

# 3M™ Mini D Ribbon (MDR) Connectors

.050" Boardmount Through-Hole R. A. Condo 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
- Stacked receptacles save board space
- Contacts: 40 (2 × 20), 100 (2 × 50) and 136 (2 × 68)
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3Mconnector.com](http://www.3Mconnector.com) for compliance information (RIA E1 & C1 apply)

Date Modified: May 20, 2010

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## Physical

**Insulation Material:** Glass Reinforced Polyester (PBT)

Flammability: UL 94V-0

Color: Black

**Contact Material:** Copper Alloy

### Plating

Underplating: 80 μ" [2.0 μm] Nickel

Wiping Area: 20 μ" [0.50 μm] Min. Gold

Solder Tail Plating: Gold flash over Nickel (RIA E1 & C1 apply)

**Body Material:** Zinc Alloy

Plating: Nickel

### Shroud & Latch Hook

Material: Steel

Plating: Nickel

Other Materials: Zinc Die Cast (Ground Lock), Stainless Steel (Joint Plate)

**Marking:** 3M Logo and Part Number

## Electrical

**Current Rating:** 1 A

**Insulation Resistance:**  $>5 \times 10^8 \Omega$  at 500 V<sub>DC</sub>

**Withstanding Voltage:** 500 V<sub>RMS</sub> for 1 Minute

## Environmental

**Temperature Rating:** -20°C to +85°C

**Process Rating:** Solder Dip Test – 260°C for 10 secs., two times after 100°C max. preheat, 60 sec. max. duration.

UL File No.: E68080



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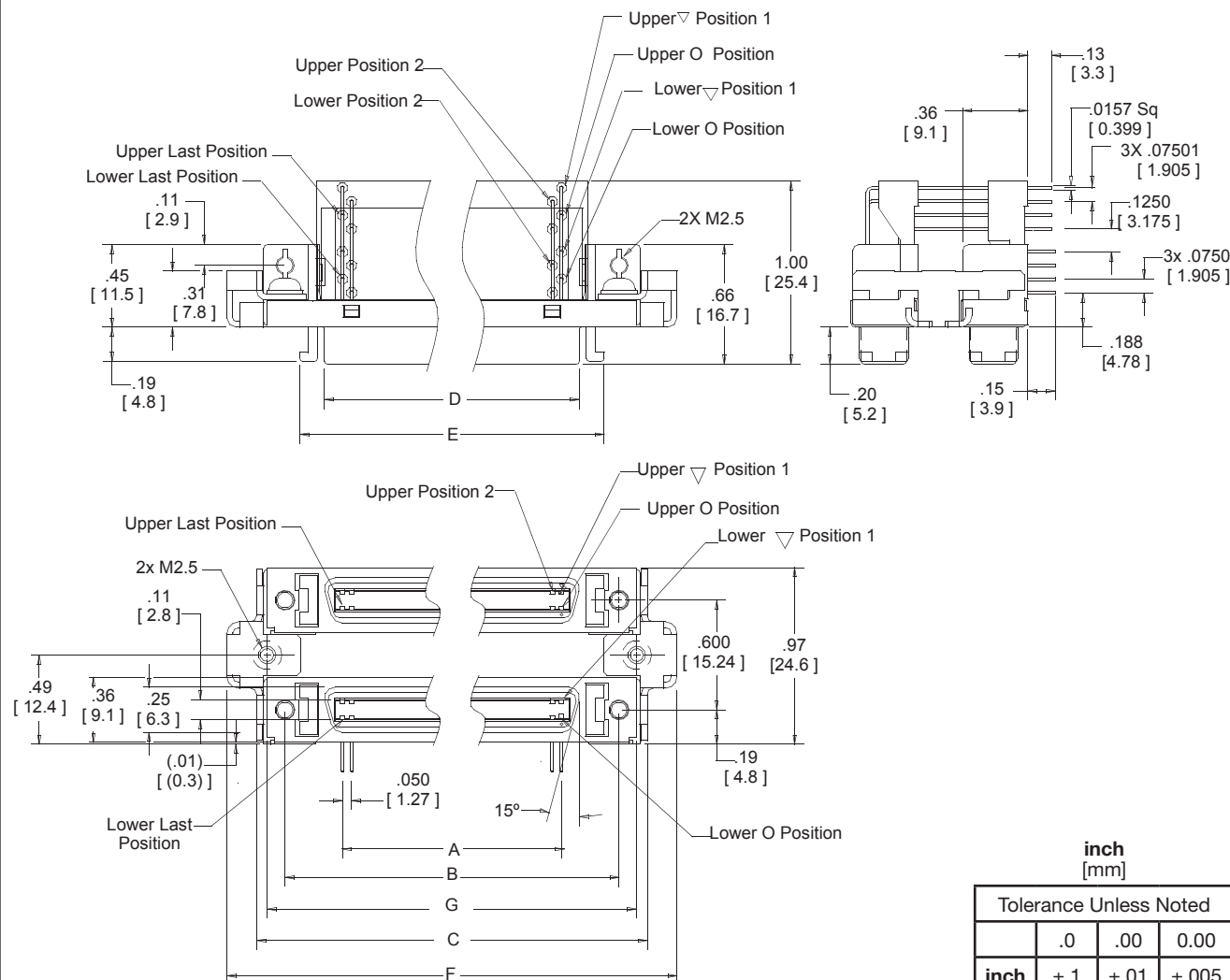
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102 Series

Contact Quantity	Dimensions						
	A	B	C	D	E	F	G
20	0.450 [11.43]	1.08 [27.5]	1.41 [35.8]	0.65 [16.4]	0.92 [23.4]	1.74 [44.2]	1.276 [32.4]
50	1.200 [30.48]	1.831 [46.5]	2.17 [55.0]	1.40 [35.5]	1.67 [42.4]	2.47 [62.7]	2.03 [51.5]
68	1.650 [41.91]	2.281 [57.93]	2.61 [66.4]	1.85 [46.9]	2.12 [53.8]	2.92 [74.1]	2.48 [62.9]



inch  
[mm]

Tolerance Unless Noted			
	.0	.00	0.00
inch	±.1	±.01	±.005

[ ] Dimensions for  
Reference Only



## Ordering Information

**102XX - M218PE**

Contact Quantity: \_\_\_\_\_  
 20 - 2 × 20 = 40 Contacts  
 50 - 2 × 50 = 100 Contacts  
 68 - 2 × 68 = 136 Contacts

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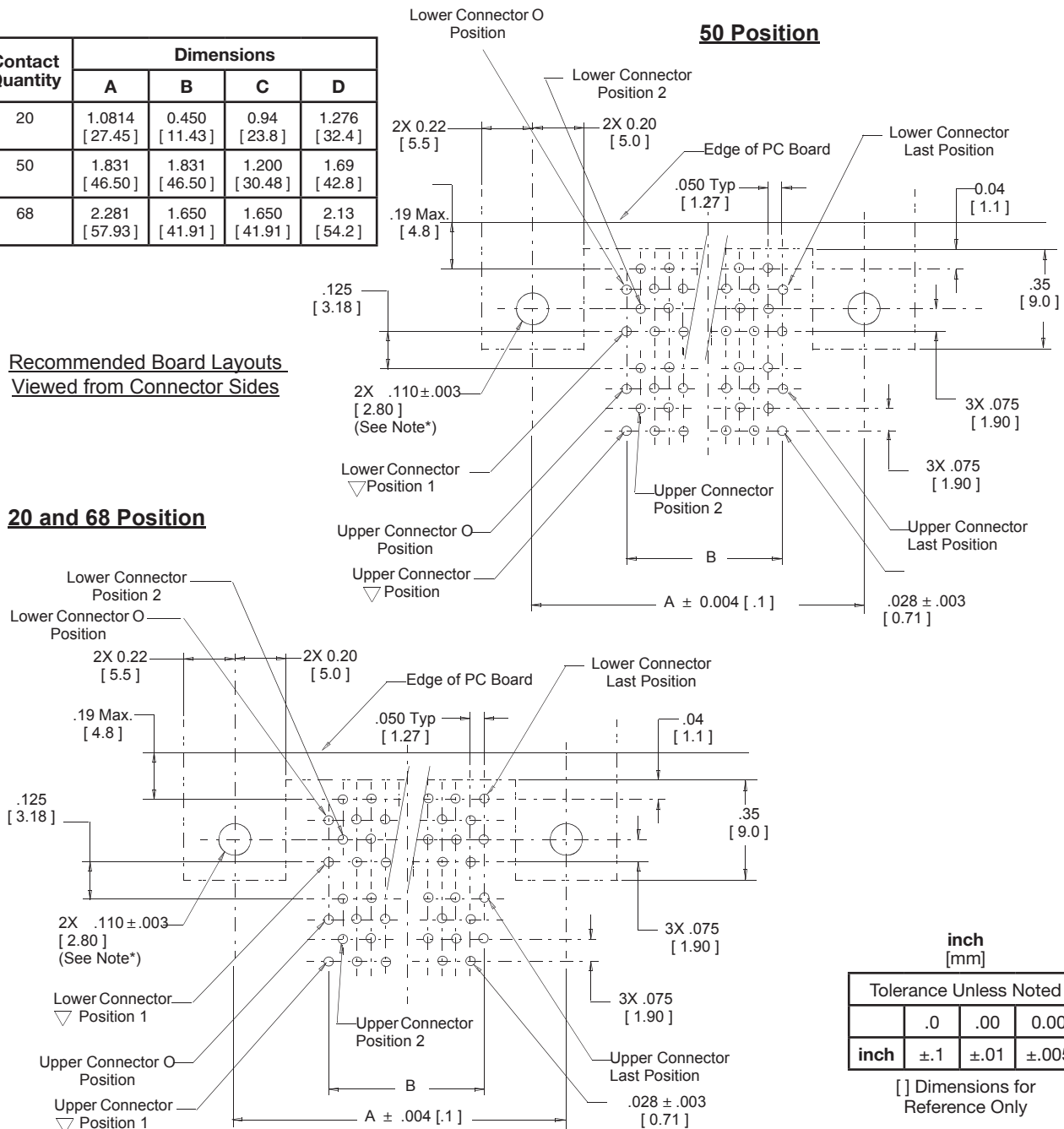
.050" Boardmount Through-Hole R. A. Condo Receptacle – Shielded

102 Series

Contact Quantity	Dimensions			
	A	B	C	D
20	1.0814 [ 27.45]	0.450 [ 11.43]	0.94 [ 23.8]	1.276 [ 32.4]
50	1.831 [ 46.50]	1.831 [ 46.50]	1.200 [ 30.48]	1.69 [ 42.8]
68	2.281 [ 57.93]	1.650 [ 41.91]	1.650 [ 41.91]	2.13 [ 54.2]

## Recommended Board Layouts Viewed from Connector Sides

### 20 and 68 Position

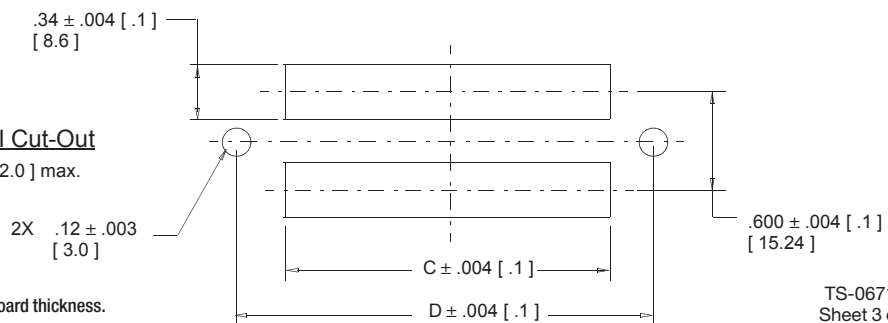


Tolerance Unless Noted			
	.0	.00	0.00
inch	±.1	±.01	±.005

[ ] Dimensions for  
Reference Only

### Recommended Panel Cut-Out

Panel thickness 0.079 [2.0] max.



Note: Plated-through mounting holes for .062 [1.57] board thickness.

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