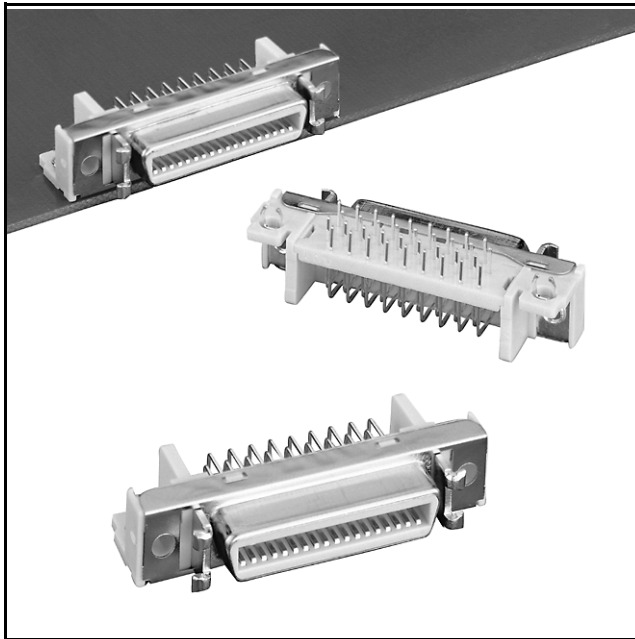


3M™ Mini D Ribbon (MDR) Connectors

.050" Boardmount Thru-Hole Right Angle Receptacle - Shielded

102 Series



- Wiper-on-wiper contact for reliable repetitive plugging
- SMT compatible PCT insulator material
- Ground lock PCB retention
- Interface latch design for connection stability
- MDR digital LCD interface as a 20 or 26 contact connector
- Contacts: 14, 20, 26, 36, 40, 50 and 68
- RoHS* compliant version (-PL or -PC plating suffix) available

Date Modified: April 5, 2005

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Sheet 1 of 3

Physical

Insulation

Material: Glass Reinforced Polyester (PBT)

Flammability: UL 94V-0

Color: See ordering information

Contact Material: Copper Alloy (C521)

Plating

Underplating: See ordering information

Wiping Area: See ordering information

Solder Tails: See ordering information

Shroud & Latch Hook

Material: Steel

Plating: Nickel

Ground Lock

Material: Copper Alloy

Plating: Matte tin

Marking: 3M Logo & Part Number

Electrical

Current Rating: 1 A

Insulation Resistance: $> 5 \times 10^8 \Omega$ at 500 VDC

Withstanding Voltage: 500 Vrms for 1 Minute

Environmental

Temperature Rating: -55°C to +105°C

Process Rating: Surface mount compatible - max. temp. 240°-250°C for 10 seconds.

UL File No.: E68080

*RoHS = Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment



Interconnect Solutions

<http://www.3M.com/interconnects/>

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For technical, sales or ordering information call

800-225-5373

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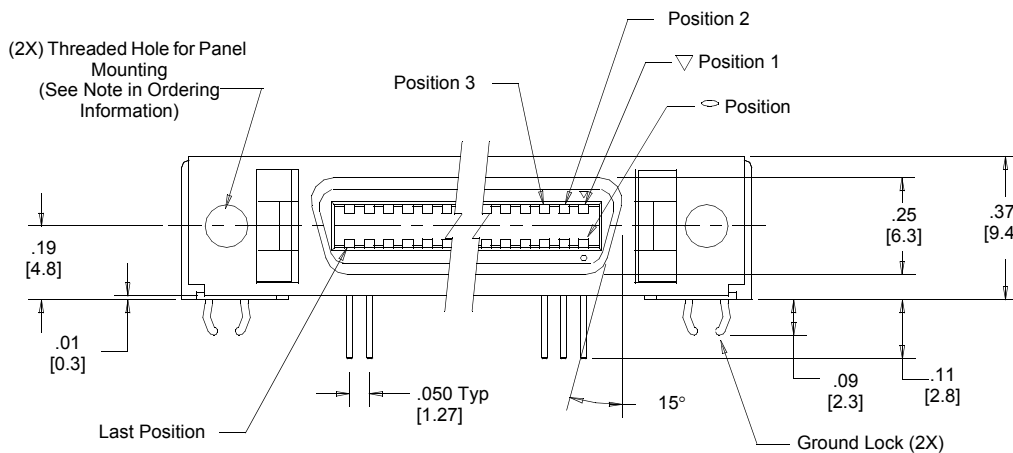
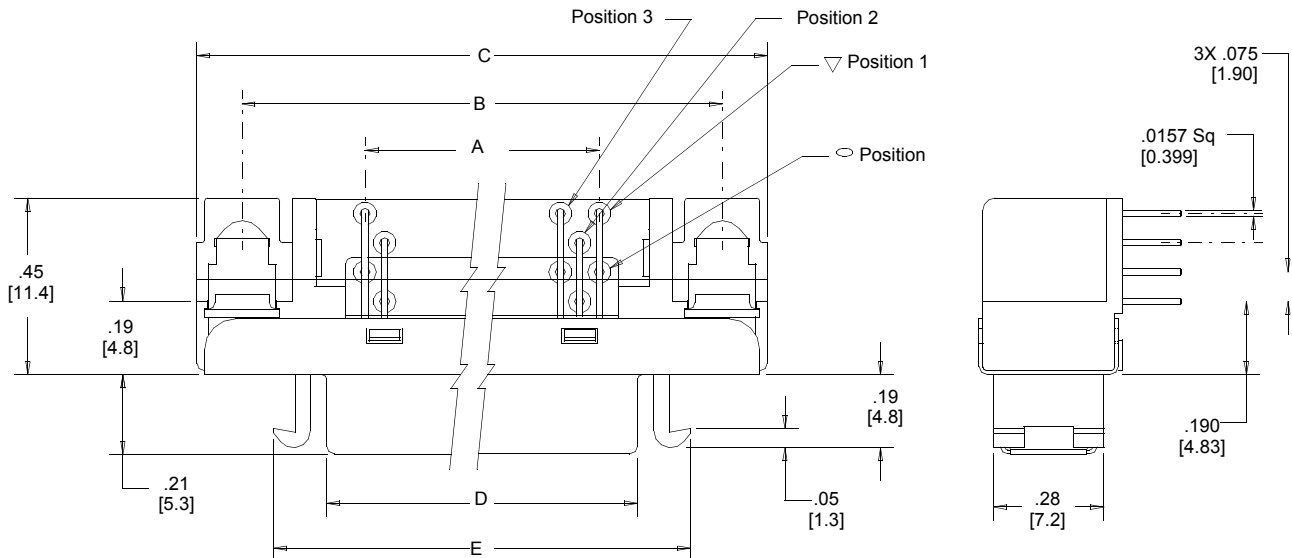
.050" Boardmount Thru-Hole Right Angle Receptacle - Shielded

102 Series

| Contact Quantity | Dimensions | | | | |
|------------------|-----------------|---------------|---------------|---------------|---------------|
| | A | B | C | D | E |
| 14 | 0.300 [7.62] | 0.93 [23.6] | 1.16 [29.5] | 0.50 [12.6] | 0.77 [19.5] |
| 20 | 0.450 [11.43] | 1.08 [27.5] | 1.31 [33.4] | 0.65 [16.4] | 0.92 [23.4] |
| 26 | 0.600 [15.24] | 1.23 [31.3] | 1.46 [37.2] | 0.80 [20.2] | 1.07 [27.2] |
| 36 | 0.850 [21.59] | 1.48 [37.6] | 1.71 [43.5] | 1.05 [26.6] | 1.32 [33.5] |
| 40 | 0.950 [24.13] | 1.58 [40.2] | 1.81 [46.1] | 1.15 [29.1] | 1.42 [36.1] |
| 50 | 1.200 [30.48] | 1.83 [46.5] | 2.06 [52.4] | 1.40 [35.5] | 1.67 [42.4] |
| 68 | 1.650 [41.91] | 2.28 [57.9] | 2.51 [63.8] | 1.85 [46.9] | 2.12 [53.8] |

| Inch [mm] | | | |
|------------------------|-----|------|-------|
| Tolerance Unless Noted | | | |
| | .0 | .00 | .000 |
| inch | ±.1 | ±.01 | ±.005 |

[] Dimensions for Reference Only



Ordering Information

X102XX-55X3XX

Connector Material:
Blank = Beige
D = Black (20 pos. only)

Contact Quantity:

Wiping area plating:

L = 8 μ" [0.2 μm] Min. Gold over 50 μ" [1.27 μm] Min. Ni.
C = 30 μ" [0.76 μm] Min. Gold over 100 μ" [2.54 μm] Min. Ni.

Solder tail plating:

J or V = tin-lead over Ni
P = flash gold over Ni (RoHS compliant)

Panelmount thread size:

G = M2.5 (14, 20, 26, 36, 40 position)
H = #4-40 (20, 36, 50 & 68 position)

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Note: Must order panelmount screws: 3344-38 for M2.5, 3344-44 for #4-40.

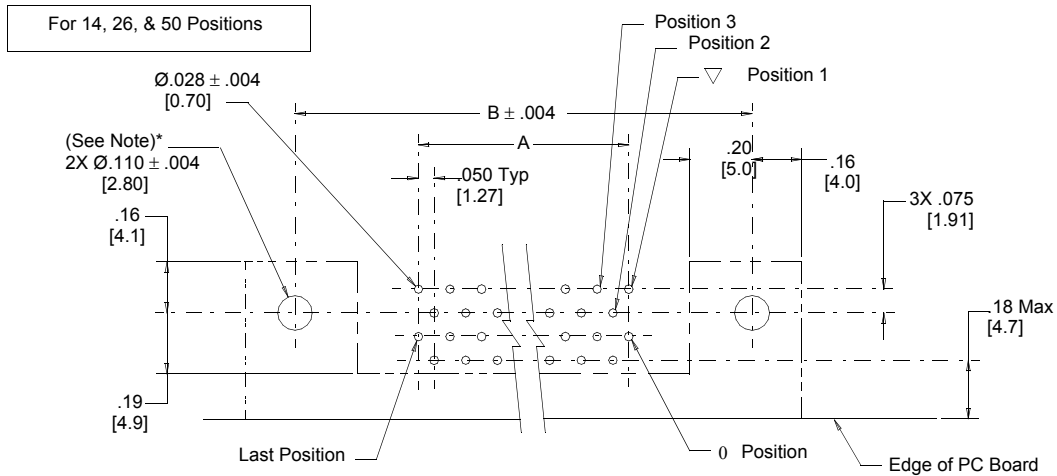
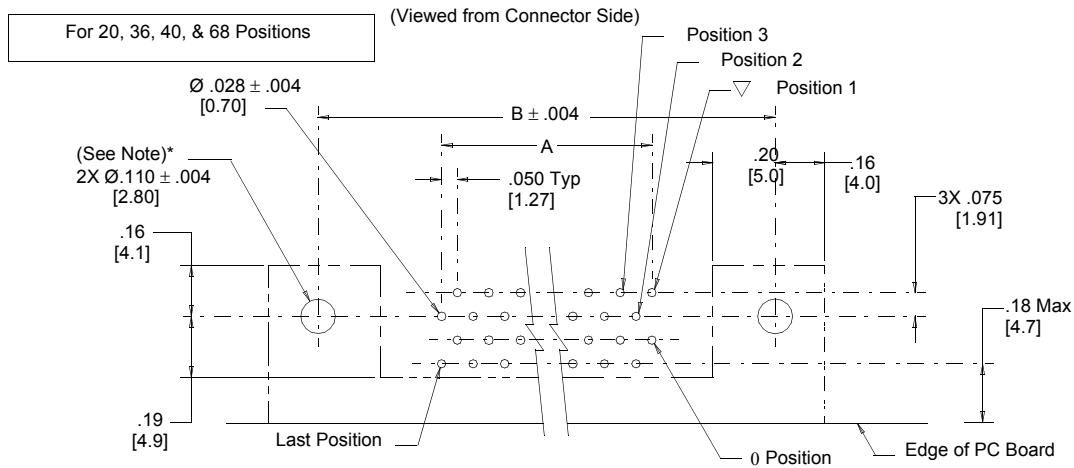
3M™ Mini D Ribbon (MDR) Connectors

.050" Boardmount Thru-Hole Right Angle Receptacle - Shielded

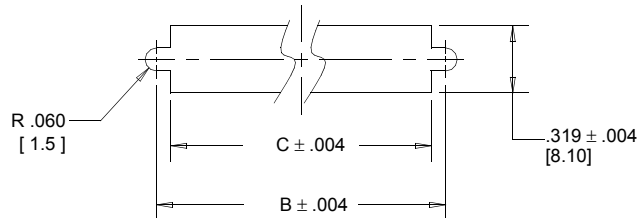
102 Series

| Contact Quantity | Dimensions | | |
|------------------|---------------|---------------|-------------|
| | A | B | C |
| 14 | .300 [7.62] | .931 [23.64] | .78 [19.9] |
| 20 | .450 [11.43] | 1.081 [27.45] | .94 [23.8] |
| 26 | .600 [15.24] | 1.231 [31.26] | 1.09 [27.6] |
| 36 | .850 [21.59] | 1.481 [37.61] | 1.33 [33.9] |
| 40 | .950 [24.13] | 1.581 [40.15] | 1.44 [36.5] |
| 50 | 1.200 [30.48] | 1.831 [46.50] | 1.69 [42.8] |
| 68 | 1.650 [41.91] | 2.281 [57.93] | 2.13 [54.2] |

Recommended Board Layout



*Note: Plated through holes for .063 board thickness



Recommended Panel Cut-Out

Note: Panel thickness .079 [2.00] Max.

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Sheet 3 of 3

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