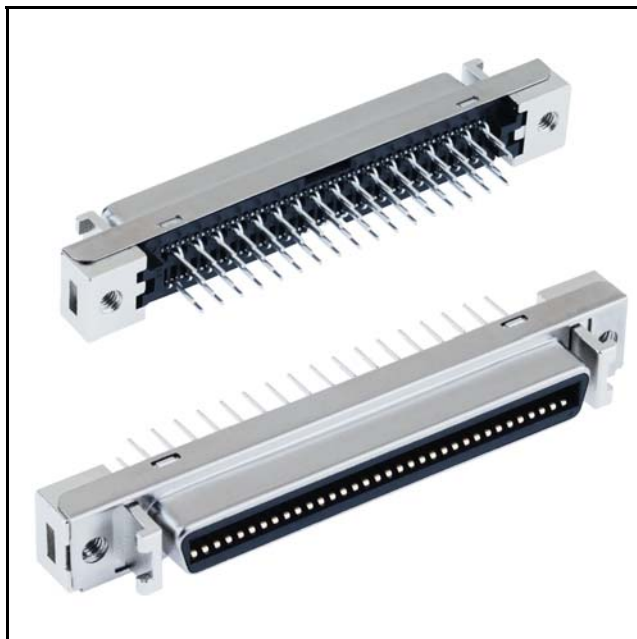


# 3M™ Mini D Ribbon (MDR) Connectors

.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

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

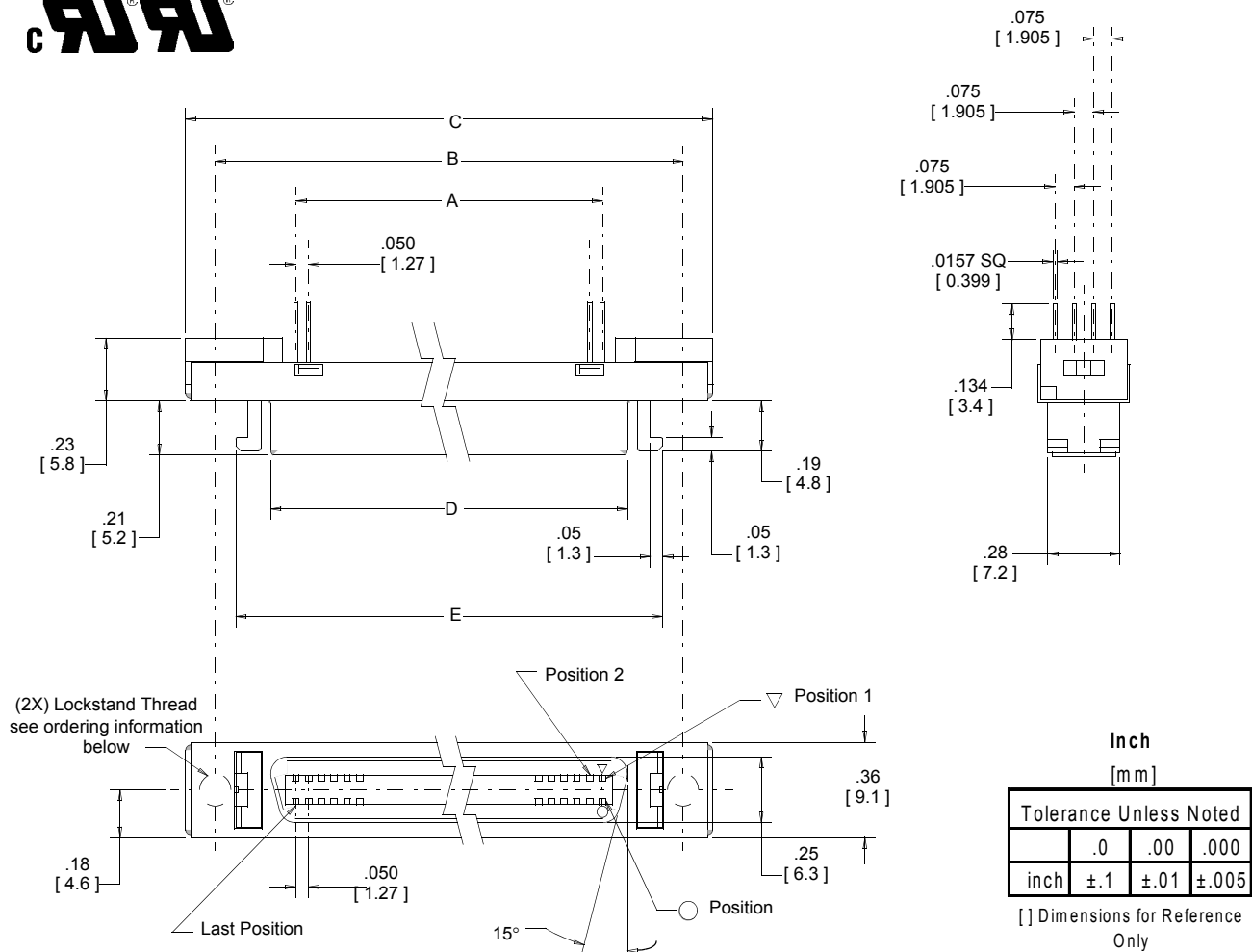
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# 3M™ Mini D Ribbon (MDR) Connectors

.050" Boardmount Thru-Hole Vertical Receptacle - Shielded

102 Series

| 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

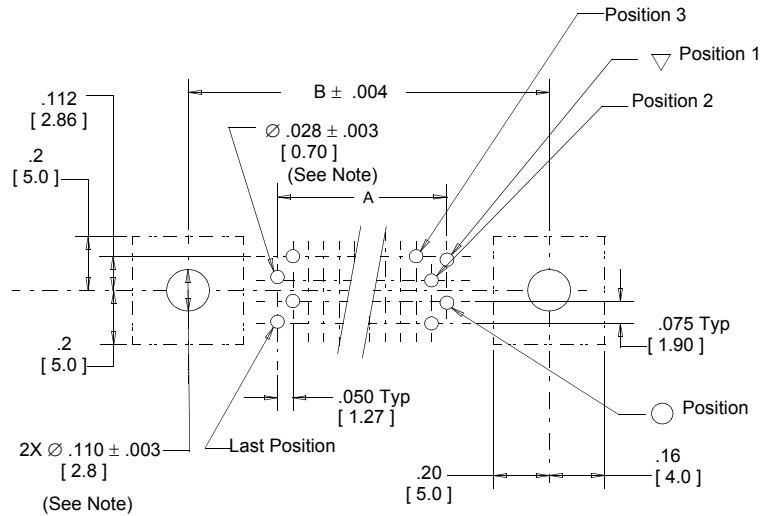
| Contact Quantity | Dimensions      |                 |
|------------------|-----------------|-----------------|
|                  | A               | B               |
| 20               | .450 [ 11.43 ]  | 1.081 [ 27.45 ] |
| 36               | .850 [ 21.59 ]  | 1.481 [ 37.61 ] |
| 40               | .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 ] |

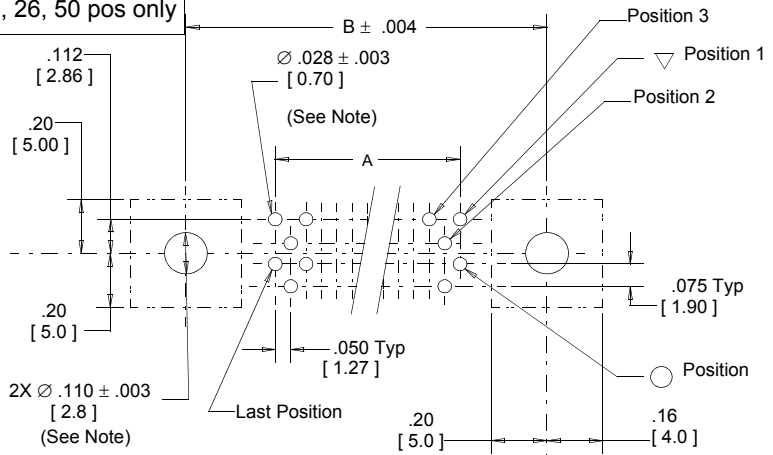
| Contact Quantity | Dimensions    |                |
|------------------|---------------|----------------|
|                  | A             | B              |
| 14               | .78 [ 20.0 ]  | .93 [ 23.64 ]  |
| 20               | .94 [ 23.8 ]  | 1.08 [ 27.45 ] |
| 26               | 1.09 [ 27.6 ] | 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

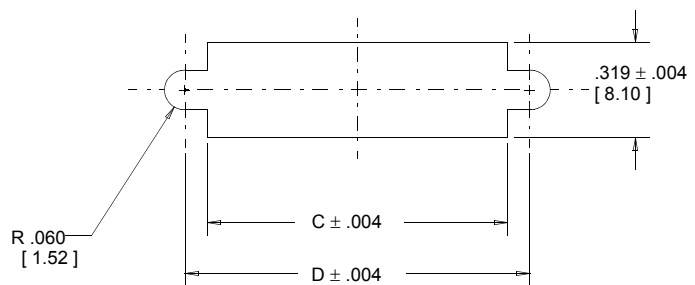


14, 26, 50 pos only



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

## Recommended Panel Cut-Out



Note: Panel thickness .079 [2.00] Max.

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## Electronic Solutions Division

6801 River Place Blvd.  
Austin, TX 78726-9000  
[www.3M.com/esd](http://www.3M.com/esd)



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