

# 3M™ Mini D Ribbon (MDR) Connectors

.050" Boardmount Through-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
- See Regulatory Information Appendix (RIA) for chemical compliance information.

Date Modified: November 26, 2007

TS-0427-B  
Sheet 1 of 3

## Physical

<b>Insulation Material:</b>	Glass Filled Polyester (PBT) or Glass Filled Polyester (PCT) - (High Temp. Option) - See ordering information
<b>Flammability:</b>	UL 94V-0
<b>Color:</b>	Black (PBT) or Beige (PCT)-High Temp. Option - See ordering information
<b>Contact Material:</b>	Copper Alloy
<b>Plating Underplating:</b>	100 $\mu$ " [ 2.5 $\mu$ m ] Nickel
<b>Wiping Area:</b>	30 $\mu$ " [ 0.76 $\mu$ m ] Min. Gold
<b>Solder Tail Plating:</b>	Gold flash over Nickel (RIA E1 & C1 apply)
<b>Body Material:</b>	Zinc Alloy
<b>Plating:</b>	Nickel
<b>Shroud &amp; Latch Hook</b>	
<b>Material:</b>	Steel
<b>Plating:</b>	Nickel
<b>Marking:</b>	3M Logo and Part Number

## Electrical

<b>Current Rating:</b>	1 A
<b>Insulation Resistance:</b>	$> 5 \times 10^8 \Omega$ at 500 V <sub>DC</sub>
<b>Withstanding Voltage:</b>	500 V <sub>RMS</sub> for 1 Minute

## Environmental

<b>Temperature Rating:</b>	-20°C to +85°C
<b>PBT Insulation Process Rating:</b>	Solder Dip Test - 260°C for 10 secs., two times after 100°C max. preheat, 60 sec. max. duration.
<b>PCT Insulation Process Rating:</b>	<b>High Temp. Option:</b> 260°C (profile per J-STD-020C)

UL File No.: E68080

# 3M™ Mini D Ribbon (MDR) Connectors

.050" Boardmount Through-Hole Vertical Receptacle - Shielded

102 Series

Contact Quantity	Dimensions				
	A	B	C	D	E
14	0.300 [ 7.62 ]	0.93 [ 23.6 ]	1.16 [ 29.5 ]	0.50 [ 12.6 ]	.77 [ 19.5 ]
20	0.450 [ 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

**X 102 XX - 62 X 2 P C**

Blank = Stand., PBT Insulator  
N = High Temp. Option, PCT Insulator

Contact Quantity  
(See Table)  
A0 = 100 pos.

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

TS-0427-B  
Sheet 2 of 3

# 3M™ Mini D Ribbon (MDR) Connectors

.050" Boardmount Through-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	
	C	D
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.

TS-0427-B  
Sheet 3 of 3