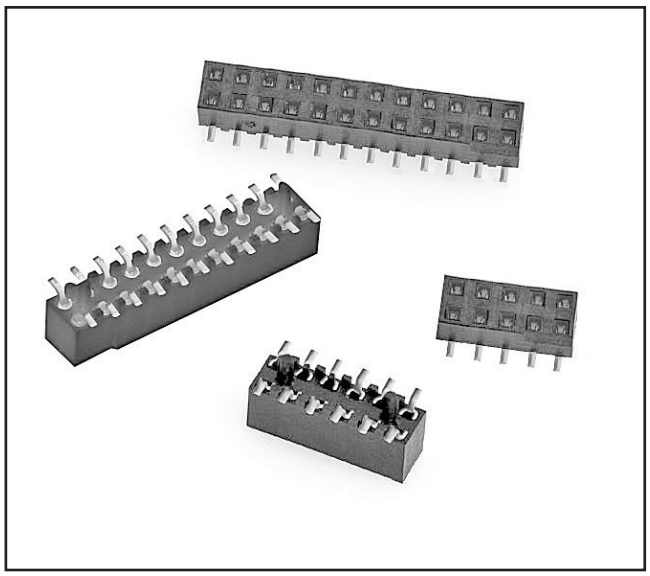
3M™ Boardmount Socket

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.3mconnectors.com for compliance information (RIA E1 & C1 apply)

Date Modified: February 24, 2014

Physical

Insulation:	
Material:	High Temperature Thermoplastic
Contact:	
Material:	Copper alloy
Plating:	
Underplating:	1.27-3.8 1 µm [50-150 µ"] Nickel overall
Wiping Area:	0.76 µm [30 µ"] Gold
Solder Tails:	5.1 µm [200 µ"] Matte tin (RIA E1 & C1 apply)
Marking:	Orientation delta and 3M Logo (except surface mount)

Electrical

Current Rating:	1 A
Voltage Rating:	150 V_{AC} per EIA-364-20
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)

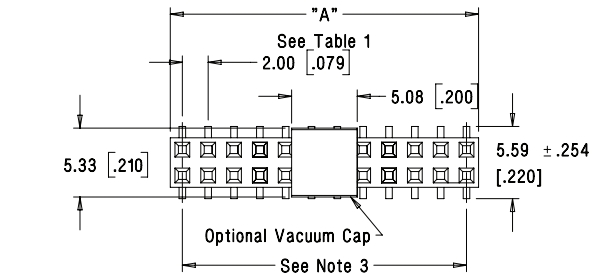
UL File No.: E68080

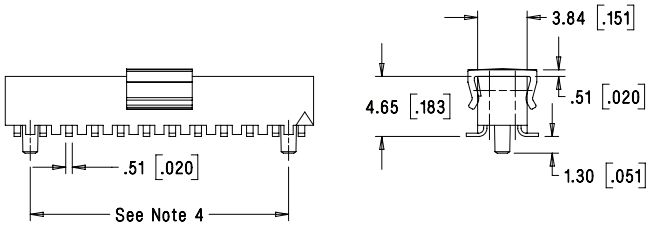
3M is a trademark of 3M Company.

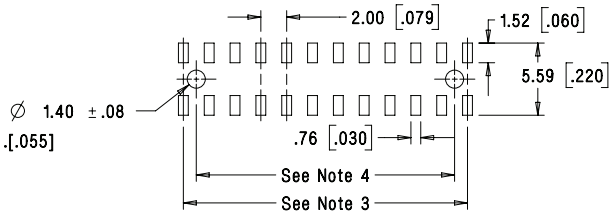
3M™ Boardmount Socket

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





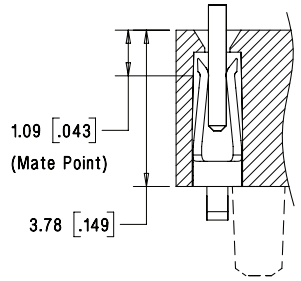


Recommended Solder Pad Pattern

mm
[Inch]

Tolerance Unless Noted			
	.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-RB-XX

- XX (first): Number of positions (See Table 1)
- X: Board Location Post
  - 0 = None (Standard)
  - 2 = With board location post (Special order)
- XX (last): Packaging style:
  - Blank = tray packaging
  - WX = tape & reel pkg (see Table 1 for ordering code)

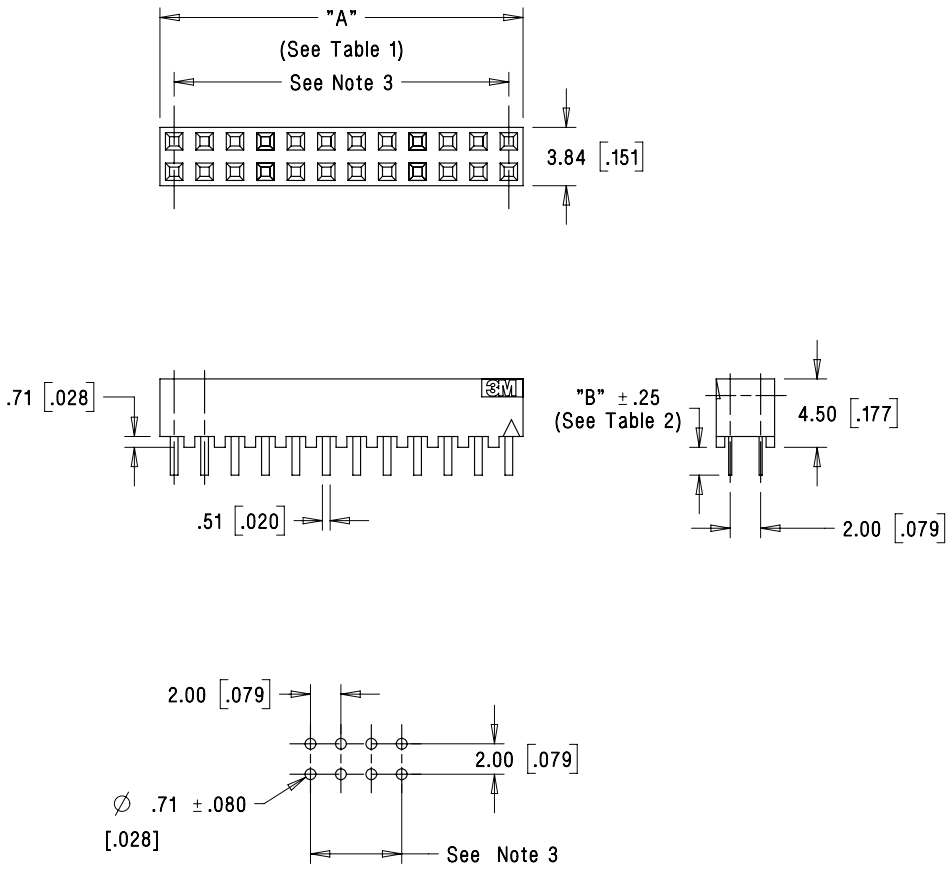
3M
Electronic Solutions Division
Interconnect Solutions
http://www.3Mconnectors.com

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

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
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-RB

Number of positions
(See Table 1)

Solder Tail Length
Dimension B
1 = .1.4 mm (Special order)
2 = 2.54 mm (Standard)

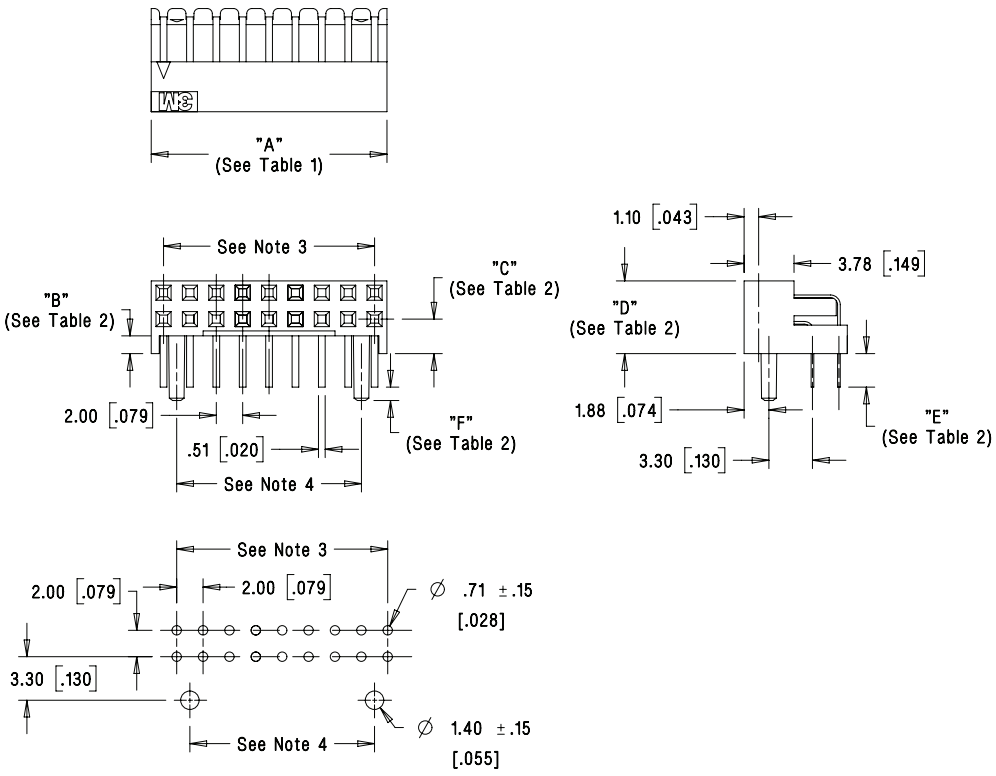
3M
Electronic Solutions Division
Interconnect Solutions
http://www.3Mconnectors.com

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

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
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

Table 2					
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	.000
mm	± 2.54	± .254	± .127

[ ] Dimensions for Reference only

Ordering Information

1502XX-5XX2-RB

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)

Board Location Post
0=None (Standard)
2=Board locating Post

3M
Electronic Solutions Division
Interconnect Solutions
http://www.3Mconnectors.com

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

3M is a trademark of 3M Company.

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

3M

3M Electronics Solutions Division
6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3Mconnectors.com

Please recycle. Printed in USA.
© 3M 2014. All rights reserved.
RIA-2217B-E