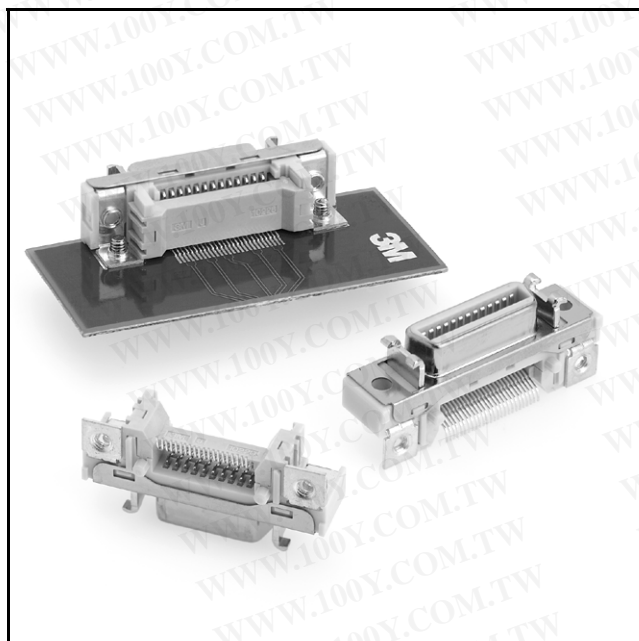


# 3M™ Mini D Ribbon (MDR) Connectors

.050" Surface Mount Right Angle Receptacle - Shielded

102 Series



- Wiper-on-wiper contact for reliable repetitive plugging
- Ultra-low signal skew for high data rate transmission
- Interface latch design for connection stability
- MDR digital LCD interface as a 20 or 26 contact connector
- Contacts: 14, 20, 26, 40 and 50
- RoHS\* compliant version (-PE plating suffix) available

Date Modified: October 21, 2005

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Sheet 1 of 3

## Physical

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

Flammability: UL 94V-0

Color: Beige

**Contact Material:** Copper Alloy (C521)

**Plating**

Underplating: 80 μ" (2.0 μm) Nickel

Wiping Area: 20 μ" (0.50 μm) Min Gold

Solder Tails: See ordering information

**Shroud & Latch Hook Material:** Steel

Plating: Nickel

**Screw Lock Material:** Copper Alloy (C521)

Plating: Tin

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

勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-54151736  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

## 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:** -55°C to +105°C

**Process:** Surface mount compatible - max. temp. 240°-250°C for 10 seconds.

\*"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated in writing by 3M, this information represents 3M's knowledge and belief based on information provided by third party suppliers to 3M.

UL File No.: E68080

**3M**

**Interconnect Solutions**

<http://www.3M.com/interconnects/>

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For technical, sales or ordering information call

**800-225-5373**

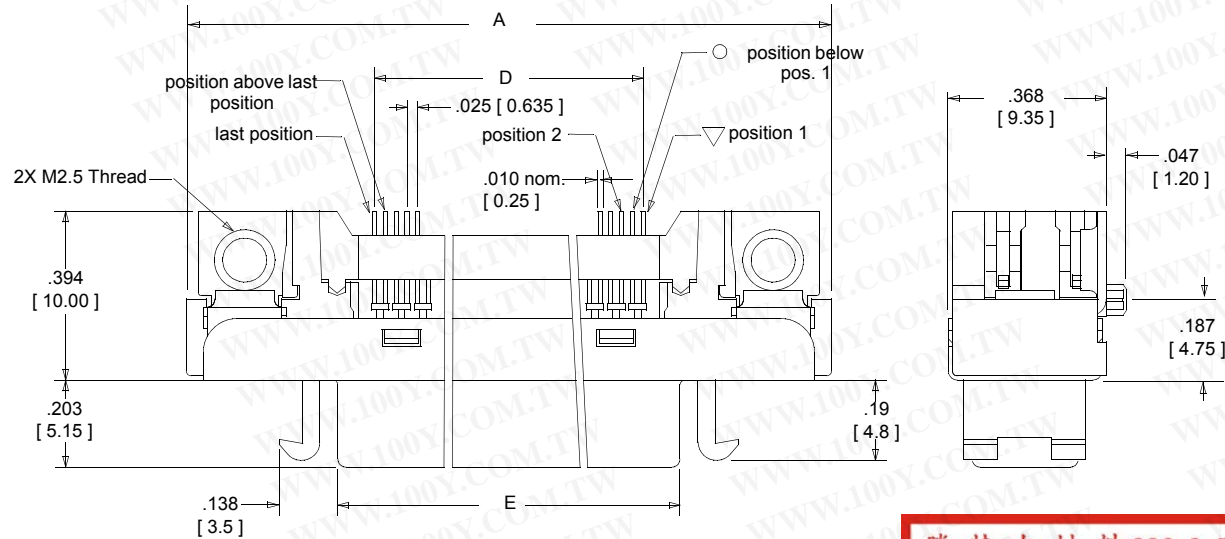
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.050" Surface Mount Right Angle Receptacle - Shielded

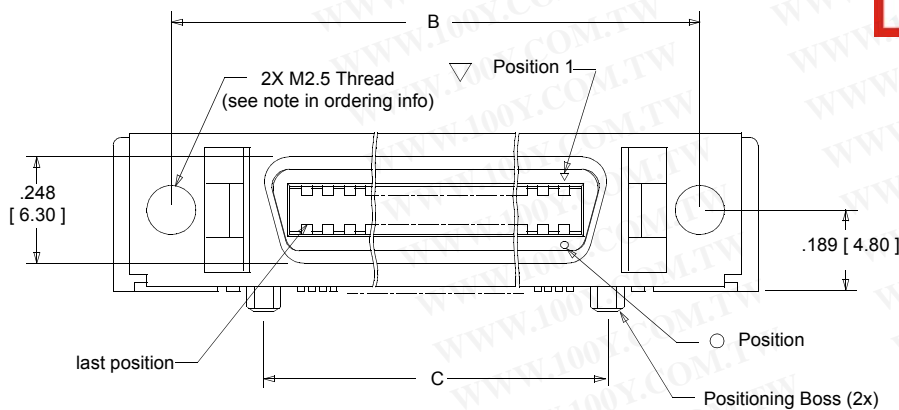
102 Series



Contact Quantity	3M Part Number	Dimensions				
		A±.008	B±.006	C±.006	D±.006	E±.006
14	10214-1210 VE	1.16 [ 29.5 ]	.93 [ 23.64 ]	.47 [ 12.70 ]	.33 [ 8.26 ]	.50 [ 12.6 ]
20	10220-1210 VE	1.32 [ 33.4 ]	1.081 [ 27.45 ]	.650 [ 16.51 ]	.475 [ 12.07 ]	.646 [ 16.4 ]
26	10226-1210 VE	1.50 [ 38.2 ]	1.231 [ 31.26 ]	.800 [ 20.32 ]	.625 [ 15.88 ]	.795 [ 20.2 ]
40	10240-1210 VE	1.85 [ 47.1 ]	1.581 [ 40.15 ]	1.150 [ 29.21 ]	.975 [ 24.77 ]	1.150 [ 29.2 ]
50	10250-1210 VE	2.06 [ 52.4 ]	1.831 [ 46.50 ]	1.400 [ 35.56 ]	1.225 [ 31.12 ]	1.40 [ 35.5 ]



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Inch [mm]			
Tolerance Unless Noted			
.0	.00	.000	
inch	±.1	±.01	±.005

[ ] Dimensions for Reference Only

## Ordering Information

102XX-1210XE

Contact Quantity  
(See Table)

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

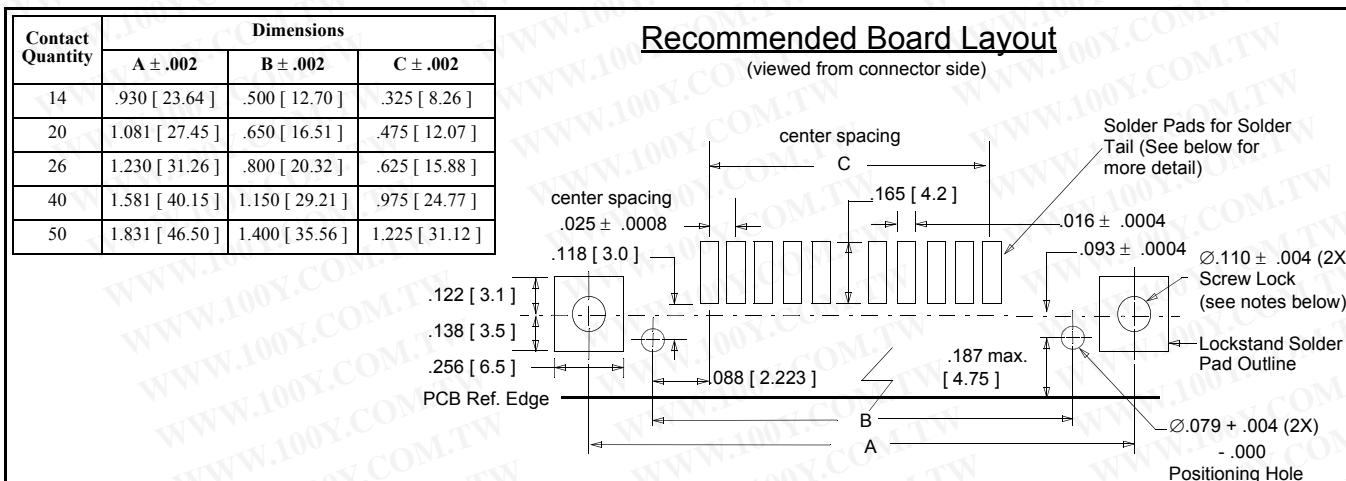
Note: Use (M2.5x8 mm) screws to mount to panel with max. thickness of 2.0 mm.

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 Sheet 2 of 3

# 3M™ Mini D Ribbon (MDR) Connectors

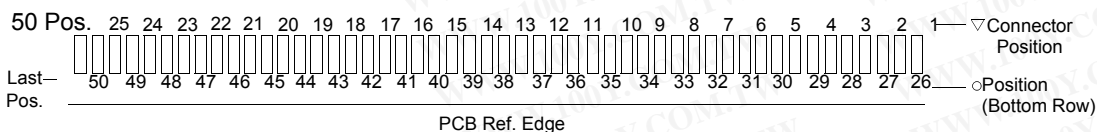
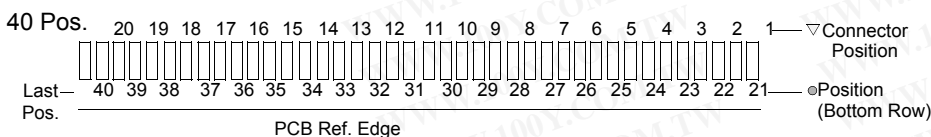
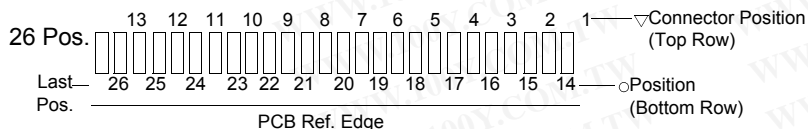
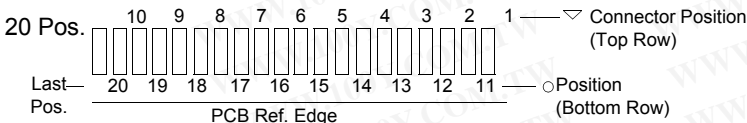
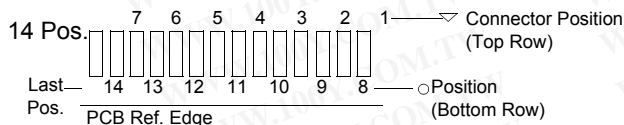
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102 Series



## Solder Tail Layout Detail

(#'s Correspond to Connector Contact # Shown on Previous Page)



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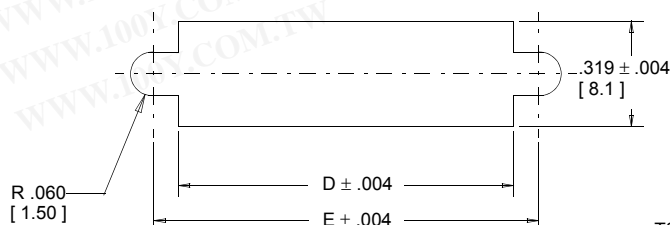
Contact Quantity	D	E
14	1.10 [ 19.9 ]	.931 [ 23.64 ]
20	.94 [ 23.8 ]	1.081 [ 27.45 ]
26	1.09 [ 27.6 ]	1.231 [ 31.26 ]
40	1.44 [ 36.5 ]	1.581 [ 40.15 ]
50	1.69 [ 42.8 ]	1.830 [ 46.50 ]

\*\*Notes:

1. Plated through holes for .062" board thickness.
2. Use mounting screws ( M2.5 ) to fasten to board.

## Recommended Panel Cut-out

Note: Panel thickness .079 [ 2.00 ] Max.



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 Sheet 3 of 3

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