

3M™ BOARDMOUNT SOCKET, 1502 SERIES  
 2.00MM X 2.00MM STRAIGHT AND SURFACE MOUNT, PLATED THROUGH HOLE



STRAIGHT  
VERSION



SURFACE MOUNT  
VERSION

2 PHYSICAL :

INSULATOR: HIGH TEMP THERMOPLASTIC  
 MATERIAL: HIGH TEMP THERMOPLASTIC  
 CONTACT: COPPER ALLOY  
 MATERIAL: COPPER ALLOY  
 PLATING: NICKEL-OVERALL  
 UNDER PLATING: 1.27-3.8µm (50-150µ") NICKEL-OVERALL  
 WIPING AREA: .76µm (30µ") GOLD  
 SOLDER TAILS: 5.1µm (200µ") MATTE TIN (RIA E1 & C1 APPLY)  
 MARKING: ORIENTATION DELTA AND 3M LOGO (EXCEPT SURFACE MOUNT)

2 ELECTRICAL :

CURRENT RATING: 1A  
 VOLTAGE RATING: 150V<sub>AC</sub> PER EIA-364-20  
 INSULATION RESISTANCE: >1 X 10<sup>9</sup> OHM AT 250V<sub>DC</sub>  
 WITHSTANDING VOLTAGE: 500V<sub>DC</sub> AT SEA LEVEL

2 ENVIRONMENTAL :

TEMPERATURE RATING: -55° C TO 105° C  
 PROCESS RATING: MAX. 260° C (PER J-STD-020C)  
 MOISTURE SENSITIVITY LEVEL: 1 (PER J-STD-020C)

- NOTES
1. REGULATORY INFORMATION: ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION.
  2. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
  3. TAPE & REEL INCLUDE VACUUM PICK-UP CAP FOR PICK 'N PLACE HANDLING EQUIPMENT.
  4. PARTS IN TRAY PACKAGING ARE SUPPLIED WITHOUT VACUUM CAP.
  5. POSITIONS PER ROW, SUBTRACT 1, MULTIPLY BY 2MM SPACING.
  6. OPTIONAL LOCATOR POSTS: POSITIONS PER ROW, MULTIPLY BY 2MM SPACING, THEN SUBTRACT 4MM. POSTS ARE ONLY AVAILABLE FOR POSITIONS 08 AND GREATER.

3M ELECTRONICS MATERIALS SOLUTIONS DIVISION  
 INTERCONNECT SOLUTIONS  
<http://www.3mconnectors.com>

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 INFORMATION CALL 800-225-5373

**UL** **us**  
 UL FILE NO: E68080

DIMENSIONS: MM ( INCH )  
 ( INCH ) FOR REF. ONLY

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				SEP 03, 2015 REDRAWN & REMOVED RIGHT ANGLE		
APPROVED	DATE	APPROVED	DATE	This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.		
CASTIGLIONE	SEP 03, 2015	MATH	SEP 03, 2015			
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2017 3M Center St. Paul, MN 55144		
DO NOT SCALE DRAWING		SCALE	TOLERANCES EXCEPT AS NOTED	<b>3M</b>		
		6 1	INCHES: .0 ± .1 .00 ± .01 .000 ± .005 .0000 ± .0002			
THIRD ANGLE PROJECTION		MILLIMETERS 0 ± .2 .0 ± .13 .000 ± .005		TITLE BOARDMOUNT SOCKET, 2MM X 2MM, STRAIGHT & SMT, PAC 20		
MAX SURFACE ROUGHNESS		SURFACES		CAGE NUMBER <b>D</b> 78-5100-0519-8		
<input checked="" type="checkbox"/> MARKED ONLY <input type="checkbox"/> UNMARKED ONLY		ANGLE		MODEL 1502		
				REV. K		
				DET. 1 OF 4		

78-5100-0519-8  
 DRAWING NUMBER  
 K  
 REVISION  
 Standard Time 12/7/2017 UTC Offset

3M™ BOARDMOUNT SOCKET, 1502 SERIES  
 2.00MM X 2.00MM STRAIGHT AND SURFACE MOUNT, PLATED THROUGH HOLE



CONTACT QTY.	DIM. "A"
04	3.96 [.156]
06	5.87 [.231]
08	7.87 [.310]
10	9.88 [.389]
12	11.86 [.467]
14	13.87 [.546]
16	15.88 [.625]
18	17.88 [.704]
20	19.86 [.782]
22	21.87 [.861]
24	23.88 [.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]

ORDERING INFORMATION  
 STRAIGHT  
 1502XX-600X-RB

CONTACT QTY.:  
 SEE TABLE 1

SOLDER TAIL LENGTH:  
 DIMENSION "B"  
 1 = 1.4MM (SPECIAL ORDER)  
 2 = 2.54MM (STANDARD)

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				SEP 03, 2015 REDRAWN & REMOVED RIGHT ANGLE	JNC	ARM
APPROVED	DATE	DATE	DATE	DATE	DATE	DATE
CASTIGLIONE	SEP 03, 2015	MFG				
CHKD	DATE	APPRV	DATE	DATE	DATE	DATE
		G. MATHEWS	SEP 03, 2015			
DIVISION	DIVISION CODE	© 3M COPYRIGHT 2017				
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DO NOT SCALE DRAWING	SCALE 6/1	TOLERANCES EXCEPT AS NOTED	3M Center St. Paul, MN 55144			
		INCHES: .00 ±.01, .000 ±.005, .0000 ±.0002	TITLE BOARDMOUNT SOCKET, 2MM X 2MM, STRAIGHT & SMT, PAC 20			
THIRD ANGLE PROJECTION		MILLIMETERS: 0 ±.2, .0 ±.13, .000 ±.005	CAGE NUMBER D78-5100-0519-8			
INTERPRET PER ASME Y14.5 - 2009			DRAWING NO. D78-5100-0519-8			
MAX SURFACE ROUGHNESS			REV. K			
MARKED SURFACES			MODEL 1502			
MARKED ONLY			SHT 2 OF 4			

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 K  
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 Imaged: K.3 Central

3M™ BOARDMOUNT SOCKET, 1502 SERIES  
 2.00MM X 2.00MM STRAIGHT AND SURFACE MOUNT, PLATED THROUGH HOLE



RECOMMENDED PAD PATTERN  
 (AS VIEWED FROM CONNECTOR SIDE)

CONTACT QTY.	DIM. "A"	TAPE WIDTH	ORDER CODE
04	3.96 [ .156 ]	N/A	N/A
06	5.87 [ .231 ]	N/A	N/A
08	7.87 [ .310 ]	24 MM	WB
10	9.88 [ .389 ]	24 MM	WB
12	11.86 [ .467 ]	24 MM	WB
14	13.87 [ .546 ]	24 MM	WB
16	15.88 [ .625 ]	24 MM	WB
18	17.88 [ .704 ]	44 MM	WD
20	19.86 [ .782 ]	44 MM	WD
22	21.87 [ .861 ]	44 MM	WD
24	23.88 [ .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

ORDERING INFORMATION  
 SURFACE MOUNT  
 1502XX-20X0-RB-XX

CONTACT QTY.:  
 SEE TABLE 1

BOARD LOCATION POST:  
 0 = NONE (STANDARD)  
 2 = WITH BOARD LOCATION POSTS  
 (SPECIAL ORDER)

PACKAGING STYLE:  
 BLANK = TRAY PACKAGING  
 WX = TAPE & REEL PACKAGING  
 (SEE TABLE 1 FOR ORDERING CODE)

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				SEP 03, 2015		
APPROVED	DATE	APPROVED	DATE	MFG DATE		
	SEP 03, 2015	G. MATHEWS	SEP 03, 2015			
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THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2009	TITLE BOARDMOUNT SOCKET, 2MM X 2MM, STRAIGHT & SMT, PAC 20				
MAX SURFACE ROUGHNESS	MARKED ONLY	CAGE NUMBER	SIZE	DRAWING NO.	REV.	
		D	78-5100-0519-8	K		
		MODEL	1502	DET	ISTS	YES X NO
						SHT 3 OF 4

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DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
K 63282		SEP 03, 2015				REDRAWN & REMOVED RIGHT ANGLE		JNC	ARM
DWF		DATE		MFG		DATE			
CASTIGLIONE		SEP 03, 2015							
CHKD		DATE		APPR		DATE			
				G. MATHEWS		SEP 03, 2015			
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DO NOT SCALE DRAWING		SCALE 1/1		TOLERANCES EXCEPT AS NOTED		INCHES .0 ± .1 .00 ± .01 .000 ± .005 .0000 ± .0002			
THIRD ANGLE PROJECTION		MILLIMETERS		0 ± 2 .0 ± .3 .00 ± .13 .000 ± .005					
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS		CAGE NUMBER		DRAWING NO.		REV.	
MAX SURFACE ROUGHNESS		MILLIMETERS		D 78-5100-0519-8		K			
SURFACES		MILLIMETERS		MODEL		1502		DET	
MARKED ONLY		MILLIMETERS		1502		1502		SHT 4 OF 4	

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