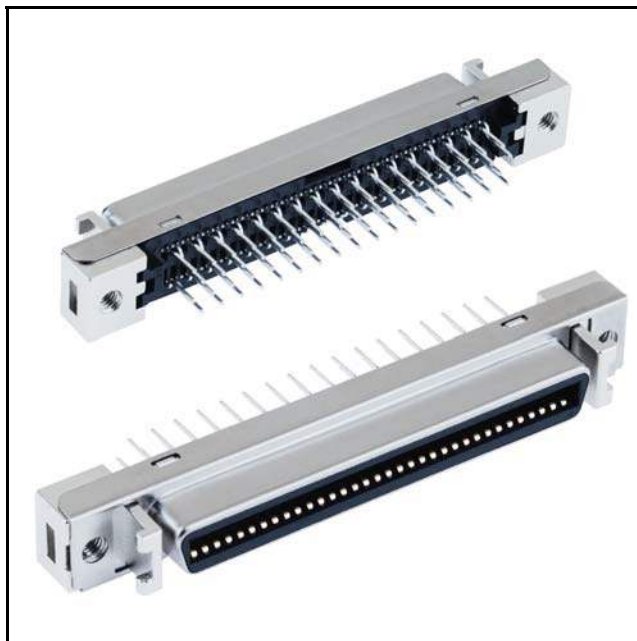


# 3M™ Mini D Ribbon (MDR) Connectors

.050" Boardmount Thru-Hole Vertical Receptacle - Shielded

102 Series



- Wiper-on-wiper contact for reliable repetitive plugging
- Rugged die cast metal case construction
- Screw lockdown for reliable PCB retention
- Interface latch design for connection stability
- IEEE 1284C Interface as a 36 contact connector
- Contacts: 14, 20, 26, 36, 40, 50, 68, 80 and 100
- RoHS\* compliant version (-PC plating suffix) available

Date Modified: April 5, 2005

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## Physical

### Insulation

Material: Glass Reinforced Polyester (PBT)  
Flammability: UL 94V-0  
Color: Black

### Contact

Material: Copper Alloy (C521)

### Plating

Underplating: 80  $\mu$ " (2.0  $\mu$ m) Nickel - QQ-N-290, Class 2  
Wiping Area: 30  $\mu$ " (0.76  $\mu$ m) Min Gold - MIL-G-45204, Type II, Grade C  
Solder Tails: See ordering information

### Body

Material: Zinc Alloy  
Plating: Nickel

### Shroud & Latch Hook

Material: Steel  
Plating: Nickel

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: -20°C to +85°C

UL File No.: E68080

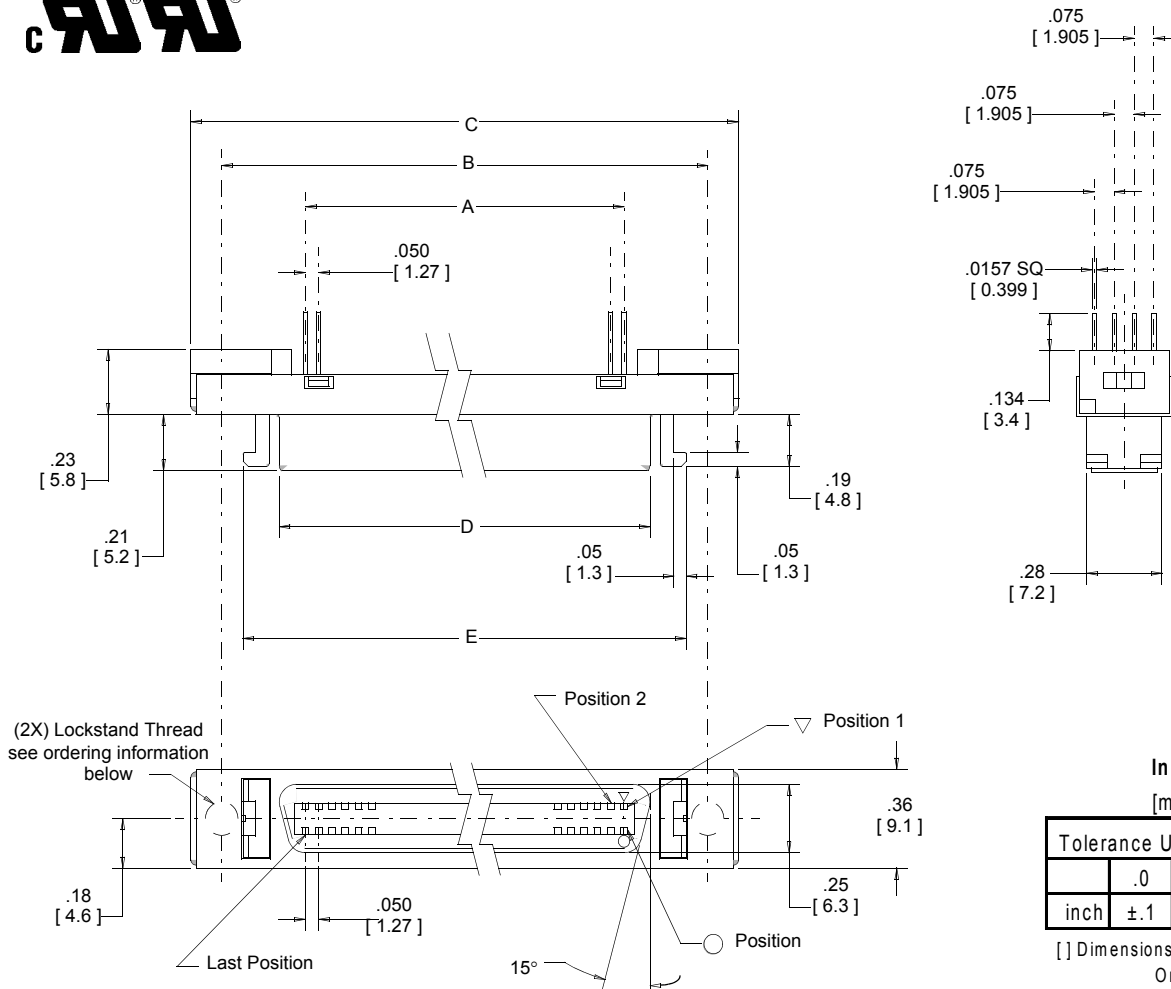
\*RoHS = Directive 2002/95/EC,  
Reduction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

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Contact Quantity	Dimensions				
	A	B	C	D	E
14	300 [ 7.62 ]	93 [ 23.6 ]	1.16 [ 29.5 ]	50 [ 12.6 ]	.77 [ 19.5 ]
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 [ 33.5 ]
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 ]	1.83 [ 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 ]
80	1.950 [ 49.53 ]	2.58 [ 65.6 ]	2.81 [ 71.5 ]	2.15 [ 54.5 ]	2.42 [ 61.5 ]
100	2.450 [ 62.23 ]	3.08 [ 78.3 ]	3.31 [ 84.2 ]	2.65 [ 67.2 ]	2.92 [ 74.2 ]



## Ordering Information

**102XX-62X2XC**

Contact Quantity  
(See Table)  
A0 = 100 pos.

Solder tail plating:  
V = tin-lead over Ni  
P = flash Gold over Ni (RoHS compliant)

Lockstand Thread  
0: M 2.6 (Special)  
1: M 2.5 (Standard)

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# 3M™ Mini D Ribbon (MDR) Connectors

.050" Boardmount Thru-Hole Vertical Receptacle - Shielded

102 Series

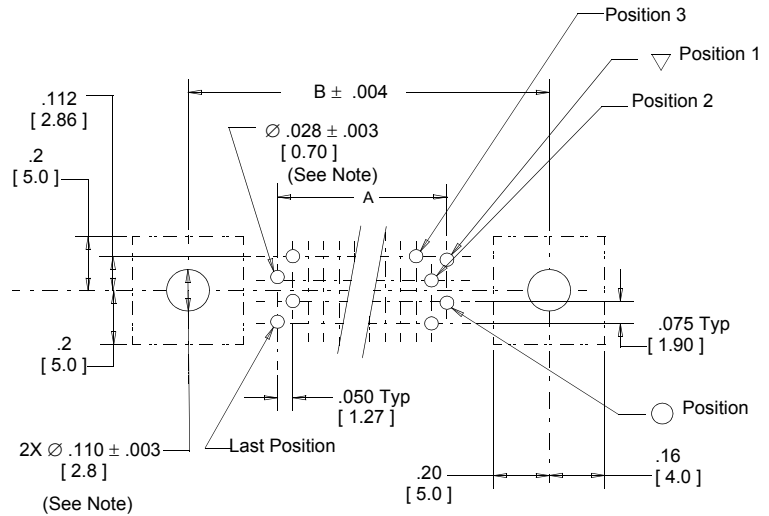
Contact Quantity	Dimensions	
	A	B
20	.450 [ 11.43 ]	1.081 [ 27.45 ]
36	.850 [ 21.59 ]	1.481 [ 37.61 ]
40	.950 [ 24.13 ]	1.581 [ 40.15 ]
68	1.650 [ 41.91 ]	2.281 [ 57.93 ]
80	1.950 [ 49.53 ]	2.581 [ 65.55 ]
100	2.450 [ 62.23 ]	3.081 [ 78.25 ]

Contact Quantity	Dimensions	
	A	B
14	.300 [ 7.62 ]	0.931 [ 23.64 ]
26	.600 [ 15.24 ]	1.231 [ 31.26 ]
50	1.200 [ 30.48 ]	1.831 [ 46.50 ]

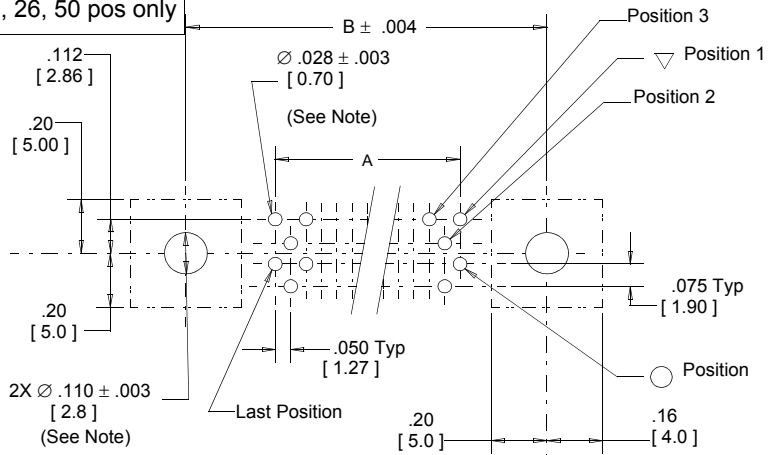
Contact Quantity	Dimensions	
	A	B
14	.78 [ 20.0 ]	.93 [ 23.64 ]
20	.94 [ 23.8 ]	1.08 [ 27.45 ]
26	1.09 [ 27.6 ]	1.23 [ 31.26 ]
36	1.33 [ 33.9 ]	1.48 [ 37.61 ]
40	1.44 [ 36.5 ]	1.58 [ 40.15 ]
50	1.69 [ 42.8 ]	1.83 [ 46.50 ]
68	2.13 [ 54.2 ]	2.28 [ 57.93 ]
80	2.44 [ 61.9 ]	2.58 [ 65.55 ]
100	2.94 [ 74.6 ]	3.08 [ 78.25 ]

## Recommended Board Layout Viewed from Connector Side

20, 36, 40, 68, 80 and 100 pos only

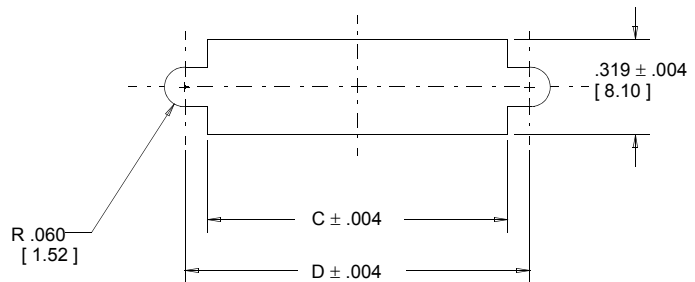


14, 26, 50 pos only



Note: Plated through holes for .062" board thickness.

## Recommended Panel Cut-Out



Note: Panel thickness .079 [ 2.00 ] Max.

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