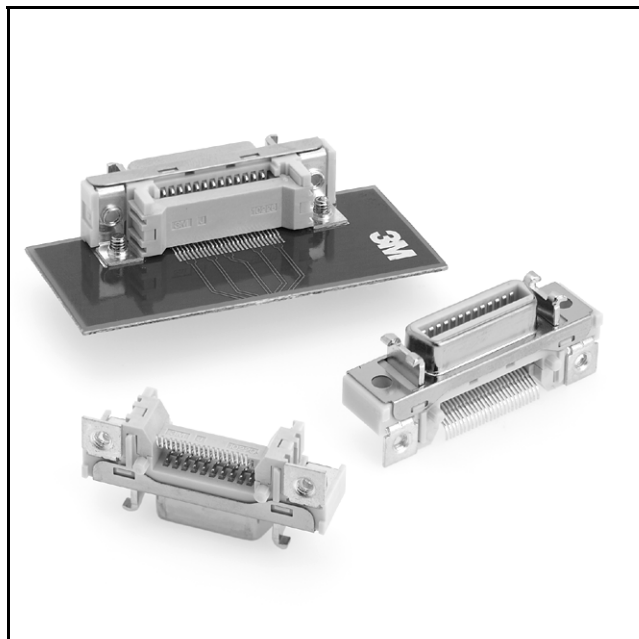


3M™ Mini D Ribbon (MDR) Connectors

.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: April 5, 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 μ m) Nickel - QQ-N-290, Class 2
Wiping Area: 30 μ " (0.76 μ m) Min Gold - MIL-G-45204, Type II, Grade C
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.

UL File No.: E68080 *RoHS = Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

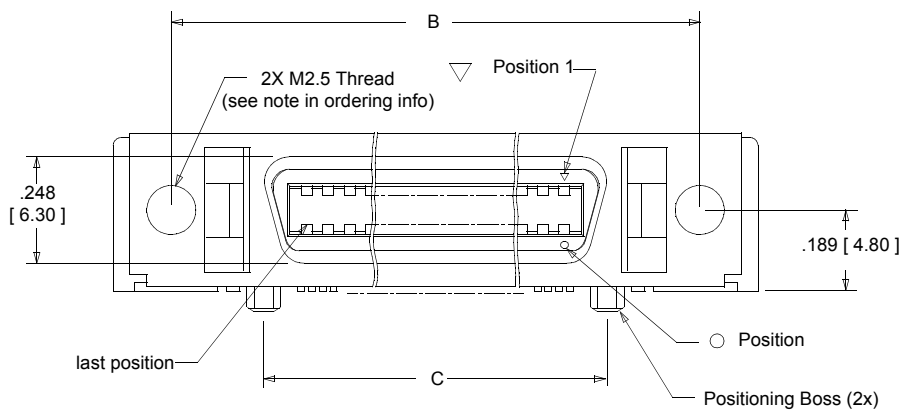
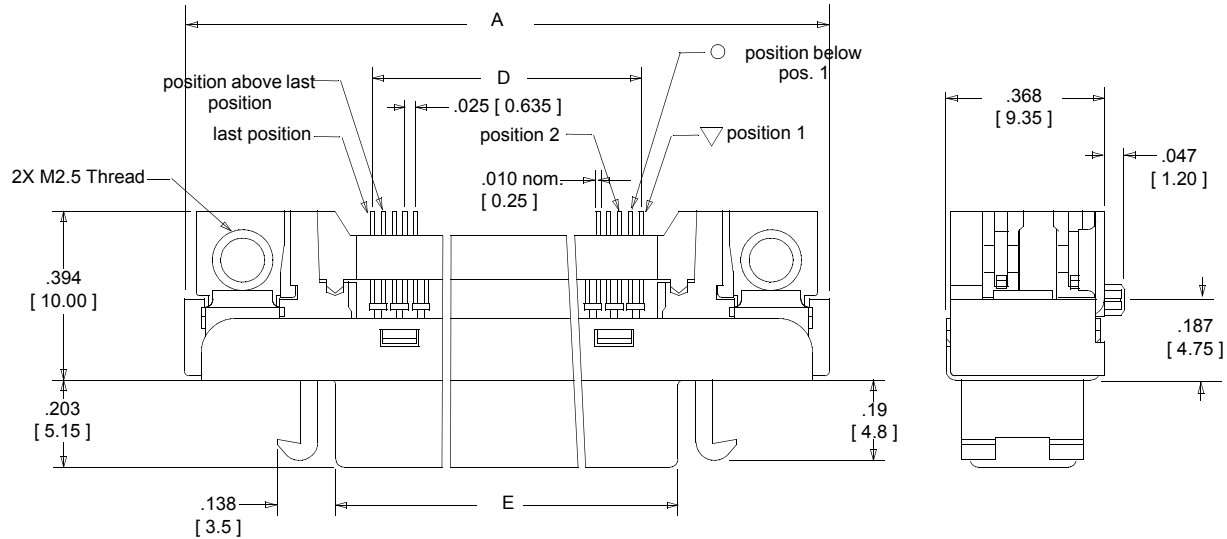
3M™ Mini D Ribbon (MDR) Connectors

.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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Sheet 2 of 3

3M™ Mini D Ribbon (MDR) Connectors

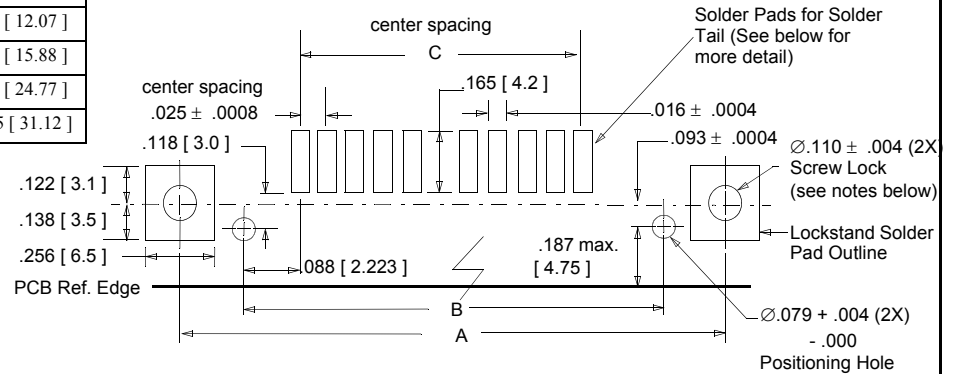
.050" Surface Mount Right Angle Receptacle - Shielded

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]

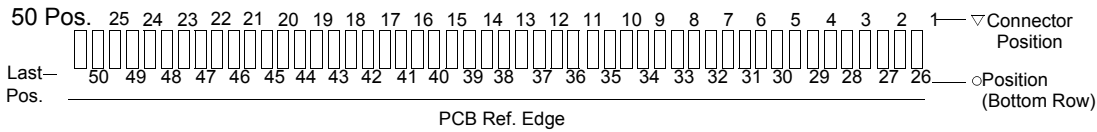
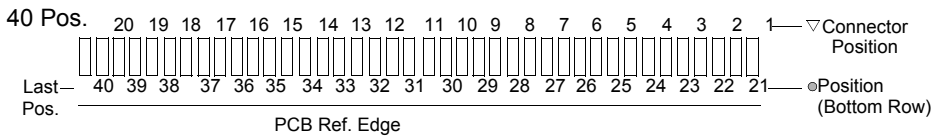
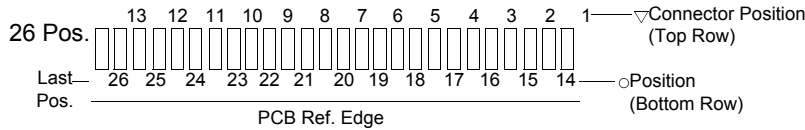
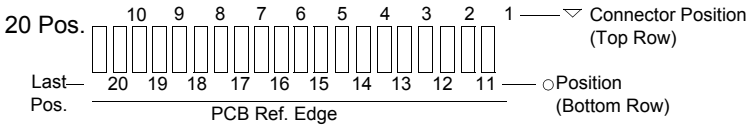
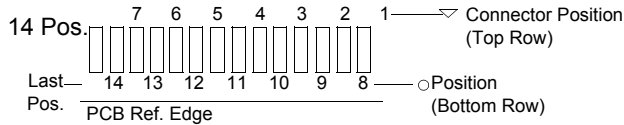
Recommended Board Layout

(viewed from connector side)



Solder Tail Layout Detail

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



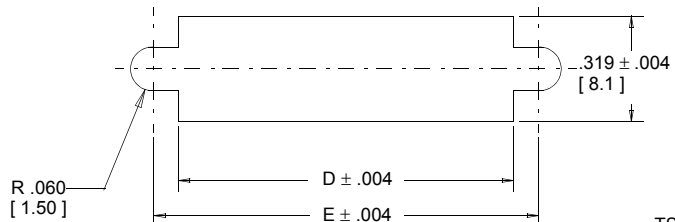
Contact Quantity	D	E
14	1.10 [19.9]	.931 [23.64]
20	.94 [23.8]	1.081 [27.45]
26	1.09 [27.6]	1.231 [31.26]
40	1.44 [36.5]	1.581 [40.15]
50	1.69 [42.8]	1.830 [46.50]

**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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