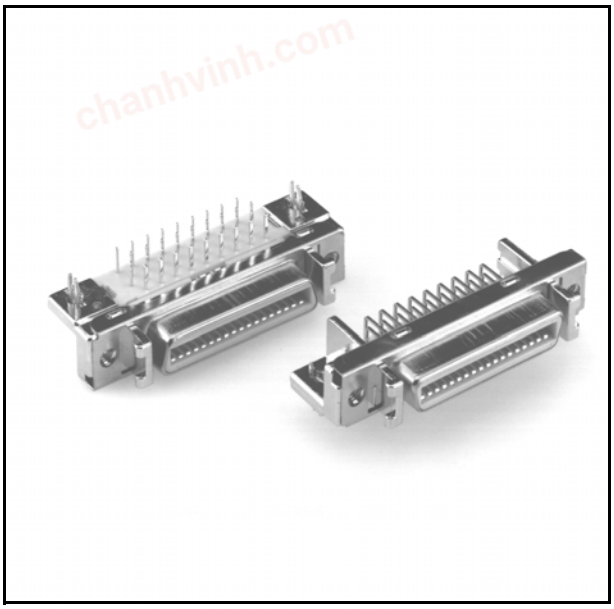
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3M™ Mini D Ribbon (MDR) Connectors

.050″ Boardmount Thru-Hole Right Angle Receptacle-Shielded 102 Series



- Wiper-on-wiper contact for reliable repetitive plugging
- Rugged die cast metal case construction
- SMT compatible PCT insulator material
- Screw or ground lock 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
- RoHS* compliant version (-PC 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 µm) Nickel - QQ-N-290, Class 2
Wiping Area:	30 µ″ (0.76 µm) Min Gold - MIL-G-45204, Type II, Grade C
Solder Tail Plating:	See ordering information
Body	
Material:	Zinc Alloy
Plating:	Nickel
Shroud & Latch Hook	
Material:	Steel
Plating:	Nickel
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 Rating:	Reflow solder process compatible up to 240-250°C for 10 sec.

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

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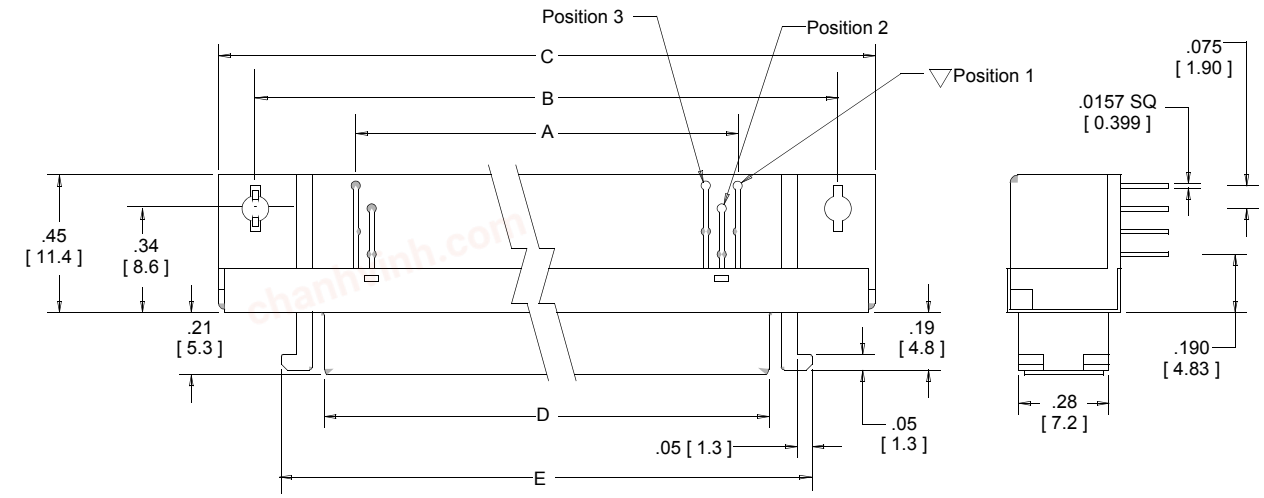
.050″ Boardmount Thru-Hole Right Angle Receptacle-Shielded 102 Series

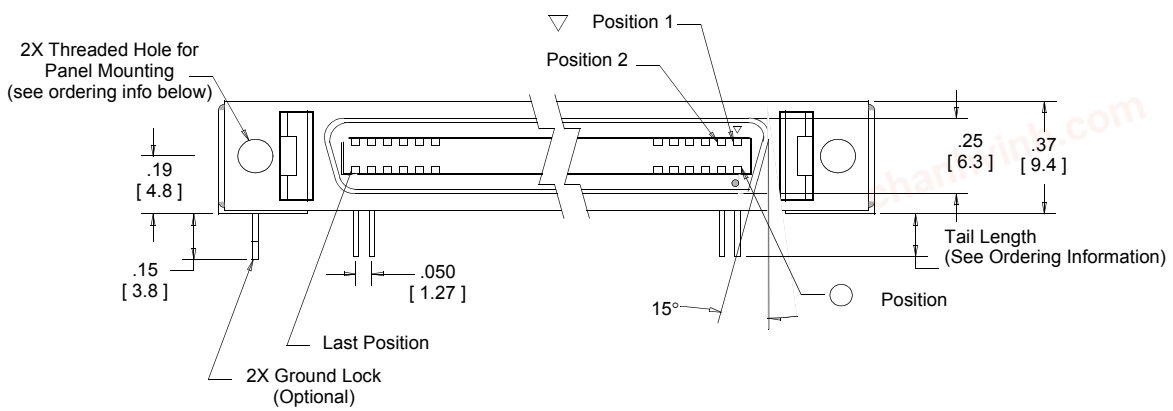
Contact Quantity	Dimensions				
	A	B	C	D	E
14	0.300 [7.62]	0.93 [23.6]	1.16 [29.5]	0.50 [12.6]	0.77 [19.5]
20	0.450 [11.43]	1.08 [27.5]	1.31 [33.4]	0.65 [16.4]	0.92 [23.4]
26	0.600 [15.24]	1.23 [31.3]	1.46 [37.2]	0.80 [20.2]	1.07 [27.2]
36	0.850 [21.59]	1.48 [37.6]	1.71 [43.5]	1.05 [26.6]	1.32 [33.5]
40	0.950 [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]

Inch
[mm]

Tolerance Unless Noted			
	.0	.00	.000
inch	±.1	±.01	±.005

[ ] Dimensions for Reference Only





Ordering Information

N102XX-52XXXC

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

Contact Quantity
(See Table)
A0 = 100 pos.

Tail Length
2 = .15 [3.9] (Standard)
3 = .11 [2.8] (Special Order)

Panel/Board Retention Features
Contacts 14-40: 1 = M2.5 panel/M2.5 screw lock
B = M2.5 panel/ground lock
G = M2.5 panel / with .086 [2.2] ground lock (Special Order see note)
Contacts 50-100: 4 = 4-40 panel/4-40 screw lock
E = 4-40 panel/ground lock
G = 4-40 panel/with .086 [2.2] ground lock (Special Order see note)

Note: Option G is used with the 52X3 Tail length only.

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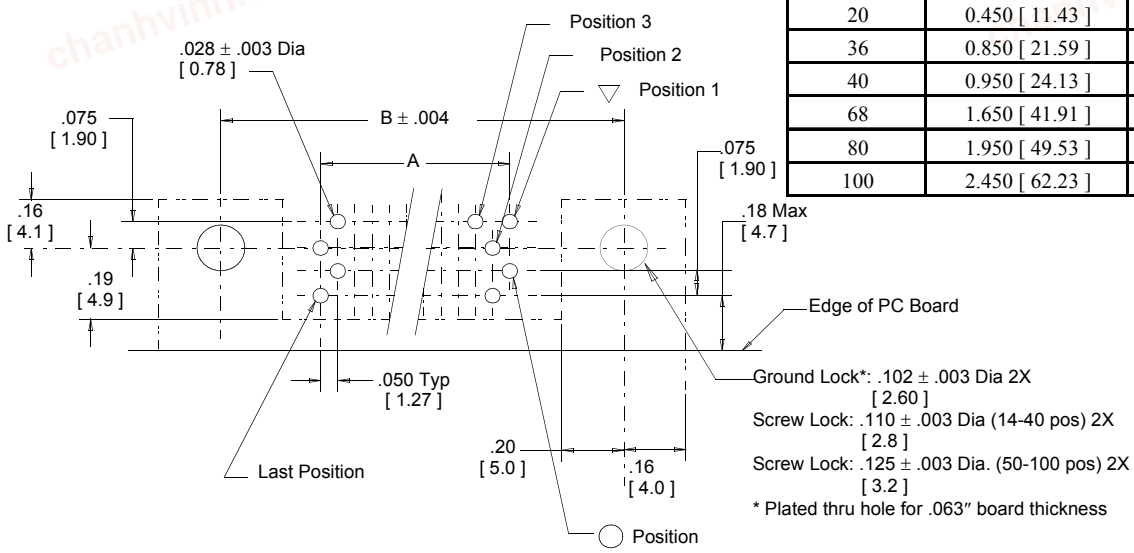
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.050″ Boardmount Thru-Hole Right Angle Receptacle-Shielded 102 Series

Recommended Board Layout

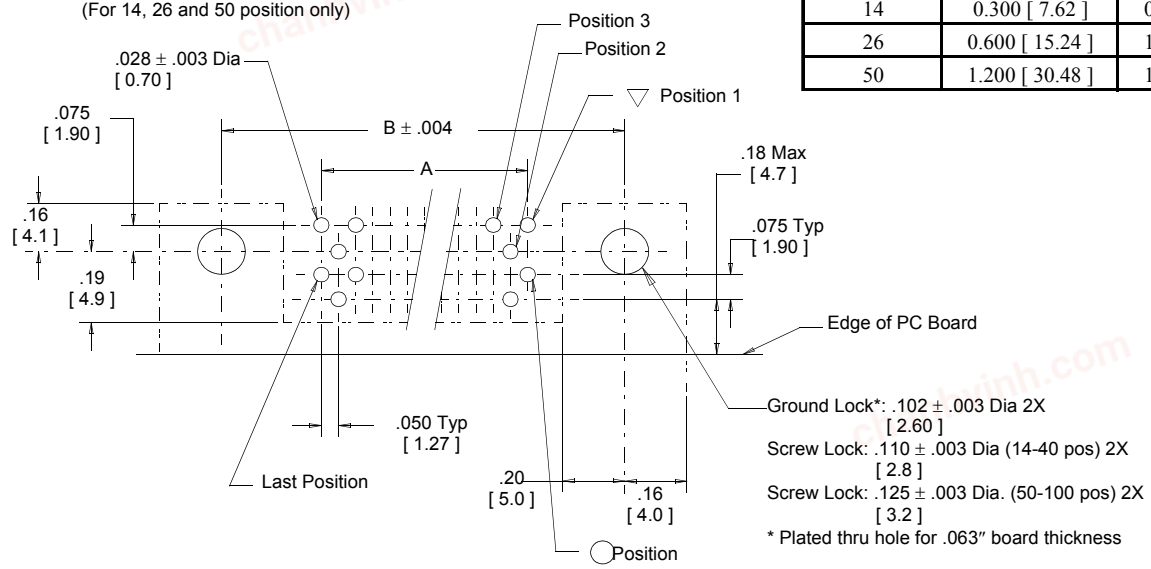
(Viewed from Connector Side for 20, 36, 40, 68, 80 and 100 position only)



Contact Quantity	Dimensions	
	A	B
20	0.450 [11.43]	1.081 [27.45]
36	0.850 [21.59]	1.481 [37.61]
40	0.950 [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]

Recommended Board Layout

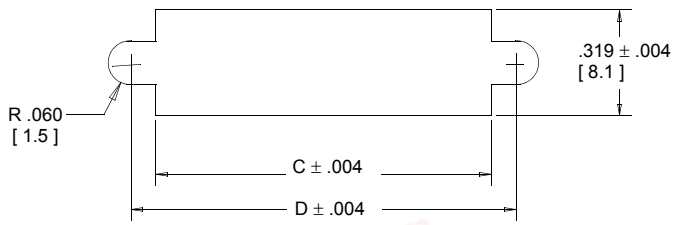
(For 14, 26 and 50 position only)



Contact Quantity	Dimensions	
	A	B
14	0.300 [7.62]	0.931 [23.64]
26	0.600 [15.24]	1.231 [31.26]
50	1.200 [30.48]	1.831 [46.50]

Recommended Panel Cut-out

Note: Panel thickness .079 [2.00] Max.



Contact Quantity	Dimensions	
	C	D
14	.78 [19.9]	.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]

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Sheet 3 of 3

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