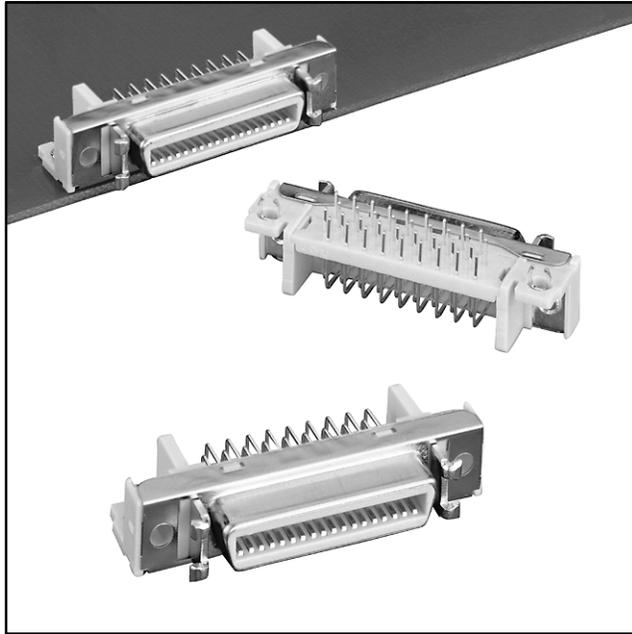


# 3M™ Mini D Ribbon (MDR) Connectors

.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

Date Modified: May 30, 2003

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## Physical

### Insulation

Material: Glass Reinforced Polyester (PCT)  
Flammability: UL 94V-0  
Color: See ordering information

### Contact

Material: Copper Alloy (C521)

### Plating

Underplating: See ordering information  
Wiping Area: See ordering information

### Shroud & Latch Hook

Material: Steel  
Plating: Nickel

### Ground Lock

Material: Copper Alloy  
Plating: Tin Lead

Marking: 3M Logo and Part Number

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## Electrical

**Current Rating:** 1 A

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

**Withstanding Voltage:** 500 Vrms for 1 Minute

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## Environmental

**Temperature Rating:** -55°C to +105°C

**Process Rating:** Surface mount compatible up to 240°C peak for short durations.

UL File No.: E68080

**3M**  
**Interconnect Solutions**  
<http://www.3M.com/interconnects/>

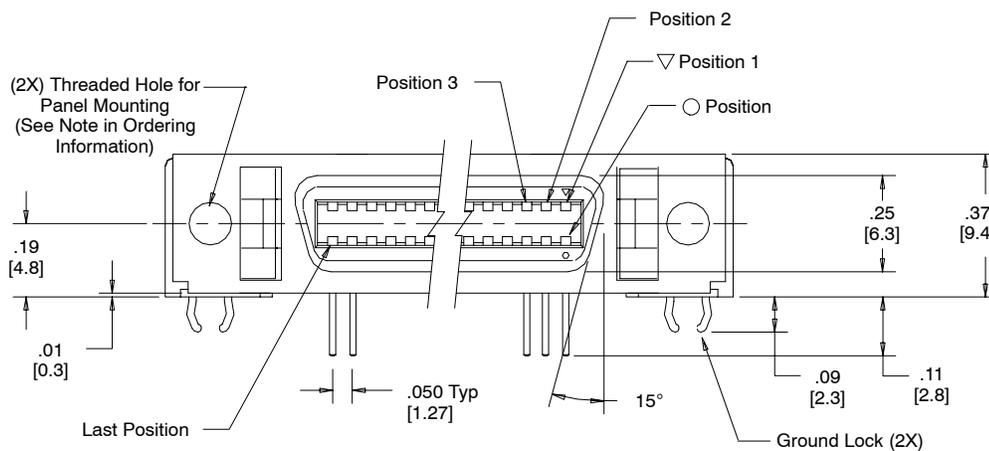
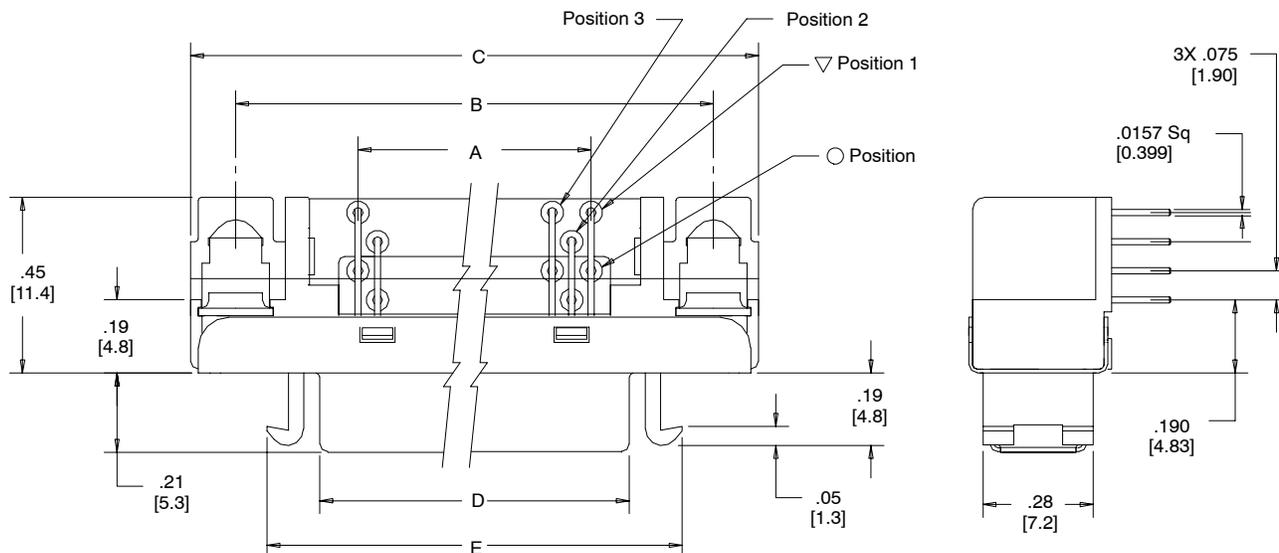
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**800-225-5373**

# 3M™ Mini D Ribbon (MDR) Connectors

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

102 Series

Contact Quantity	Dimensions				
	A	B	C	D	E
14	.300 [7.62]	.93 [23.6]	1.16 [29.6]	.50 [12.6]	.77 [19.6]
20	.450 [11.43]	1.08 [27.5]	1.31 [33.4]	.65 [16.4]	.92 [23.4]
26	.600 [15.24]	1.23 [31.3]	1.46 [37.2]	.80 [20.2]	1.07 [27.2]
36	.850 [21.59]	1.48 [37.6]	1.71 [43.5]	1.05 [26.6]	1.32 [33.6]
40	.950 [24.13]	1.58 [40.2]	1.81 [46.1]	1.15 [29.1]	1.42 [36.1]
50	1.200 [30.48]	1.831 [46.50]	2.06 [52.5]	1.40 [35.5]	1.67 [42.5]
68	1.650 [41.91]	2.281 [57.93]	2.51 [63.9]	1.85 [46.9]	2.12 [53.9]



**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)

Plating Options for Wiping Area:  
JL = 8 μ" [ 0.2 μm ] Min. Gold over 50 μ" [ 1.27 μm ] Min. Ni.  
VC = 30 μ" [ 0.76 μm ] Min. Gold over 100 μ" [ 2.54 μm ] Min. Ni.

Contact Quantity

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.

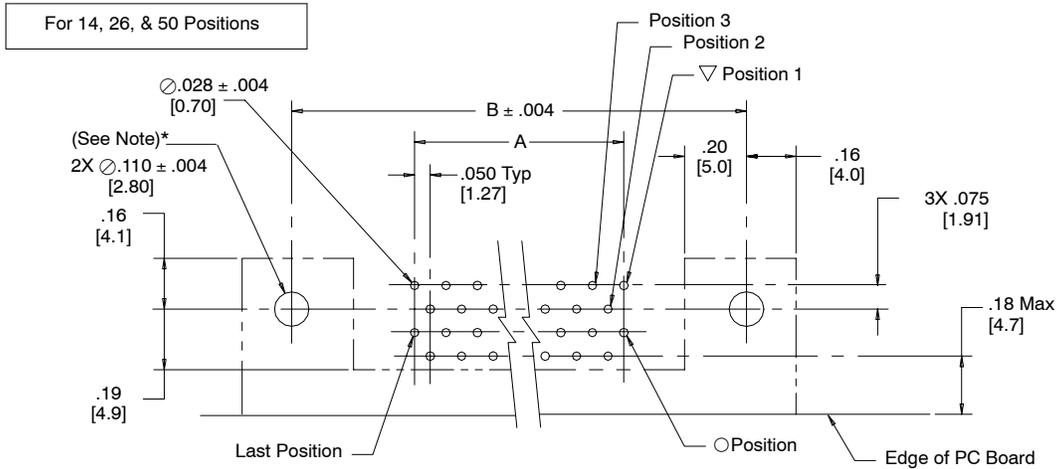
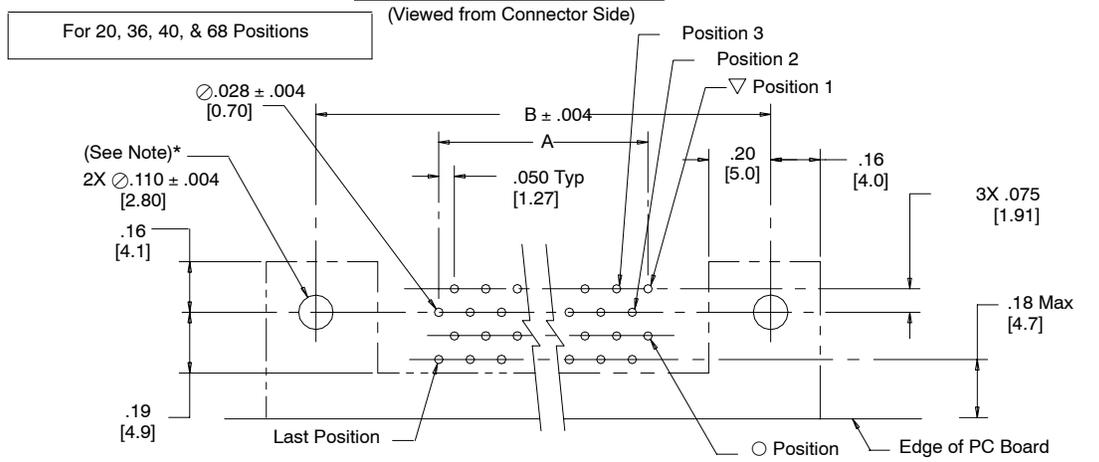
# 3M™ Mini D Ribbon (MDR) Connectors

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

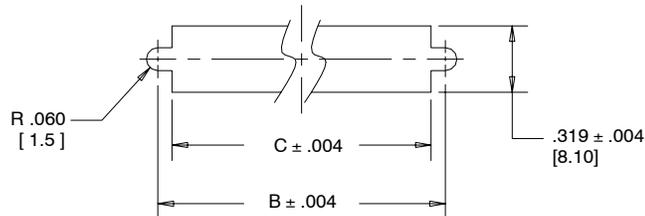
102 Series

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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