89	6.45	5.41	4.77	4.36
MEC1-170-02-S-D-A	140	166-7845●	9.84	7.14	5.98	5.28	4.83

Power Card Edge Connectors

FCI

156-8678
156-8679156-8680
156-8682

156-8683

The Power Card Edge connector is a cost effective connector system that can be used for DC power output from embedded AC/DC power supplies or for distribution between boards within an enclosure.

The connector range includes options for right-angle, vertical or straddle-mount solder termination.

The connectors low profiles are ideal for use in enterprise data or communications equipment, particularly in servers and external storage systems.

Features:

- One-piece card edge design provides cost-effective power delivery with capacity for up to 7.0A per power contact
- Narrow connector body enables use in 1U servers and power supplies
- Low profile design helps maximise airflow for system cooling
- Straddle mount connectors feature mounting ears for secure PCB attachment

Power Contact Pitch	Signal Contact Pitch	Contact Material	Contact Plating	Current Rating	Operating Temperature
2.54 mm	1.27 mm	120µ" Pure Matte Tin over 50µ" Ni	30µ" Gold over 50µ" Ni	7A	-5°C to 105°C

515313

Mfrs. List No.	Description	Order Code	1+	10+	50+
10035388-500LF	2 x 28 power right angle	156-8678●	7.36	6.85	6.41
10053363-200LF	2 x 32 power right angle	156-8679●	4.96	4.61	4.32
10046971-001LF	2 x 32 power vertical	156-8680●	4.50	4.19	3.92
10046971-003LF	2 x 35 power vertical	156-8682●	2.84	2.63	2.47
10034908-001LF	2 x 19 power straddle mount	156-8683●	3.85	3.57	3.34

FREE technical support

Our trained engineers are here to help!



08447 11 11 22



techsales@farnell.co.uk

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