## 3M<sup>™</sup> 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:  $40 (2 \times 20)$ ,  $100 (2 \times 50)$  and  $136 (2 \times 68)$
- Regulatory Information: Visit 3M.com/regs or contact your 3M representative to find the RoHS compliance status of the 3M part you are interested in.

Date Modified: October 24, 2019

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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

**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:** 1A

**Insulation Resistance:**  $>5 \times 10^8 \Omega$  at  $500 \, V_{DC}$ **Withstanding Voltage:**  $500 \, V_{RMS}$  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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	Contact	Dimensions						
50	Quantity	Α	В	С	D	E	F	G
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]  Upper V Position 1  Upper O Position 1  Upper O Position 1  Lower V Position 1  Lower O Position 1  Upper Last Position 1  Upper Last Position 2  Lower D Position 1  Upper O Position 1  Lower O Position 1  Upper O Position 1	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 ]
Upper Position 1  Upper V Position 1  Upper Last Position  Lower Position 1  Lower O Position 1  Upper O Position 1	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 ]
Upper Position 2 Lower Position 1 Lower O Position 1  [2.9]  45 [1.5]  1.90 [1.87]  48 [1.5]  1.90 [1.87]  1.90 [1.90]  [	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 ]
[4.8]  Upper Position 2  Upper O Position 1  Lower Position 1  [2.8]  [5.2]  Upper O Position 1  Lower Position 1  [0.3]  Lower Last Position 1  Lower O Position 1  [0.3]  Lower O Position inch [mm]  [mm]  Tolerance Unless Noted	Low	rer Last Position1112151531153117.8 ]	Lower Position 2—		Lower O Posi  —Lower O Posi  —2X M2.5	tion 1 tion [9	36	-0.0157 Sq [0.399] 3X.07501 [1.905] -1250 -1250 -13.175] -3x.07 -1900 -188
	.30 12.4] [9.1 	2x M2.5 .11 [2.8] .25 ] [6.3] .(.01) [(0.3)] ower Last	.050	sition 2—	Upper O Posit Lowe  .600 [15.24]	on 1 ion Position 1 .97 [24.6]	Toleranc	[mm] e Unless Noted



102XX - M218PE

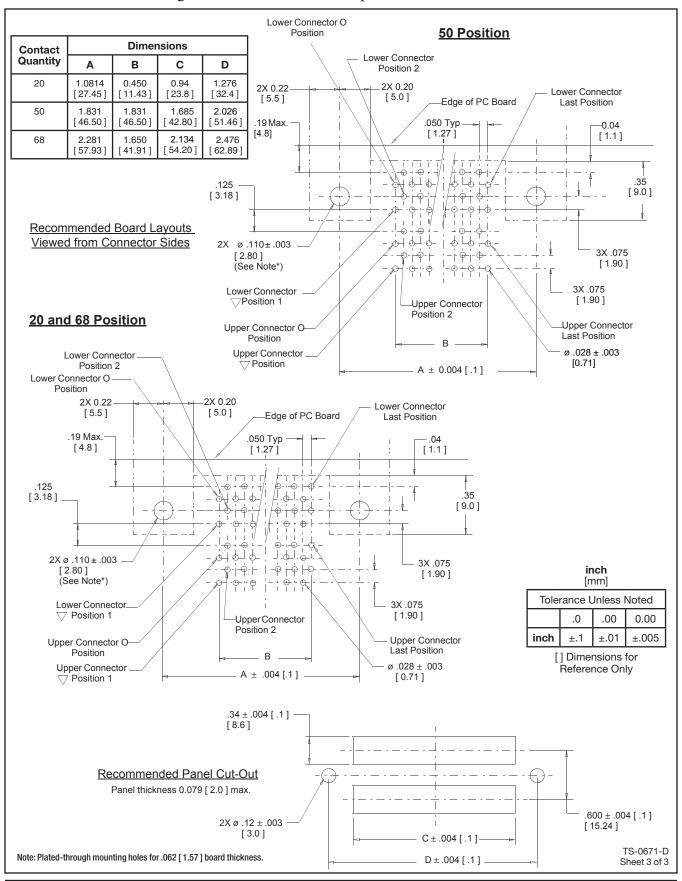
Contact Quantity:  $20 - 2 \times 20 = 40$  Contacts

 $50 - 2 \times 50 = 100 \text{ Contacts}$  $68 - 2 \times 68 = 136 \text{ Contacts}$ 

> TS-0671-D Sheet 2 of 3

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102 Series



Regulatory: For regulatory information about this product, visit 3M.com/regs or contact your 3M representative.

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