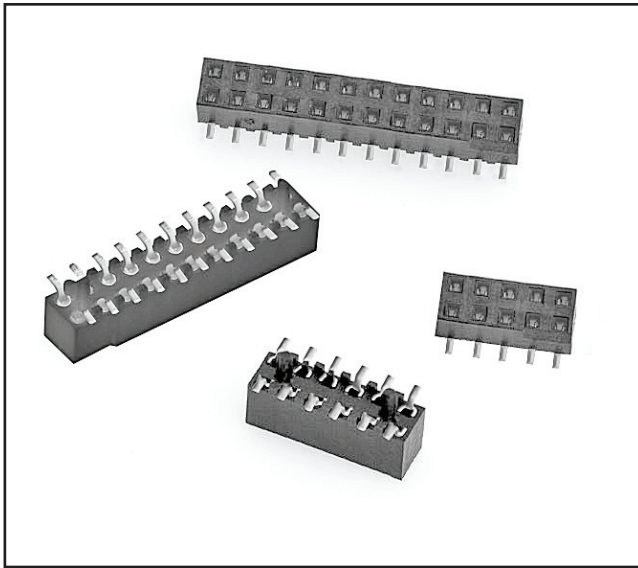


3M™ Boardmount Socket

2 mm x 2 mm Straight Surface Mount, Straight and Right Angle Plated Through-Hole 1502 Series



- High Temperature Insulator
- Reflow Solder Compatible
- Low height helps minimize PCB stack height
- End Stackable
- Thru-hole versions are side stackable
- SMT parts are available in tape and reel pack with vacuum cap for automated placement applications
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3mconnector.com for compliance information (RIA E1 & C1 apply)

Date Modified: July 5, 2010

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Physical

Insulator:

Surface Mount: Glass Filled LCP
Vertical Thru-Hole: Glass filled PCT
Right Angle Thru-Hole: Glass filled PCT

Contact:

Material: Copper alloy

Plating:

Underplating: 1.27-3.81 μm [50-150 $\mu\text{''}$] Nickel overall
Wiping Area: 0.76 μm [30 $\mu\text{''}$] Gold
Solder Tails: 5.1 μm [200 $\mu\text{''}$] Matte tin or tin-lead (refer to ordering information)

Marking: Orientation delta and 3M Logo (except surface mount)

Electrical

Current Rating: 1 A

Insulation Resistance: $> 1 \times 10^9 \Omega$ at 250 V_{DC}

Withstanding Voltage: 500 V_{DC} at Sea Level

Environmental

Temperature Rating: -55°C to +105°C

Process Rating: Maximum 260°C, (per J-STD-020C)

Moisture Sensitivity Level: 1 (per J-STD-020C)

UL File No.: E68080

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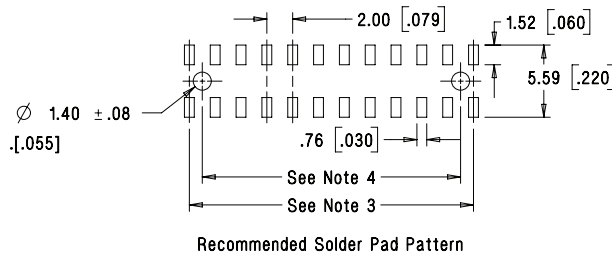
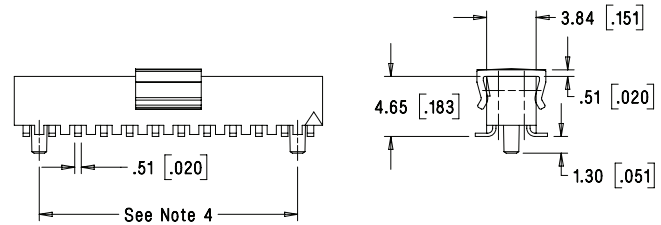
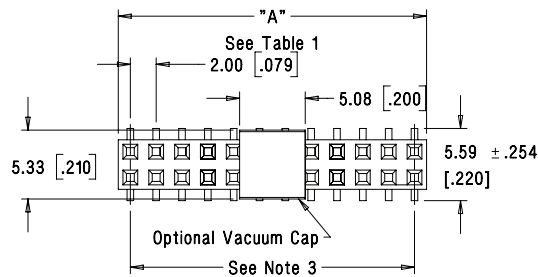
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3M™ Boardmount Socket

2 mm x 2 mm Straight Surface Mount, Straight and Right Angle Plated Through-Hole 1502 Series

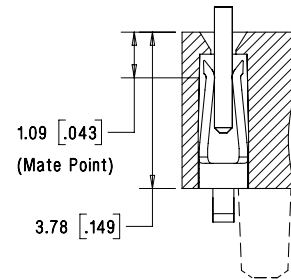


Table 1			
Contact Quantity	Dimension A	Tape Width	Order Code
04	3.96 [0.156]	n/a	n/a
06	5.87 [0.231]	n/a	n/a
08	7.87 [0.310]	24 mm	WB
10	9.88 [0.389]	24 mm	WB
12	11.86 [0.467]	24 mm	WB
14	13.87 [0.546]	24 mm	WB
16	15.88 [0.625]	24 mm	WB
18	17.88 [0.704]	44 mm	WD
20	19.86 [0.782]	44 mm	WD
22	21.87 [0.861]	44 mm	WD
24	23.88 [0.940]	44 mm	WD
26	25.88 [1.019]	44 mm	WD
28	27.86 [1.097]	44 mm	WD
30	29.87 [1.176]	44 mm	WD
32	31.88 [1.255]	56 mm	WE
34	33.88 [1.334]	56 mm	WE
36	35.86 [1.412]	56 mm	WE
38	37.87 [1.491]	56 mm	WE
40	39.88 [1.570]	56 mm	WE
42	41.88 [1.649]	56 mm	WE
44	43.87 [1.727]	72 mm	WF
46	45.87 [1.806]	72 mm	WF
48	47.88 [1.885]	72 mm	WF
50	49.89 [1.964]	72 mm	WF
52	51.87 [2.042]	72 mm	WF
54	53.87 [2.121]	72 mm	WF
56	55.88 [2.200]	72 mm	WF
58	57.86 [2.278]	88 mm	WG
60	59.87 [2.357]	88 mm	WG



Tolerance Unless Noted		
mm	[Inch]	
.0	.00	
mm	± 2.54	± .127

[] Dimensions for Reference only



Note: Mate point same for all board mount types.

Notes:

1. Tape & reel include vacuum pick-up cap for pick 'n place handling equipment.
2. Parts in tray packaging are supplied without vacuum cap.
3. Positions per row, subtract 1, multiply by 2 mm spacing.
4. Optional locator posts: Positions per row, multiply by 2 mm, then subtract 4 mm.

**Optional Locator Posts available for positions eight and greater.

Ordering Information

1502XX-20X0-XX-XX

Number of positions
(See Table 1)

Board Location Post
0 = None (Standard)
2 = With board location post
(Special order)

Plating suffix:
RB = 0.76 μm [30 μ"] Gold with matte tin solder tails (RIA E1 & C1 apply)
TB = 0.76 μm [30 μ] Gold with tin-lead solder tails (RIA E3 & C2 apply)

Packaging style:
Blank = tray packaging
WX = tape & reel pkg (see Table 1 for ordering code)

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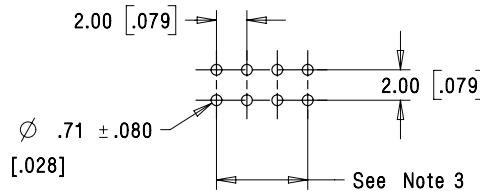
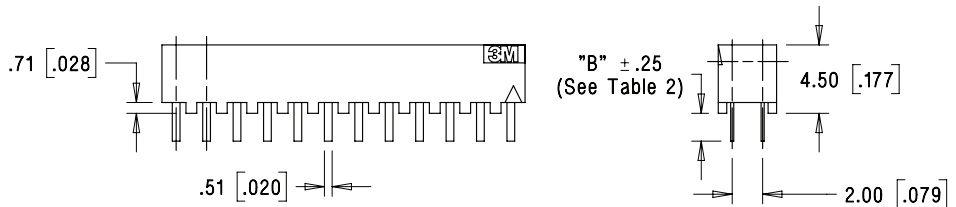
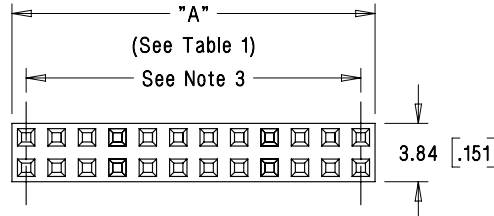
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3M™ Boardmount Socket

2 mm x 2 mm Straight Surface Mount, Straight and Right Angle Plated Through-Hole 1502 Series



Contact Quantity	Dimension A
04	3.96 [0.156]
06	5.87 [0.231]
08	7.87 [0.310]
10	9.88 [0.389]
12	11.86 [0.467]
14	13.87 [0.546]
16	15.88 [0.625]
18	17.88 [0.704]
20	19.86 [0.782]
22	21.87 [0.861]
24	23.88 [0.940]
26	25.88 [1.019]
28	27.86 [1.097]
30	29.87 [1.176]
32	31.88 [1.255]
34	33.88 [1.334]
36	35.86 [1.412]
38	37.87 [1.491]
40	39.88 [1.570]
42	41.88 [1.649]
44	43.87 [1.727]
46	45.87 [1.806]
48	47.88 [1.885]
50	49.89 [1.964]
52	51.87 [2.042]
54	53.87 [2.121]
56	55.88 [2.200]
58	57.86 [2.278]
60	59.87 [2.357]



Recommended Hole Pattern

mm [Inch]			
Tolerance Unless Noted			
	.0	.00	.000
mm	± 2.54	± .254	±

[] Dimensions for Reference only

Ordering Information

1502XX-600X-XX

Number of positions
(See Table 1)

Solder Tail Length
Dimension B
1 = .14 mm (Special order)
2 = 2.54 mm (Standard)

Plating suffix:
RB = 0.76 μm [30 μin] Gold with matte tin solder tails (RIA E1 & C1 apply)
TB = 0.76 μm [30 μin] Gold with tin-lead solder tails (RIA E3 & C2 apply)

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Sheet 3 of 4

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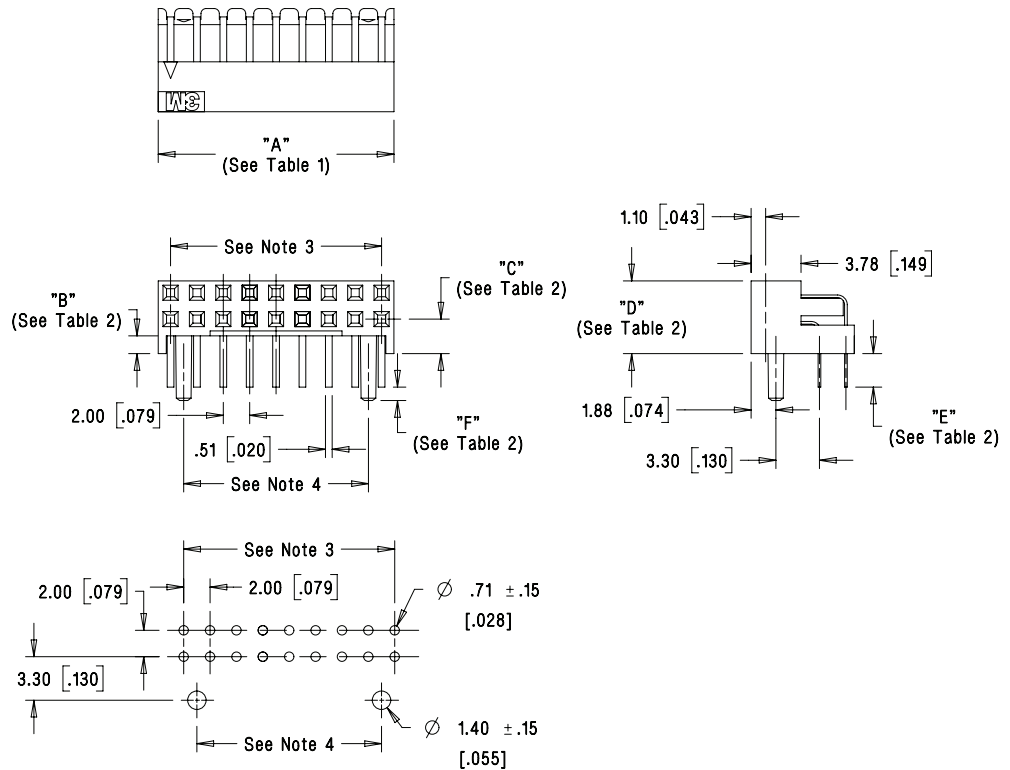
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3M™ Boardmount Socket

2 mm x 2 mm Straight Surface Mount, Straight and Right Angle Plated Through-Hole 1502 Series



Contact Quantity	Dimension A
08	7.87 [0.310]
10	9.88 [0.389]
12	11.86 [0.467]
14	13.87 [0.546]
16	15.88 [0.625]
18	17.88 [0.704]
20	19.86 [0.782]
22	21.87 [0.861]
24	23.88 [0.940]
26	25.88 [1.019]
28	27.86 [1.097]
30	29.87 [1.176]
32	31.88 [1.255]
34	33.88 [1.334]
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44	43.87 [1.727]
46	45.87 [1.806]
48	47.88 [1.885]
50	49.89 [1.964]
52	51.87 [2.042]
54	53.87 [2.121]
56	55.88 [2.200]
58	57.86 [2.278]
60	59.87 [2.357]



Recommended Hole Pattern

Standoff Height Code	Dimensions				
	B	C	D	E	F
0	.015 [0.38]	.065 [1.65]	.179 [4.55]	.100 [2.54]	.040 [1.02]
1	.053 [1.35]	.103 [2.62]	.217 [5.51]	.100 [2.54]	.040 [1.02]
2	.028 [0.71]	.078 [1.98]	.192 [4.88]	.125 [3.18]	.015 [0.38]

mm [Inch]		
Tolerance Unless Noted		
	.0	.00
mm	± 2.54	$\pm .254$
		$\pm .127$

[] Dimensions for Reference only

Ordering Information

1502XX-5XX2-XX

Number of positions
(See Table 1)

Standoff Height Code
(see table 2, Dim B)
0 = 0.38 mm (Standard)
1 = 1.135 mm (Special order)
2 = 0.71 mm (Special order -
Avail. for 40, 44 and 50
position only)

Plating suffix:

RB = 0.76 μ m [30 μ "] Gold with matte tin solder tails
(RIA E1 & C1 apply)
TB = 0.76 μ m [30 μ "] Gold with tin-lead solder tails
(RIA E3 & C2 apply)

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