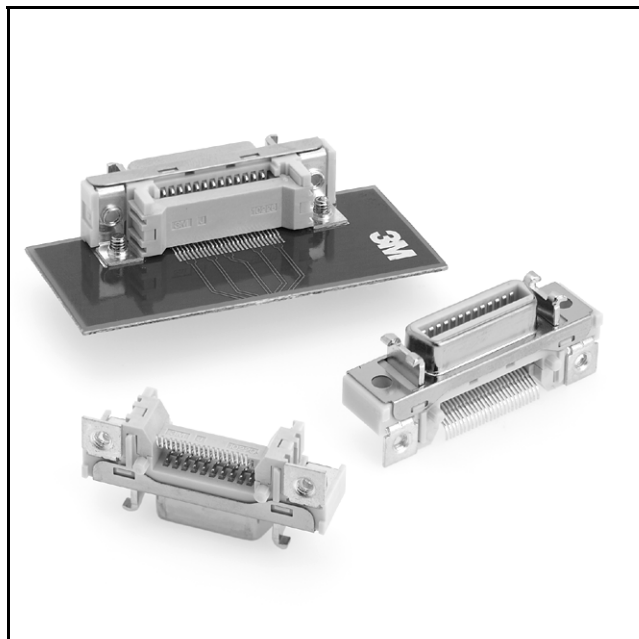


3M™ Mini D Ribbon (MDR) Connectors

.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

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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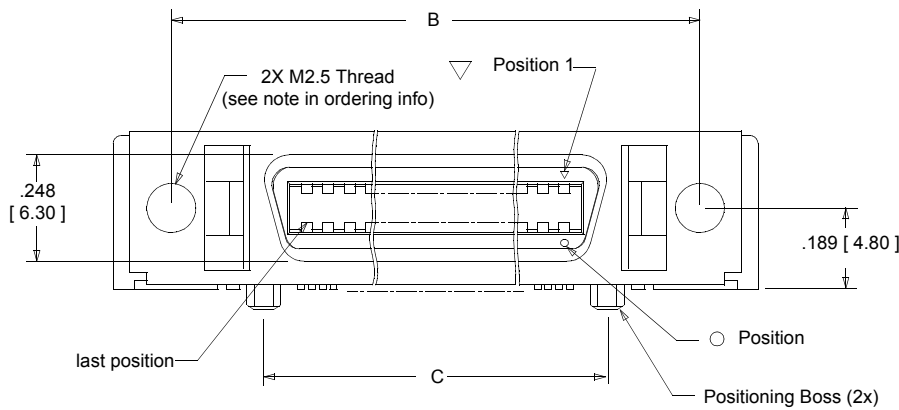
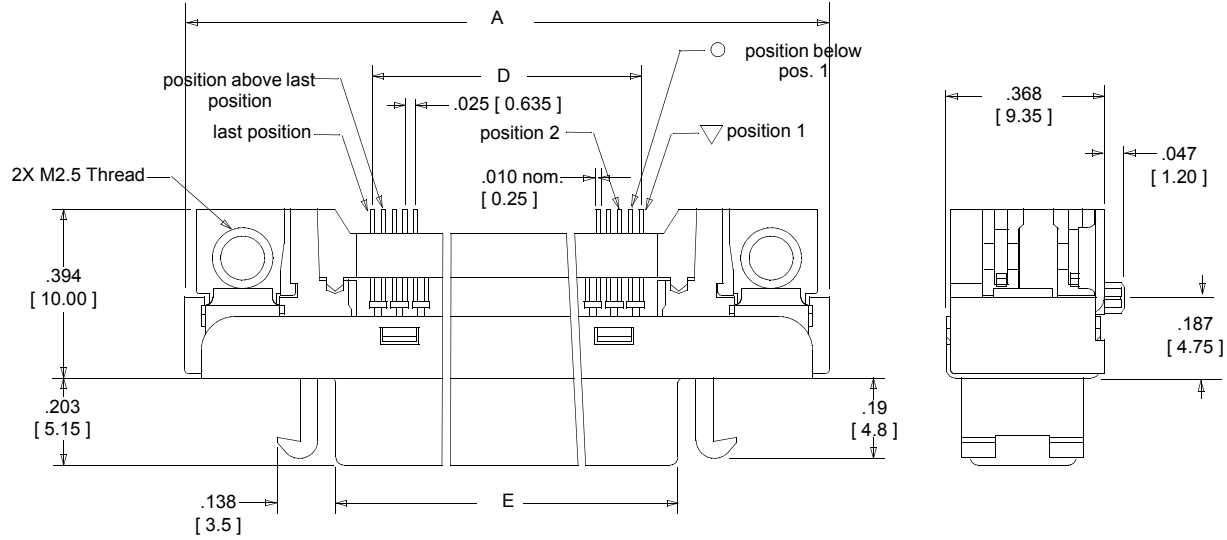
3M™ Mini D Ribbon (MDR) Connectors

.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]



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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3M™ Mini D Ribbon (MDR) Connectors

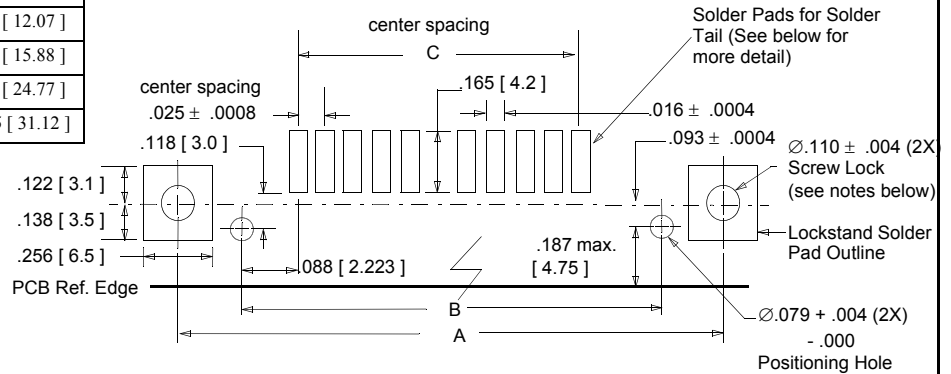
.050" Surface Mount Right Angle Receptacle - Shielded

102 Series

Contact Quantity	Dimensions		
	A ± .002	B ± .002	C ± .002
14	.930 [23.64]	.500 [12.70]	.325 [8.26]
20	1.081 [27.45]	.650 [16.51]	.475 [12.07]
26	1.230 [31.26]	.800 [20.32]	.625 [15.88]
40	1.581 [40.15]	1.150 [29.21]	.975 [24.77]
50	1.831 [46.50]	1.400 [35.56]	1.225 [31.12]

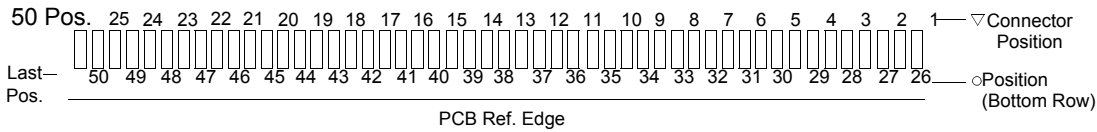
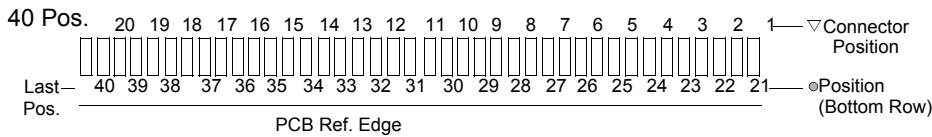
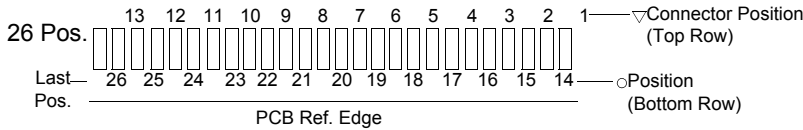
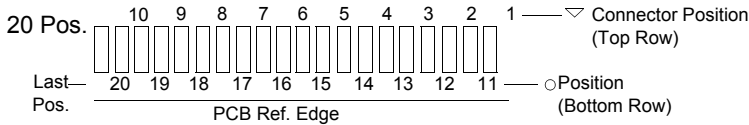
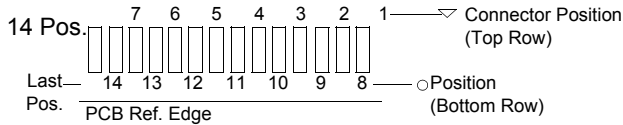
Recommended Board Layout

(viewed from connector side)



Solder Tail Layout Detail

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

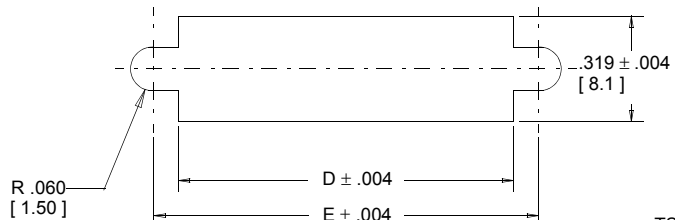


Contact Quantity	D	E
14	1.10 [19.9]	.931 [23.64]
20	.94 [23.8]	1.081 [27.45]
26	1.09 [27.6]	1.231 [31.26]
40	1.44 [36.5]	1.581 [40.15]
50	1.69 [42.8]	1.830 [46.50]

- **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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