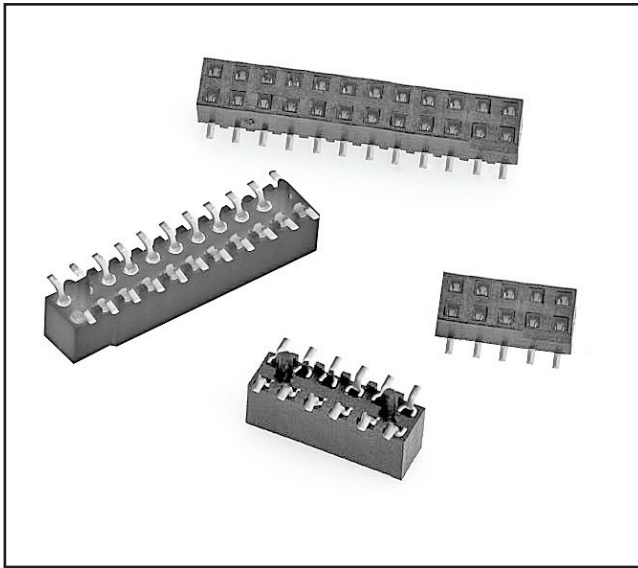


3M™ Boardmount Socket

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

TS-0519-G
Sheet 1 of 4

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: 1.27-3.8 μm [50-150 μ''] Nickel overall

Wiping Area: 0.76 μm [30 μ''] Gold

Solder Tails: 5.1 μm [200 μ''] 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



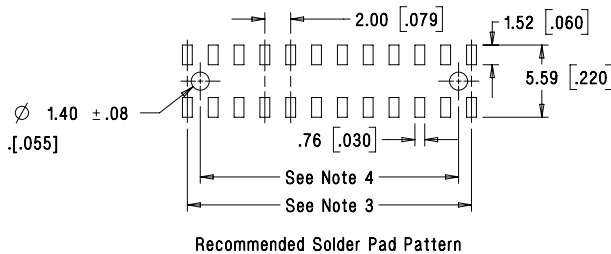
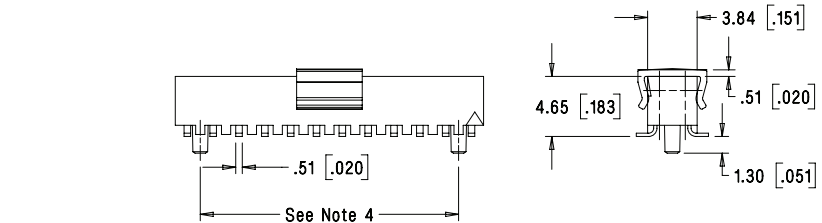
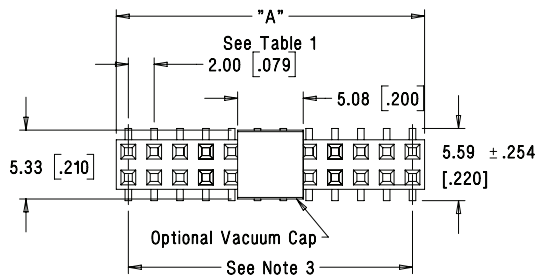
Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnectors.com>

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

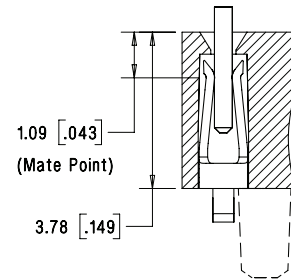
3M™ Boardmount Socket

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

Table 1			
Contact Quantity	Dimension A	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



mm [Inch]	
Tolerance Unless Noted	
.0	.00
mm ± 2.54	± .127
[] Dimensions for Reference only	



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.

Note: Mate point same for all board mount types.

**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)

TS-0519-G
Sheet 2 of 4



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

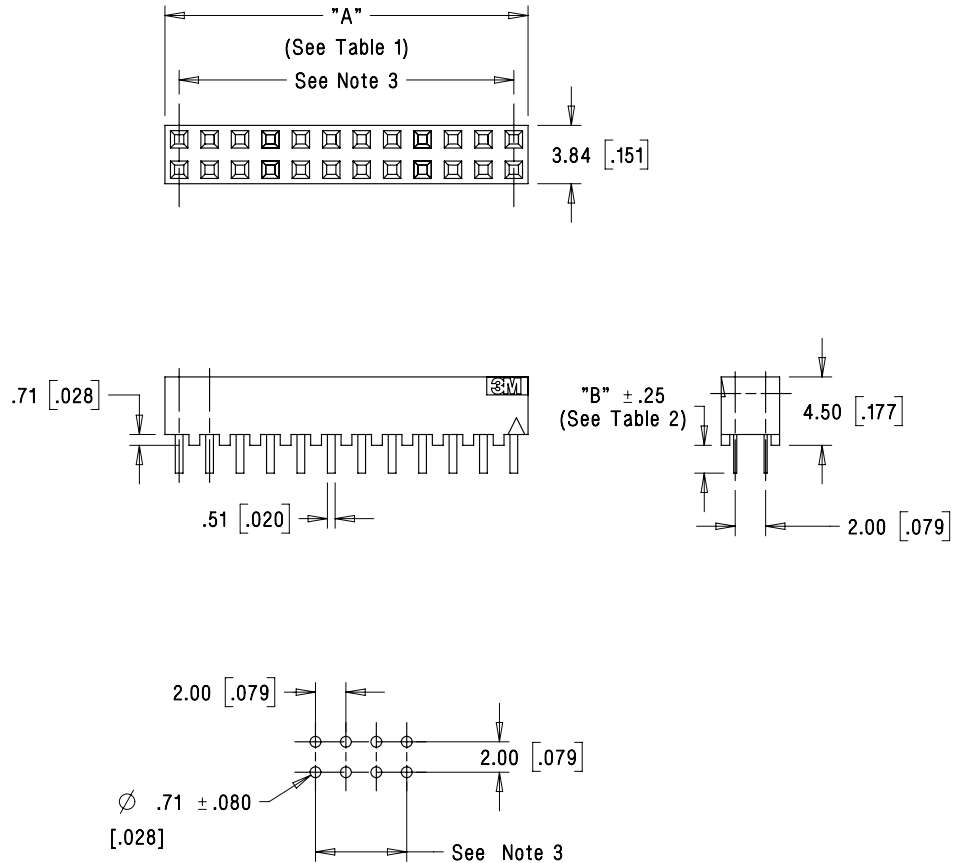
3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

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]



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

[] Dimensions for Reference only

Recommended Hole Pattern

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 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)

TS-0519-G
Sheet 3 of 4

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-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 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)

TS-0519-G
Sheet 4 of 4



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

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 ninety (90) days 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 Electronics Solutions Division

6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3Mconnector.com

Please recycle. Printed in USA.
© 3M 2010. All rights reserved.
RIA-2217B-E

3M is a trademark of 3M Company.