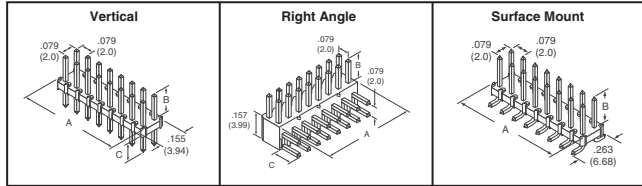


# 3M 2mm x 2mm Pin Strip Headers



Dim. in Inches (mm)



**Features:** • Industry standard compatible • High temperature dielectric • IR, vapor and wave solder compatible • Straight Solder Tail • Maximizes use of PC board space • Mates with boardmount and wiremount products • End stackable feature • Side stackable feature  
**Physical Specifications:** • Contact Plating: • Wiping area: 30µ" Gold • Solder Tails: 200µ" Tin Lead (RoHS Compliant: 300µ" Matte Tin) • Underplate: 100µ" Nickel • Contact Material: Copper Alloy  
**Insulator Material:** High Temperature Thermoplastic (PCT or LCP) • Flammability: UL 94V-0  
**Electrical Specifications:** • Current Rating: 1.5A • Insulation Resistance: >1 x 10<sup>9</sup>Ω @ 250VDC • Withstanding Voltage: 500VDC @ Sea level  
**Environmental Specifications:** • Operating Temperature: -55°C - 105°C

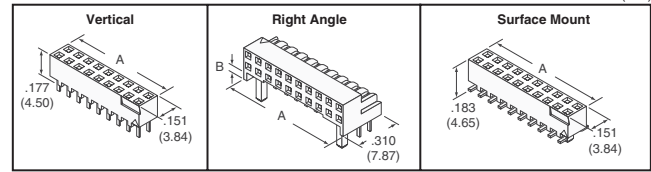
No. of Pos.	Dim. Inch (mm)			Digi-Key Part No.	Price Each			3M Part No.
	A	B	C		1	100	500	
<b>Vertical (Natural)</b>								
8	.295 (7.5)	.152 (3.86)	.118 (3.0)	3M1108-ND	.96	.73	.66	151208-8422-TB
10	.374 (9.5)	.152 (3.86)	.118 (3.0)	3M1110-ND	1.56	1.19	1.08	151210-8422-TB
12	.453 (11.5)	.152 (3.86)	.118 (3.0)	3M1112-ND	1.16	.89	.81	151212-8422-TB
20	.768 (19.5)	.152 (3.86)	.118 (3.0)	3M1120-ND	1.56	1.19	1.08	151220-8422-TB
24	.925 (23.5)	.152 (3.86)	.118 (3.0)	3M1124-ND	1.79	1.36	1.23	151224-8422-TB
40	1.556 (39.5)	.152 (3.86)	.118 (3.0)	3M1140-ND	2.45	1.87	1.69	151240-8422-TB
44	1.714 (43.5)	.152 (3.86)	.118 (3.0)	3M1144-ND	2.64	2.01	1.82	151244-8422-TB
50	1.950 (49.5)	.152 (3.86)	.118 (3.0)	3M1150-ND	2.91	2.22	2.01	151250-8422-TB
60	2.344 (59.5)	.152 (3.86)	.118 (3.0)	3M1160-ND	3.37	2.56	2.32	151260-8422-TB
<b>Vertical (Black) — RoHS Compliant</b>								
8	.295 (7.5)	.152 (3.86)	.118 (3.0)	3M1408-ND	.92	.70	.63	151208-8422-RB
8	.295 (7.5)	.152 (3.86)	.059 (1.5)	3M5353-ND	1.66	1.27	1.15	151208-8421-RB
10	.374 (9.5)	.152 (3.86)	.118 (3.0)	3M1410-ND	1.00	.76	.69	151210-8422-RB
10	.374 (9.5)	.130 (3.30)	.118 (3.0)	3M5356-ND	1.00	.76	.69	151210-8322-RB
12	.453 (11.5)	.152 (3.86)	.118 (3.0)	3M1412-ND	1.10	.84	.76	151212-8422-RB
14	.531 (13.5)	.152 (3.86)	.118 (3.0)	3M5358-ND	1.21	.92	.83	151214-8422-RB
16	.611 (15.5)	.152 (3.86)	.118 (3.0)	3M5362-ND	1.33	1.02	.92	151216-8422-RB
20	.768 (19.5)	.152 (3.86)	.118 (3.0)	3M1420-ND	1.48	1.13	1.02	151220-8422-RB
20	.768 (19.5)	.130 (3.30)	.059 (1.5)	3M5365-ND	2.27	1.73	1.56	151220-8321-RB
20	.768 (19.5)	.130 (3.30)	.118 (3.0)	3M5366-ND	1.48	1.13	1.02	151220-8322-RB
24	.925 (23.5)	.152 (3.86)	.118 (3.0)	3M1424-ND	1.71	1.30	1.18	151224-8422-RB
26	1.005 (25.5)	.130 (3.30)	.118 (3.0)	3M5370-ND	1.79	1.36	1.23	151226-8322-RB
30	1.162 (29.5)	.152 (3.86)	.118 (3.0)	3M1430-ND	1.96	1.49	1.35	151230-8422-RB
40	1.556 (39.5)	.152 (3.86)	.118 (3.0)	3M1440-ND	2.33	1.77	1.61	151240-8422-RB
40	1.556 (39.5)	.130 (3.30)	.118 (3.0)	3M5373-ND	2.33	1.77	1.61	151240-8322-RB
44	1.714 (43.5)	.152 (3.86)	.118 (3.0)	3M1444-ND	2.52	1.92	1.74	151244-8422-RB
44	1.714 (43.5)	.130 (3.30)	.118 (3.0)	3M5375-ND	2.52	1.92	1.74	151244-8322-RB
50	1.950 (49.5)	.152 (3.86)	.118 (3.0)	3M1450-ND	2.77	2.11	1.91	151250-8422-RB
50	1.950 (49.5)	.130 (3.30)	.118 (3.0)	3M5377-ND	2.77	2.11	1.91	151250-8322-RB
60	2.344 (59.5)	.152 (3.86)	.118 (3.0)	3M5381-ND	3.20	2.44	2.21	151260-8422-RB
<b>Right Angle (Natural)</b>								
8	.295 (7.5)	.152 (3.86)	.118 (3.0)	3M1208-ND	.62	.48	.43	151208-7422-TB
10	.374 (9.5)	.152 (3.86)	.118 (3.0)	3M1210-ND	.71	.54	.49	151210-7422-TB
12	.453 (11.5)	.152 (3.86)	.118 (3.0)	3M1212-ND	.77	.59	.53	151212-7422-TB
20	.768 (19.5)	.152 (3.86)	.118 (3.0)	3M1220-ND	1.04	.79	.72	151220-7422-TB
24	.925 (23.5)	.152 (3.86)	.118 (3.0)	3M1224-ND	1.21	.92	.83	151224-7422-TB
30	1.162 (29.5)	.152 (3.86)	.118 (3.0)	3M1230-ND	1.39	1.06	.96	151230-7422-TB
50	1.950 (49.5)	.152 (3.86)	.118 (3.0)	3M1250-ND	2.18	1.66	1.51	151250-7422-TB
60	2.344 (59.5)	.152 (3.86)	.118 (3.0)	3M1260-ND	2.50	1.90	1.72	151260-7422-TB
<b>Right Angle (Black) — RoHS Compliant</b>								
8	.295 (7.5)	.152 (3.86)	.118 (3.0)	3M1508-ND	.60	.46	.42	151208-7422-RB
10	.374 (9.5)	.152 (3.86)	.118 (3.0)	3M1510-ND	.67	.51	.46	151210-7422-RB
10	.374 (9.5)	.130 (3.30)	.118 (3.0)	3M5355-ND	.77	.59	.53	151210-7322-RB
12	.453 (11.5)	.152 (3.86)	.118 (3.0)	3M1512-ND	.73	.56	.51	151212-7422-RB
12	.453 (11.5)	.130 (3.30)	.118 (3.0)	3M5357-ND	.73	.56	.51	151212-7322-RB
16	.611 (15.5)	.152 (3.86)	.118 (3.0)	3M5361-ND	.87	.67	.61	151216-7422-RB
18	.689 (17.5)	.130 (3.30)	.118 (3.0)	3M5363-ND	.94	.72	.65	151218-7322-RB
20	.768 (19.5)	.152 (3.86)	.118 (3.0)	3M1520-ND	1.00	.76	.69	151220-7422-RB
24	.925 (23.5)	.152 (3.86)	.118 (3.0)	3M1524-ND	1.14	.87	.79	151224-7422-RB
26	1.005 (25.5)	.152 (3.86)	.118 (3.0)	3M5369-ND	1.21	.92	.83	151226-7422-RB
30	1.162 (29.5)	.152 (3.86)	.118 (3.0)	3M1530-ND	1.33	1.02	.92	151230-7422-RB
32	1.240 (31.5)	.130 (3.30)	.118 (3.0)	3M5371-ND	1.52	1.16	1.05	151232-7322-RB
36	1.398 (35.5)	.130 (3.30)	.118 (3.0)	3M5372-ND	1.64	1.25	1.13	151236-7322-RB
40	1.556 (39.5)	.152 (3.86)	.118 (3.0)	3M1540-ND	1.79	1.36	1.23	151240-7422-RB
44	1.714 (43.5)	.152 (3.86)	.118 (3.0)	3M1544-ND	1.89	1.44	1.31	151244-7422-RB
44	1.714 (43.5)	.152 (3.86)	.059 (1.5)	3M5374-ND	2.70	2.06	1.86	151244-7421-RB
50	1.950 (49.5)	.152 (3.86)	.118 (3.0)	3M1550-ND	2.08	1.58	1.43	151250-7422-RB
60	2.344 (59.5)	.152 (3.86)	.118 (3.0)	3M2360-ND	2.37	1.81	1.64	151260-7422-RB
<b>Surface Mount (Black) — RoHS Compliant</b>								
4	.139 (3.5)	.130 (3.30)	—	3M5350-ND	.67	.51	.46	151204-2320-RB
8	.295 (7.5)	.130 (3.30)	—	3M5351CT-ND†	1.93	1.47	—	151208-2320-RB-WB
8	.295 (7.5)	.152 (3.86)	—	3M5352CT-ND†	2.04	1.55	—	151208-2420-RB-WB
8	.295 (7.5)	.152 (3.86)	—	3M5352TR-ND‡	997.43/750	—	—	151208-2420-RB-WB
10	.374 (9.5)	.152 (3.86)	—	3M5354CT-ND†	2.12	1.62	—	151210-2420-RB-WB
10	.374 (9.5)	.152 (3.86)	—	3M5354TR-ND‡	693.55/500	—	—	151210-2420-RB-WB
16	.611 (15.5)	.130 (3.30)	—	3M5359-ND	1.33	1.02	.92	151216-2320-RB
16	.611 (15.5)	.152 (3.86)	—	3M5360-ND	1.33	1.02	.92	151216-2420-RB
16	.611 (15.5)	.152 (3.86)	—	3M5360CT-ND†	2.23	1.70	—	151216-2420-RB-WC
16	.611 (15.5)	.152 (3.86)	—	3M5360TR-ND‡	729.30/500	—	—	151216-2420-RB-WC
20	.768 (19.5)	.152 (3.86)	—	3M5364-ND	1.48	1.13	1.02	151220-2420-RB
22	.847 (21.5)	.152 (3.86)	—	3M5367-ND	1.37	1.05	.95	151222-2420-RB
26	1.005 (25.5)	.152 (3.86)	—	3M5368CT-ND†	2.43	1.85	—	151226-2420-RB-WD
26	1.005 (25.5)	.152 (3.86)	—	3M5368TR-ND‡	396.83/250	—	—	151226-2420-RB-WD
50	1.95 (49.5)	.152 (3.86)	—	3M5376CT-ND†	3.45	2.63	—	151250-2420-RB-WF
50	1.95 (49.5)	.152 (3.86)	—	3M5376TR-ND‡	1129.70/500	—	—	151250-2420-RB-WF
60	2.344 (59.5)	.130 (3.30)	—	3M5378-ND	3.20	2.44	2.21	151260-2320-RB
60	2.344 (59.5)	.152 (3.86)	—	3M5379-ND	3.20	2.44	2.21	151260-2420-RB

† Cut Tape    ‡ Tape and Reel

# 2mm x 2mm Boardmount Sockets



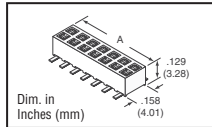
Dim. in Inches (mm)



**Features:** • High temperature dielectric • Reflow solder compatible • Industry standard compatible • Minimizes PC board stacking heights • End stackable feature • Side stackable feature  
**Physical Specifications:** • Insulator Material: Glass Filled Polyester (PCT) • Marking: Orientation date and 3M Logo • Contact Material: Beryllium copper or Copper alloy • Contact Plating: • Wiping area: 30µ" gold • Solder Tails: 200µ" Tin/Lead (RoHS Compliant: 300µ" Matte Tin) • Underplate: 50µ" - 150µ" Nickel overall  
**Electrical Specifications:** • Current Rating: 1A • Insulation Resistance: 1 x 10<sup>9</sup>Ω @ 250VDC • Withstanding Voltage: 500VDC @ Sea level  
**Environmental Specifications:** • Operating Temperature: -55°C - 105°C

No. of Pos.	Dim. Inch (mm)		Digi-Key Part No.	Price Each			3M Part No.
	A	B		1	100	500	
<b>Vertical (Natural)</b>							
8	.310 (8.0)	—	3M1008-ND	1.73	1.32	1.19	150208-6002-TB
10	.389 (10.0)	—	3M1010-ND	1.79	1.36	1.23	150210-6002-TB
12	.467 (12.0)	—	3M1012-ND	1.85	1.41	1.28	150212-6002-TB
20	.782 (20.0)	—	3M1020-ND	2.12	1.62	1.46	150220-6002-TB
24	.940 (24.0)	—	3M1024-ND	2.25	1.71	1.55	150224-6002-TB
30	1.176 (30.0)	—	3M1030-ND	2.43	1.85	1.68	150230-6002-TB
40	1.570 (40.0)	—	3M1040-ND	2.75	2.09	1.89	150240-6002-TB
44	1.727 (44.0)	—	3M1044-ND	2.89	2.20	1.99	150244-6002-TB
50	1.964 (50.0)	—	3M1050-ND	3.08	2.34	2.12	150250-6002-TB
<b>Vertical (Black) — RoHS Compliant</b>							
4	.156 (4.0)	—	3M5301-ND	1.54	1.17	1.06	150204-6002-RB
6	.231 (6.0)	—	3M5303-ND	1.64	1.25	1.13	150206-6001-RB
6	.231 (6.0)	—	3M5304-ND	1.62	1.24	1.12	150206-6002-RB
8	.310 (8.0)	—	3M1308-ND	1.64	1.25	1.13	150208-6002-RB
10	.389 (10.0)	—	3M1310-ND	1.71	1.30	1.18	150210-6002-RB
12	.467 (12.0)	—	3M1312-ND	1.77	1.35	1.22	150212-6002-RB
14	.546 (14.0)	—	3M5308-ND	1.83	1.40	1.26	150214-6002-RB
16	.625 (16.0)	—	3M5311-ND	1.87	1.43	1.29	150216-6002-RB
18	.704 (18.0)	—	3M5312-ND	1.93	1.47	1.33	150218-6002-RB
20	.782 (20.0)	—	3M1320-ND	2.02	1.54	1.39	150220-6002-RB
24	.940 (24.0)	—	3M1324-ND	2.14	1.63	1.48	150224-6002-RB
26	1.019 (26.0)	—	3M5321-ND	2.18	1.66	1.51	150226-6002-RB
28	1.097 (28.0)	—	3M5322-ND	2.18	1.66	1.51	150228-6002-RB
30	1.176 (30.0)	—	3M1330-ND	2.31	1.76	1.59	150230-6002-RB
32	1.255 (32.0)	—	3M5325-ND	2.37	1.81	1.64	

# 3M 2mm Surface Mount Thru-Board Sockets



**Features:** • Reflow solder compatible • End stackable feature  
**Physical Specifications:** • Insulator material: Glass filled PCT • Flammability: UL94V-0 • Color: Black • Contact material: Copper Alloy • Underplating: 50 - 150µ Nickel • Wiping area: 30µ gold • Solder Tails: 300µ Matte Tin  
**Electrical Specifications:** • Current Rating: 1A  
**Environmental Specifications:** • Operating Temperature: -55°C - 105°C

**A**

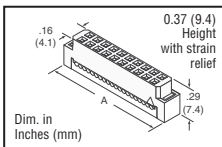
No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Cut Tape Price Each			Tape and Reel Qty.	3M Part No.
			1	100	500		
4	0.156 (3.96)	3M5410-ND	.92	.70	.63	—	153204-2000-RB
4	0.156 (3.96)	3M5635CT-ND	1.12	.86	—	800	743.60 153204-2000-RB-WA
6	0.231 (5.87)	3M5411CT-ND	1.16	.89	—	800	640.64 153206-2000-RB-WA
14	0.546 (13.87)	3M5414CT-ND	1.35	1.03	—	800	743.60 153214-2000-RB-WB
16	0.625 (15.88)	3M5416CT-ND	1.56	1.19	—	800	858.00 153216-2000-RB-WB
24	0.940 (23.88)	3M5420CT-ND	1.77	1.35	—	800	972.40 153224-2000-RB-WD
26	1.019 (25.88)	3M5422CT-ND	1.93	1.47	—	800	1063.92 153226-2000-RB-WD
46	1.806 (45.87)	3M5430CT-ND	3.54	2.69	—	800	1853.28 153246-2000-RB-WF

### Thru-Board Sockets with Board Locator Post

8	0.310 (7.87)	3M5412-ND	.98	.75	.68	—	—	153208-2020-RB
10	0.389 (9.88)	3M5413-ND	1.08	.83	.75	—	—	153210-2020-RB
14	0.546 (13.87)	3M5415-ND	1.23	.94	.85	—	—	153214-2020-RB
16	0.625 (15.88)	3M5417CT-ND	1.35	1.03	—	800	743.60	153216-2020-RB-WB
20	0.782 (19.86)	3M5418CT-ND	1.66	1.27	—	800	915.20	153220-2020-RB-WC
22	0.861 (21.87)	3M5419CT-ND	1.66	1.27	—	800	915.20	153222-2020-RB-WD
24	0.940 (23.88)	3M5421-ND	1.56	1.19	1.08	—	—	153224-2020-RB
26	1.019 (25.88)	3M5423CT-ND	1.93	1.47	—	800	1063.92	153226-2020-RB-WD
30	1.176 (29.87)	3M5424-ND	2.08	1.58	1.43	—	—	153230-2020-RB
32	1.255 (31.88)	3M5425-ND	2.20	1.68	1.52	—	—	153232-2020-RB
36	1.412 (35.86)	3M5426-ND	2.54	1.93	1.75	—	—	153236-2020-RB
40	1.570 (39.88)	3M5427-ND	2.77	2.11	1.91	—	—	153240-2020-RB
42	1.649 (41.88)	3M5428-ND	2.93	2.23	2.02	—	—	153242-2020-RB
44	1.727 (43.87)	3M5429-ND	3.00	2.28	2.06	—	—	153244-2020-RB
50	1.964 (49.89)	3M5431CT-ND	3.45	2.63	—	700	1581.58	153250-2020-RB-WF
56	2.200 (55.88)	3M5432-ND	3.85	2.93	2.65	—	—	153256-2020-RB
60	2.357 (59.87)	3M5433-ND	4.10	3.12	2.82	—	—	153260-2020-RB

† For Tape and Reel part number, change CT-ND to TR-ND. † Bulk

## 2mm Wiremount Sockets



### 2mm Wiremount Socket - 1mm Pitch Cable

**Features:** • Industry standard compatible • Mates with 2.0mm x 2.0mm grid pin strips • Low profile • Preassembled covers • Available with and without strain relief  
**Physical Specifications:** • Insulation Material: Glass Filled Polyester (PBT), Flammability: UL94 V-0 • Color: Gray • Contact Material: Copper Alloy • Contact Plating: Underplate and U-slot: 50-150µ Nickel, QQ-N-290, Class 2 • Wiping area: Gold Mil-G-45204, Type II, Grade C  
**Electrical Specifications:** • Current Rating: 1 Amp • Insulation Resistance: >1x10<sup>9</sup>Ω at 500VDC • Withstanding Voltage: 1000Vrms at Sea Level  
**Environmental Specifications:** • Operating Temperature Rating: -55°C - 105°C Rating: UL File No. E68080

### 1.0mm Round Conductor Flat Cable - 28AWG Stranded, PVC

**Physical Specifications:** • Insulation Material: Polyvinyl Chloride (PVC) • Color: Gray • Marking: Red Edge  
**Conductors:** 28AWG, 7 x 36 Tinned Stranded Copper  
**Electrical Specifications:** • Voltage Rating: 300V  
**Environmental Specifications:** • Operating Temperature Range: -20°C - 105°C • Flammability Rating: UL: VW-1, CSA: FT1 Rating: UL File No. E42769, Style 2651 CSA File No. LL 53649 (optional)

No. of Pos.	Dimension A Inch (mm)	Digi-Key Part No.	Pricing			3M Part No.
			1	100	500	
<b>IDC Sockets Gold</b>						
10	.59 (15.0)	MSA10A-ND	2.97	225.94	1001.00	152210-0100-GB
12	.67 (17.0)	MSA12A-ND	3.02	229.10	1036.75	152212-0100-GB
20	.99 (25.1)	MSA20A-ND	3.31	251.22	1113.00	152220-0100-GB
26	1.22 (31.0)	MSA26A-ND	3.97	301.78	1337.00	152226-0100-GB
40	1.77 (45.0)	MSA40A-ND	4.16	316.00	1400.00	152240-0100-GB
44	1.93 (49.0)	MSA44A-ND	4.26	323.90	1465.75	152244-0100-GB
50	2.17 (55.0)	MSA50A-ND	4.35	330.22	1494.35	152250-0100-GB
<b>IDC Sockets Gold with Strain Relief</b>						
10	.59 (15.0)	MSE10A-ND	3.45	262.28	1186.90	152210-0103-GB
12	.67 (17.0)	MSE12A-ND	3.64	276.50	1251.25	152212-0103-GB
20	.99 (25.1)	MSE20A-ND	3.60	273.34	1211.00	152220-0103-GB
26	1.22 (31.0)	MSE26A-ND	4.49	341.28	1512.00	152226-0103-GB
40	1.77 (45.0)	MSE40A-ND	4.58	347.60	1540.00	122240-0103-GB
44	1.93 (49.0)	MSE44A-ND	4.80	364.98	1651.65	152244-0103-GB
50	2.17 (55.0)	MSE50A-ND	4.89	371.30	1680.25	152250-0103-GB
<b>IDC Sockets Gold, with Center Polarizing Bump</b>						
10	.59 (15.0)	MTA10A-ND	2.97	225.94	1001.00	152210-0110-GB
12	.67 (17.0)	MTA12A-ND	3.02	229.10	1015.00	152212-0110-GB
20	.99 (25.1)	MTA20A-ND	3.31	251.22	1113.00	152220-0110-GB
26	1.22 (31.0)	MTA26A-ND	3.97	301.78	1337.00	152226-0110-GB
40	1.77 (45.0)	MTA40A-ND	4.08	309.68	1372.00	152240-0110-GB
44	1.93 (49.0)	MTA44A-ND	4.26	323.90	1435.00	152244-0110-GB
50	2.17 (55.0)	MTA50A-ND	4.35	330.22	1463.00	152250-0110-GB
<b>IDC Sockets Gold, with Center Polarizing Bump, with Strain Relief</b>						
10	.59 (15.0)	MTE10A-ND	3.45	262.28	1162.00	152210-0113-GB
12	.67 (17.0)	MTE12A-ND	3.64	276.50	1225.00	152212-0113-GB

No. of Pos.	Dimension A Inch (mm)	Digi-Key Part No.	Pricing			3M Part No.
			1	100	500	
20	.99 (25.1)	MTE20A-ND	3.79	287.56	1274.00	152220-0113-GB
26	1.22 (31.0)	MTE26A-ND	4.49	341.28	1512.00	152226-0113-GB
40	1.77 (45.0)	MTE40A-ND	4.58	347.60	1540.00	152240-0113-GB
44	1.93 (49.0)	MTE44A-ND	4.80	364.98	1617.00	152244-0113-GB
50	2.17 (55.0)	MTE50A-ND	4.89	371.30	1645.00	152250-0113-GB

### Strain Reliefs

10	—	MMMR10-ND	.52	39.50	178.75	3448-152210	
12	—	MMMR12-ND	.83	63.20	286.00	3448-152212	
20	—	MMMR20-ND	.52	39.50	178.75	3448-152220	
26	—	MMMR26-ND	1.02	77.42	350.35	3448-152226	
40	—	MMMR40-ND	.94	71.10	321.75	3448-152240	
44	—	MMMR44-ND	.33	25.28	114.40	3448-152244	
50	—	MMMR50-ND	.52	39.50	178.75	3448-152250	
Keying plug (Strip of 10)			MMMR01-ND	2.08	158.00	715.00	3435-152200

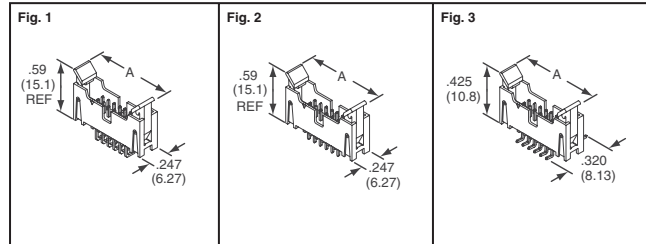
100m reel quantity may contain splices. Splice position will be marked on the reel.

No. of Pos.	Digi-Key Part No.	(NOTE: "X" in Part No. Represents No. of Meters)					3M Part No.
		Price Per Meters					
<b>Ribbon Cable Gray (1mm Pitch)</b>							
10	MC10L-X-ND	7.78	14.46	32.25	55.60	88.96	3625/10 100M
12	MC12L-X-ND	9.34	17.35	38.70	66.73	106.76	3625/12 100M
44	MC44L-X-ND	34.25	63.61	141.90	244.66	391.46	3625/44 100M
50	MC50L-X-ND	38.92	72.29	161.25	278.03	444.84	3625/50 100M

## 2mm Latch / Eject Headers



**Features:** • Latch/Eject mechanism maintains a secure connection • Roll pins retain latches to body in shipping and high vibration environments • Ejector helps make removal of assemblies easy • Latch design helps resist breakage during eject • High temperature insulators suitable for lead free processing and meet JEDEC J-STO-020C  
**Specifications:** • Insulation Material: Glass filled Polyester (PCT) • Flammability: UL94V-0 • Contact Material: Copper Alloy • Underplating: 50µ (1.27µm) Nickel • Wiping area: 30µ (0.76µm) Gold • Solder Tails: 200µ (5.0µm) Matte Tin • Color: Black • Current Rating: 1A • Temperature Rating: -55°C - 105°C



No. of Contacts	Dim. A Inch (mm)	Solder Tail Length Inch (mm)	Digi-Key Part No.	Price Each			3M Part No.
				1	100	500	
<b>Fig. 1 — Right Angle</b>							
10	.83 (21.1)	.112 (2.84)	3M5080-ND	5.05	3.84	3.48	155210-5302-RB
10	.83 (21.1)	.155 (3.94)	3M5081-ND	5.05	3.84	3.48	155210-5303-RB
12	.91 (23.1)	.112 (2.84)	3M5085-ND	4.14	3.15	2.85	155212-5302-RB
12	.91 (23.1)	.155 (3.94)	3M5086-ND	4.14	3.15	2.85	155212-5303-RB
20	1.22 (31.09)	.112 (2.84)	3M5090-ND	5.87	4.46	4.04	155220-5302-RB
20	1.22 (31.09)	.155 (3.94)	3M5091-ND	5.87	4.46	4.04	155220-5303-RB
26	1.46 (37.1)	.112 (2.84)	3M5095-ND	6.93	5.27	4.77	155226-5302-RB
26	1.46 (37.1)	.155 (3.94)	3M5096-ND	6.93	5.27	4.77	155226-5303-RB
40	2.01 (51.1)	.112 (2.84)	3M5100-ND	10.65	8.09	7.33	155240-5302-RB
40	2.01 (51.1)	.155 (3.94)	3M5101-ND	10.65	8.09	7.33	155240-5303-RB
44	2.17 (55.09)	.112 (2.84)	3M5105-ND	11.71	8.90	8.06	155244-5302-RB
44	2.17 (55.09)	.155 (3.94)	3M5106-ND	11.71	8.90	8.06	155244-5303-RB
50	2.41 (61.09)	.112 (2.84)	3M5110-ND	13.31	10.12	9.16	155250-5302-RB
50	2.41 (61.09)	.155 (3.94)	3M5111-ND	13.31	10.12	9.16	155250-5303-RB
<b>Fig. 2 — Vertical Through Hole</b>							
10	.83 (21.1)	.112 (2.84)	3M5082-ND	4.60	3.50	3.17	155210-6302-RB
10	.83 (21.1)	.155 (3.94)	3M5083-ND	4.60	3.50	3.17	155210-6303-RB
12	.91 (23.1)	.112 (2.84)	3M5087-ND	3.87	2.94	2.66	155212-6302-RB
12	.91 (23.1)	.155 (3.94)	3M5088-ND	3.87	2.94	2.66	155212-6303-RB
20	1.22 (31.09)	.112 (2.84)	3M5092-ND	5.32	4.05	3.67	155220-6302-RB
20	1.22 (31.09)	.155 (3.94)	3M5093-ND	5.32	4.05	3.67	155220-6303-RB
26	1.46 (37.1)	.112 (2.84)	3M5097-ND	6.28	4.78	4.32	155226-6302-RB
26	1.46 (37.1)	.155 (3.94)	3M5098-ND	6.28	4.78	4.32	155226-6303-RB
40	2.01 (51.1)	.112 (2.84)	3M5102-ND	9.65	7.34	6.64	155240-6302-RB
40	2.01 (51.1)	.155 (3.94)	3M5103-ND	9.65	7.34	6.64	155240-6303-RB
44	2.17 (55.09)	.112 (2.84)	3M5107-ND	10.61	8.06	7.30	155244-6302-RB
44	2.17 (55.09)	.155 (3.94)	3M5108-ND	10.61	8.06	7.30	155244-6303-RB
50	2.41 (61.09)	.112 (2.84)	3M5112-ND	12.06	9.17	8.30	155250-6302-RB
50	2.41 (61.09)	.155 (3.94)	3M5113-ND	12.06	9.17	8.30	155250-6303-RB
<b>Fig. 3 — Vertical Surface Mount</b>							
10	.83 (21.1)	—	3M5079-ND	5.97	4.		

# 3M 2mm Mini-Clamp Plugs and Sockets



**Features:** • Provides even quality • Reduces maintenance work by providing higher connection reliability • Reduces waste • Operation by general tool "pliers" reduces tooling cost • Latch enabled rugged field termination **Physical Specifications:** • Material: Nylon body, polycarbonate cover • Flammability: UL 94V-0 • Underplating: 100µ" (2.54µm) nickel • Wiping area: 8µ" (0.2µm) minimum gold with lubricant **Electrical Specifications:** • Current Rating: 3A • Voltage Rating: 32V **Temperature Rating:** -20°C ~ 85°C

**Fig. 1 — Wiremount Plug**

No. of Pos.	Dim. A (mm)
3	12.9
4	14.9

**Fig. 2 — Boardmount Plug, Single Row**

No. of Pos.	Dim. A (mm)
3	13.8
4	15.8

**Fig. 3 — Boardmount Plug, Multiple Row**

No. of Pos.	Dim. A (mm)
3	13.8
4	15.8

**Fig. 4 — Wiremount Socket**

No. of Positions	Dim. A (mm)
3 (without latch)	13.8
3 (with latch)	23.4
4 (without latch)	15.8
4 (with latch)	25.4

Fig.	No. of Pos.	AWG	Wire Ins. Dia. (mm)	Cover Color	Digi-Key Part No.	Price Each			3M Part No.
						1	25	50	
1	3	20-22	1.0-1.2	Green	3M5704-ND	2.00	1.87	1.74	37103-2124-000 FL 500
		20-22	1.2-1.6	Blue	3M5705-ND	2.00	1.87	1.74	37103-2165-000 FL 500
		20-22	1.6-2.0	Gray	3M5706-ND	2.00	1.87	1.74	37103-2206-000 FL 500
		24-26	0.8-1.0	Red	3M5707-ND	2.00	1.87	1.74	37103-3101-000 FL 500
		24-26	1.0-1.2	Yellow	3M5708-ND	2.00	1.87	1.74	37103-3122-000 FL 500
	4	24-26	1.2-1.6	Orange	3M5709-ND	2.00	1.87	1.74	37103-3163-000 FL 500
		20-22	1.0-1.2	Green	3M5710-ND	2.32	2.17	2.01	37104-2124-000 FL 500
		20-22	1.2-1.6	Blue	3M5711-ND	2.32	2.17	2.01	37104-2165-000 FL 500
		20-22	1.6-2.0	Gray	3M5712-ND	2.32	2.17	2.01	37104-2206-000 FL 500
		24-26	0.8-1.0	Red	3M5713-ND	2.32	2.17	2.01	37104-3101-000 FL 500
2	3	24-26	1.0-1.2	Yellow	3M5714-ND	2.32	2.17	2.01	37104-3122-000 FL 500
		24-26	1.2-1.6	Orange	3M5715-ND	2.32	2.17	2.01	37104-3163-000 FL 500
		—	—	—	3M5700-ND‡	1.49	1.39	1.29	37203-62A3-003PL
		—	—	—	3M5701-ND‡	1.49	1.39	1.29	37203-62B3-003PL
		—	—	—	3M5702-ND‡	1.69	1.58	1.47	37204-62A3-004PL
	4	—	—	—	3M5703-ND‡	1.69	1.58	1.47	37204-62B3-004PL
		—	—	—	3M5716-ND‡§	3.42	3.20	2.97	37208-62A3-004PL
		—	—	—	3M5717-ND‡	2.95	2.76	2.56	37212-62M3-003PL
		—	—	—	3M5718-ND‡	2.95	2.76	2.56	37216-62M3-004PL
		4x2	—	—	—	3M5719-ND	2.16	2.02	1.88
3	3x4	20-22	1.0-1.62	Green	3M5719-ND	2.16	2.02	1.88	37303-2124-000 FL 500
		20-22	1.0-1.62	Green	3M5720-ND†	2.25	2.10	1.95	37303-2124-0P0 FL 500
		20-22	1.2-1.6	Blue	3M5721-ND	2.16	2.02	1.88	37303-2165-000 FL 500
		20-22	1.2-1.6	Blue	3M5722-ND†	2.25	2.10	1.95	37303-2165-0P0 FL 500
		20-22	1.6-2.0	Gray	3M5723-ND	2.16	2.02	1.88	37303-2206-000 FL 500
	4x4	20-22	1.6-2.0	Gray	3M5724-ND†	2.25	2.10	1.95	37303-2206-0P0 FL 500
		24-26	0.8-1.0	Red	3M5725-ND	2.16	2.02	1.88	37303-3101-000 FL 500
		24-26	0.8-1.0	Red	3M5726-ND†	2.25	2.10	1.95	37303-3101-0P0 FL 500
		24-26	1.0-1.62	Yellow	3M5727-ND	2.16	2.02	1.88	37303-3122-000 FL 500
		24-26	1.0-1.62	Yellow	3M5728-ND†	2.25	2.10	1.95	37303-3122-0P0 FL 500
4	3	24-26	1.2-1.6	Orange	3M5729-ND	2.16	2.02	1.88	37303-3163-000 FL 500
		24-26	1.2-1.6	Orange	3M5730-ND†	2.48	2.31	2.15	37303-3163-0P0 FL 500
		20-22	1.0-1.62	Green	3M5731-ND	2.52	2.36	2.19	37304-2124-000 FL 500
		20-22	1.0-1.62	Green	3M5732-ND†	2.63	2.46	2.29	37304-2124-0P0 FL 500
		20-22	1.2-1.6	Blue	3M5733-ND	2.52	2.36	2.19	37304-2165-000 FL 500
	4	20-22	1.2-1.6	Blue	3M5734-ND†	2.63	2.46	2.29	37304-2165-0P0 FL 500
		20-22	1.6-2.0	Gray	3M5735-ND	2.52	2.36	2.19	37304-2206-000 FL 500
		20-22	1.6-2.0	Gray	3M5736-ND†	2.63	2.46	2.29	37304-2206-0P0 FL 500
		24-26	0.8-1.0	Red	3M5737-ND	2.52	2.36	2.19	37304-3101-000 FL 500
		24-26	0.8-1.0	Red	3M5738-ND†	2.63	2.46	2.29	37304-3101-0P0 FL 500
5	3	24-26	1.0-1.62	Yellow	3M5739-ND	2.52	2.36	2.19	37304-3122-000 FL 500
		24-26	1.0-1.62	Yellow	3M5740-ND†	2.63	2.46	2.29	37304-3122-0P0 FL 500
		24-26	1.2-1.6	Orange	3M5741-ND	2.52	2.36	2.19	37304-3163-000 FL 500
		24-26	1.2-1.6	Orange	3M5742-ND†	2.63	2.46	2.29	37304-3163-0P0 FL 500
		—	—	—	3M5716-ND‡§	3.42	3.20	2.97	37208-62A3-004PL
	4	—	—	—	3M5717-ND‡	2.95	2.76	2.56	37212-62M3-003PL
		—	—	—	3M5718-ND‡	2.95	2.76	2.56	37216-62M3-004PL
		—	—	—	3M5719-ND	2.16	2.02	1.88	37303-2124-000 FL 500
		—	—	—	3M5720-ND†	2.25	2.10	1.95	37303-2124-0P0 FL 500
		—	—	—	3M5721-ND	2.16	2.02	1.88	37303-2165-000 FL 500

† With Latch ‡ See Digi-Key website for PCB footprint type § 3M5716 Dim. = 12.9

## Molex 2mm Cable-to-Board Receptacle

UL2651, UL2678 UL File No: E29179 CSA  
 File No: LR19980 Mates With: Milli-Grid 2.00mm Headers  
**Electrical:** Voltage: 125VDC Current: 1.0A Contact Resistance: 30mΩ maximum Dielectric Withstanding Voltage: 500VAC  
**Insulation Resistance:** 5000MΩ minimum **Physical:** Housing: High Thermoplastic, UL 94V-0 Contact: Copper Alloy  
**Plating Contact Area:** (15µ) Gold **Operating Temperature:** -20°C ~ 85°C **Cable:** 1.00mm Flat Cable, 7 Strands, 28 AWG

No. of Pos.	Dimensions (mm)		Digi-Key Part No.	Price Each			Molex Part No.
	A	B		1	10	25	
<b>Dual Row, IDT without Polarization and Locking Ramp</b>							
10	16.65	8.00	WM14210-ND	2.61	2.09	1.75	87568-1063
12	18.65	10.00	WM14212-ND	2.90	2.32	1.94	87568-1263
14	20.65	12.00	WM14214-ND	3.34	2.68	2.23	87568-1463
16	22.65	14.00	WM14216-ND	3.58	2.87	2.39	87568-1663
20	26.65	18.00	WM14220-ND	3.73	2.99	2.49	87568-2063
22	28.65	20.00	WM14222-ND	4.10	3.29	2.74	87568-2263

No. of Pos.	Dimensions (mm)		Digi-Key Part No.	Price Each			Molex Part No.
	A	B		1	10	25	
24	30.65	22.00	WM14224-ND	4.47	3.58	2.99	87568-2463
26	32.65	24.00	WM14226-ND	4.56	3.65	3.04	87568-2663
30	36.65	28.00	WM14230-ND	4.81	3.85	3.21	87568-3063
34	40.65	32.00	WM14234-ND	5.07	4.06	3.39	87568-3463
40	46.65	38.00	WM14240-ND	5.52	4.42	3.68	87568-4063
44	50.65	42.00	WM14244-ND	5.74	4.60	3.83	87568-4463
50	56.65	48.00	WM14250-ND	6.34	5.08	4.23	87568-5063
<b>Dual Row, IDT with Single Locking Ramp</b>							
10	16.65	8.00	WM14310-ND	2.61	2.09	1.75	87568-1073
12	18.65	10.00	WM14312-ND	2.90	2.32	1.94	87568-1273
<b>Dual Row, IDT with Polarization and Locking Ramp</b>							
14	20.65	12.00	WM14314-ND	3.34	2.68	2.23	87568-1493
16	22.65	14.00	WM14316-ND	3.58	2.87	2.39	87568-1693
20	26.65	18.00	WM14320-ND	3.73	2.99	2.49	87568-2093
22	28.65	20.00	WM14322-ND	4.10	3.29	2.74	87568-2293
24	30.65	22.00	WM14324-ND	4.47	3.58	2.99	87568-2493
26	32.65	24.00	WM14326-ND	4.56	3.65	3.04	87568-2693
30	36.65	28.00	WM14330-ND	4.81	3.85	3.21	87568-3093
34	40.65	32.00	WM14334-ND	5.07	4.06	3.39	87568-3493
40	46.65	38.00	WM14340-ND	5.52	4.42	3.68	87568-4093
44	50.65	42.00	WM14344-ND	5.74	4.60	3.83	87568-4493
50	56.65	48.00	WM14350-ND	6.34	5.08	4.23	87568-5093

RoHS Compliant

## 1mm Round Conductor Flat Cable



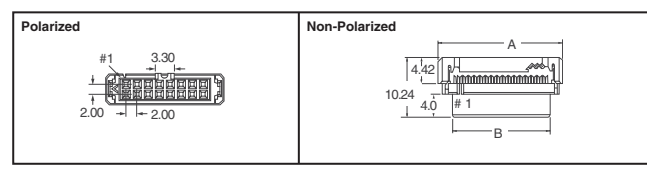
UL File No: E61522, UL Style No. 2678 CSA File No: LL61126 **Electrical:** Voltage: 150V **Physical:** Flammability: VW-1 **Operating Temperature:** -20°C ~ 105°C **Insulation:** Gray PVC **Edge Mark:** Black, 28AWG Stranded, Tinned

Circuits	Dimensions (mm)		Digi-Key Part No.	(NOTE: "X" in Part No. Represents No. of Feet)				
	A	B		5	10	25	50	100
10	10.00	9.00	WM11-X-ND	3.96	7.46	16.31	27.96	46.60
20	20.00	19.00	WM12-X-ND	7.72	14.52	31.77	54.46	124.65
24	24.00	23.00	WM13-X-ND	9.26	17.42	38.11	65.34	141.36
40	40.00	39.00	WM14-X-ND	16.97	31.94	69.87	119.78	199.63
44	44.00	43.00	WM15-X-ND	18.67	35.14	76.87	131.78	270.79
50	50.00	49.00	WM16-X-ND	19.28	36.30	79.41	136.13	265.32

## Tyco Electronics AMP Authorized Distributor

## 2mm Ribbon Connectors

The new 2.0 (079) AMP-LATCH® receptacle connector family features contacts on a true 2.0 x 2.0 (.079 x .079) mating grid for 1.0 (.039) pitch ribbon. These receptacles feature insulation displacement contacts (IDC) with a top/bottom single beam contact orientation. Contacts are beryllium copper, duplex plated 30µ" gold in the mating area and 100µ" minimum tin-lead on termination end all over 50µ" nickel underplating. Contact mating area is 1.54 (.061) from the face of the housing and they accept 0.50mm (.0197) round or square posts. **Product Facts:** • True hard metric 2.0 x 2.0 mating grid for 1.0 pitch ribbon cable • IDC, beryllium copper contacts, duplex plated gold-over-nickel • U.L. 94V-0 rated thermoplastic components **Performance Data:** • Durability: 150 cycles • Termination Resistance: 25mΩ maximum • Mating Force: 1.67N maximum • Unmating Force: 0.14N minimum • Operating Temperature: -65°C ~ 105°C



No. of Pos.	Dimensions (mm)		Digi-Key Part No.	Price Each			AMP Part No.
	A	B		1	25	50	
<b>Receptacle — Feed Thru Cover Non-Polarized</b>							
26	31.17	26.42	ASA26K-ND	5.17	3.24	111626-6	
<b>Receptacle — Feed Thru Cover Polarized — RoHS Compliant</b>							
10	15.16	10.41	AKA10L-ND	2.84	1.79	2-111623-8	
14	19.18	14.40	AKA14L-ND	2.94	1.85	2-111623-9	
16	21.18	16.41	AKA16L-ND	3.42	2.15	2-111623-0	
20	25.17	20.40	AKA20L-ND	3.06	1.92	2-111623-1	
24	29.18	24.41	AKA24L-ND	5.25	3.29	2-111623-7	
26	31.17	26.42	AKA26L-ND	3.56	2.24	2-111623-2	
30	35.18	30.40	AKA30L-ND	3.62	2.27	2-111623-3	