

3M Mini D Ribbon (MDR) Connectors

Dimensions in Inches (mm)

A

Fig. 1 — IDC Wiremount

• Glass Reinforced Polyester (PBT) • UL 94V-0
• Wiping Area: 30µ" minimum Gold • Wire Accommodation: Gray, 26AWG Solid, Black: 28AWG Stranded, 30AWG Solid • IEEE 1284C Interface as a 36 Contact Connector

Fig. 2 — Solder Connector

• Glass Reinforced Polyester (PCT) • UL 94V-0 • Wiping Area: 20µ" minimum Gold • Solder Area: Tin-Lead • Wire Accommodation: 24, 26, 28 and 30AWG
Note: Use only unshielded backshell 103xx-52F0-008 or 103xx-52A0-008

Fig. 3 — Boardmount Thru-Hole Right Angle

• Glass Reinforced Polyester (PCT) • UL 94V-0 • Wiping Area: 30µ" minimum Gold • IEEE 1284C Interface as a 36 Contact Connector

Fig. 4 — IDC Wiremount Panelmount

• Glass Reinforced Polyester (PBT) • UL 94V-0 • Wiping Area: 30µ" minimum Gold • Wire Accommodation: 28AWG Stranded, 30AWG Solid • IEEE 1284C Interface as a 36 Contact Connector • Interface latch

Fig. 5 — Boardmount Thru-Hole Right Angle

• Glass Reinforced Polyester (PBT) • UL 94V-0 • Wiping Area: 30µ" minimum Gold • Interface latch

Fig. 6 — Boardmount Thru-Hole Vertical

• Glass Reinforced Polyester (PBT) • UL 94V-0 • Wiping Area: 30µ" minimum Gold • IEEE 1284C Interface as a 36 Contact Connector • Interface latch

Fig. 7 — Surface Mount Right Angle

• Glass Reinforced Polyester (PCT) • UL 94V-0 • Wiping Area: 20µ" minimum Gold • Interface latch

Fig. 8 — Surface Mount Right Angle

• Glass Reinforced Polyester (PCT) • UL 94V-0 • Wiping Area: 20µ" minimum Gold • Interface latch

Fig. 9 — Boardmount Compliant Pin Vertical

• Glass Reinforced Polyester (PBT) • UL 94V-0 • Wiping Area: 30µ" minimum Gold • Tails: Gold Flash

Fig. 10 — Plastic Shielded Junction Shell for Round Cable

• Outer Shell Material: ABS • UL 94V-0 • Inner Shell Material: Steel, .020" • Plating: Nickel

Fig. 11 — Plastic Solder Junction Shell, Non-Shielded

• Glass Reinforced Polyester (PBT) • UL 94V-0 • Quick release metal latching mechanism

Fig. 12 — Metal Junction Shell for Round Cable

• Material: Aluminum, .050" • Plating: Nickel

Fig. 13 — 60° Metal Junction Shell for Round Cable

• Material: Aluminum, .050" • Plating: Nickel

Fig. 14 — MDR Cable Assembly Plug

Dimension A = Length (from Strain Relief to Strain Relief)

Fig. 15 — NEW! Rugged Thumbscrew Retention and EMI Shielded Junction Shell

Dimension A = Length (from Strain Relief to Strain Relief)

Fig. 16 — NEW! Rugged Thumbscrew Retention and EMI Shielded Junction Shell

Dimension A = Length (from Strain Relief to Strain Relief)

Fig. 17 — I/O Mounting Hardware

3M #	A	B	C	D
3341-10	.35(8.9)	M2.5	.30(7.6)	230 DP
3341-16	.35(8.9)	#4-40	.30(7.6)	230 DP
3341-17	.35(8.9)	#4-40	.30(7.6)	230 DP
3341-13	.35(8.9)	M2.5	.30(7.6)	230 DP
3341-25	.41(10.5)	M2.5	.12(3.0)	120 DP
3341-31	.40(10.2)	M2.5	.15(3.8)	100 DP
3341-32	.50(12.5)	M2.5	.30(7.6)	.203 DP

• Material: Stainless Steel • Plating: Passivated

Fig. 18 — Board Lock and Panel Mounting Screws

3M #	A
3344-26	M2.6 x 8mm
3344-3	M2.5 x 6mm
3344-38	M2.5 x 8mm
3344-4	#4-40 x 1/4
3344-44	#4-40 x 3/8

• Material: Steel • Plating: Zinc

Fig.	Color	No. of Pos.	Dim. A In. (mm)	Digi-Key Part No.	1	Price Each 10	250	3M Part No.	
Plugs — Shielded, .050" — RoHS Compliant									
1	Black	14	.72 (18.2)	MPB14A-ND	4.87	4.10	3.70	3.51	10114-6000EC
		20	.87 (22.0)	MPB20A-ND	5.03	4.24	3.83	3.63	10120-6000EC
		26	1.02 (25.8)	MPB26A-ND	5.20	4.38	3.95	3.75	10126-6000EC
		36	1.27 (32.2)	MPB36A-ND	6.24	5.25	4.74	4.50	10136-6000EC
		40	1.37 (34.7)	MPB40A-ND	6.45	5.43	4.90	4.65	10140-6000EC
	Gray	14	1.62 (41.1)	MPB50A-ND	6.88	5.80	5.23	4.97	10150-6000EC
		68	2.07 (52.5)	MPB68A-ND	7.07	5.95	5.38	5.10	10168-6000EC
		80	2.37 (60.1)	MPB80A-ND	8.59	7.23	6.53	6.20	10180-6000EC
		100	2.87 (72.8)	MPB100A-ND	10.21	8.60	7.76	7.37	101A0-6000EC
		68	2.07 (52.5)	MPA68A-ND	6.49	5.46	4.93	4.68	10168-6010EC
2	Black	14	.72 (18.2)	3M1767-ND	6.41	5.39	4.87	4.62	10114-3000PE
		20	.87 (22.0)	3M1768-ND	6.97	5.87	5.30	5.03	10120-3000PE
		26	1.02 (25.8)	3M1769-ND	7.78	6.55	5.91	5.61	10126-3000PE
		36	1.27 (32.2)	3M1770-ND	8.26	6.95	6.28	5.96	10136-3000PE
		40	1.37 (34.7)	3M1771-ND	8.65	7.28	6.58	6.24	10140-3000PE
	Beige	14	1.62 (41.1)	3M1772-ND	9.34	7.86	7.10	6.74	10150-3000PE
		20	1.31 (33.3)	3M1806-ND	13.64	11.48	10.37	9.84	10120-52B2PC
		26	1.46 (37.2)	3M1807-ND	14.14	11.90	10.75	10.20	10126-52B2PC
		36	1.71 (43.5)	3M1808-ND	14.66	12.34	11.14	10.58	10136-52B2PC
		50	2.06 (52.4)	3M1809-ND	15.31	12.88	11.63	11.04	10150-52B2PC
Receptacles — Shielded, .050"									
4	Black	20	1.31 (33.4)	MRB20A-ND	8.88	7.48	6.75	6.41	10220-0210EC
		26	1.46 (37.2)	MRB26A-ND	9.61	8.09	7.30	6.93	10226-0210EC
		36	1.71 (43.5)	MRB36A-ND	10.77	9.07	8.19	7.77	10236-0210EC
		40	1.81 (46.1)	MRB40A-ND	11.32	9.52	8.60	8.16	10240-0210EC
		50	2.06 (52.4)	MRB50A-ND	12.52	10.54	9.52	9.03	10250-0210EC
		68	2.51 (63.8)	MRB68A-ND	14.62	12.31	11.11	10.55	10268-0210EC
5	Black	14	1.16 (29.6)	3M1811-ND	4.20	3.54	3.20	3.03	10214-55G3PC
		20	1.31 (33.4)	3M1814-ND	3.72	3.14	2.83	2.69	10220-55G3PC
		26	1.31 (33.4)	3M1815-ND	4.37	3.68	3.32	3.15	10220-55H3PC
		26	1.46 (37.2)	3M1818-ND	4.04	3.40	3.07	2.91	10226-55G3PC
		36	1.71 (43.5)	3M1820-ND	4.43	3.73	3.37	3.20	10236-55G3PC
	Beige	36	1.71 (43.5)	3M1821-ND	4.43	3.73	3.37	3.20	10236-55H3PC
		40	1.81 (46.1)	3M1824-ND	5.49	4.62	4.18	3.96	10240-55G3PC
		50	2.06 (52.4)	3M1766-ND	5.20	4.38	3.95	3.75	10250-55H3PC
		68	2.51 (63.8)	3M1828-ND	6.76	5.69	5.14	4.88	10268-55H3PC
		68	2.51 (63.8)	3M1822-ND	10.82	9.10	8.22	7.80	10268-5JBPC
6	Black	14	1.16 (29.5)	3M1812-ND	4.53	3.82	3.45	3.27	10214-6212PC
		20	1.31 (33.4)	3M1816-ND	4.76	4.01	3.62	3.44	10220-6212PC
		26	1.46 (37.2)	3M1819-ND	4.93	4.15	3.75	3.56	10226-6212PC
		36	1.71 (43.5)	3M1822-ND	5.08	4.27	3.86	3.66	10236-6212PC
		40	1.81 (46.1)	3M1724-ND	5.10	4.29	3.88	3.68	10240-6212VC
		50	2.06 (52.4)	3M1725-ND	5.10	4.29	3.88	3.68	10240-6212VC

Fig.	Color	No. of Pos.	Dim. A In. (mm)	Digi-Key Part No.	1	Price Each 10	250	3M Part No.	
6	Black	40	1.81 (46.1)	3M1825-ND	5.30	4.47	4.03	3.83	10240-6212PC
		50	2.06 (52.4)	3M1827-ND	5.62	4.73	4.27	4.05	10250-6212PC
		68	2.51 (63.8)	3M1829-ND	6.57	5.53	5.00	4.74	10268-6212PC
		80	2.81 (71.5)	3M1830-ND	8.86	7.46	6.74	6.39	10280-6212PC
		100	3.31 (84.2)	3M1831-ND	9.48	7.98	7.21	6.84	102A0-6212PC
7	Beige	14	1.16 (29.5)	3M1810-ND	5.77	6.37	5.76	5.46	10214-1210PE
		20	1.32 (33.4)	3M1813-ND	7.74	6.51	5.88	5.58	10220-1210PE
		26	1.50 (38.2)	3M1731-ND	7.74	6.51	5.88	5.58	10226-1210PE
		26	1.50 (38.2)	3M1817-ND	8.05	6.78	6.12	5.81	10226-1210PE
		40	1.85 (47.1)	3M1823-ND	9.30	7.83	7.07	6.71	10240-1210PE
8	Beige	50	2.06 (52.4)	3M1733-ND	9.36	7.88	7.11	6.75	10250-1210PE
		50	2.06 (52.4)	3M1826-ND	9.73	8.19	7.40	7.02	10250-1210PE
		14	1.16 (29.5)	3M6469-ND	8.09	6.81	6.15	5.84	10214-1S10PE
		20	1.31 (33.3)	3M6470-ND	8.26	6.95	6.28	5.96	10220-1S10PE
		26	1.46 (37.2)	3M6471-ND	8.59	7.23	6.53	6.20	10226-1S10PE
9	Black	40	1.81 (46.1)	3M6472-ND	9.92	8.35	7.54	7.16	10240-1S10PE
		50	2.06 (52.4)	3M6473-ND	10.40	8.75	7.90	7.50	10250-1S10PE
		14	1.16 (29.5)	3M1734-ND	8.69	7.32	6.61	6.27	10214-R21TS
		36	1.71 (43.5)	3M1735-ND	9.19	7.74	6.99	6.63	10236-R21TS
		40	1.81 (46.1)	3M1736-ND	9.36	7.88	7.11	6.75	10240-R21TS
10	Beige	68	2.51 (63.8)	3M1737-ND	10.90	9.17	8.28	7.86	10268-R21TS
		80	2.81 (71.5)	3M1738-ND	14.85	12.50	11.29	10.71	10280-R21TS
		14	1.02 (25.9)	3M1739-ND	4.68	3.94	3.56	3.38	10314-3210-000
10	Beige	20	1.17 (29.7)	3M1740-ND	4.06	3.42	3.09	2.93	10320-3210-000
		26	1.32 (33.5)	3M1741-ND	4.14	3.49	3.15	2.99	10326-3210-000
		36	1.57 (39.8)	3M1742-ND	4.22	3.56	3.21	3.05	10336-3210-000
		40	1.67 (42.4)	3M1765-ND	4.78	4.03	3.64	3.45	10340-3210-000
		50	1.92 (48.7)	3M1743-ND	4.35	3.66	3.31	3.14	10350-3210-000
		68	2.37 (60.1)	3M1744-ND	4.45	3.75	3.39	3.21	10368-3210-000
		14	1.16 (29.5)	3M1745-ND	6.99	5.88	5.31	5.04	10314-A220-008
		20	1.31 (33.3)	3M1746-ND	7.20	6.06	5.47	5.19	10320-52F0-008
		26	1.46 (37.2)	3M1747-ND	7.40	6.23	5.63	5.34	10326-52F0-008
		36	1.71 (43.5)	3M1748-ND	7.49	6.30	5.69	5.40	10336-52F0-008
11	Black	50	2.06 (52.4)	3M1749-ND	7.70	6.48	5.85	5.55	10350-52F0-008
		14	1.01 (25.8)	3M1750-ND	11.40	9.59	8.66	8.22	10314-A200-000
		20	1.17 (29.7)	3M1751-ND	10.15	8.54	7.72	7.32	10320-A200-000
		26	1.32 (33.5)	3M1752-ND	10.92	9.19	8.30	7.88	10326-A200-000
		36	1.57 (39.8)	3M1753-ND	11.54	9.72	8.77	8.33	10336-A200-000
12	—	40	1.67 (42.4)	3M1754-ND	12.38	10.42	9.41	8.93	10336-A200-000
		50	1.92 (48.7)	3M1755-ND	12.90	10.85	9.80	9.30	10350-A200-000
		14	1.02 (25.9)	3M1739-ND	4.68	3.94	3.56	3.	