

3M™ 4-Wall Header

.100" × .100" Low Profile, Straight and Right Angle

2500 Series



- Low profile, space saving design
- Center slot polarization prevents mis-insertions and reduces insertion time
- Dual slot polarization means broader compatibility with competitive polarization designs
- Optional retainer clip for locking sockets in place and increasing connection reliability in vibration-prone environments
- High temperature insulator suitable for “no lead” soldering operations
- Suitable for reflow soldering using “paste in hole” techniques
- Exposed solder tails (on right angle version) provide ease of cleaning and reduced repair costs
- RoHS* compliant

Date Modified: August 25, 2005

TS-0770-15
Sheet 1 of 4

Physical

Insulator

Material: Glass Filled Polyester (PCT)

Flammability: UL 94V-0

Color: Black

Contact

Material: Copper Alloy

Plating

Underplating: 100 μ" [2.54 μm] Nickel - Overall

Wiping Area: 30 μ" [0.76 μm] Gold

Solder Tails: 200 μ" [5.08 μm] Matte Tin

Terminal Finish Indicator: e3 (per JESD97)

Marking: 3M Logo, Part Identification Number and Orientation Triangle

Electrical

Current Rating: 2 A

Insulation Resistance: $>1 \times 10^9 \Omega$ at 500 Vdc

Withstanding Voltage: 1000 Vrms at Sea Level

Environmental

Temperature Rating: -55°C to +105°C

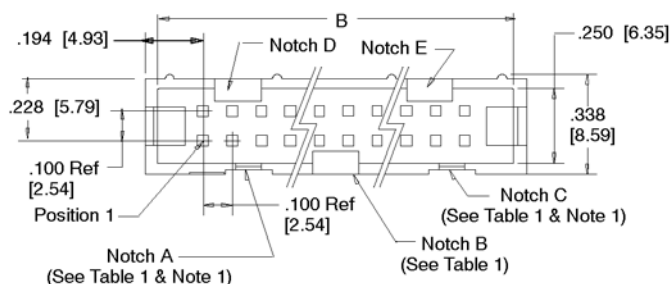
Process Rating: Maximum 260°C, single pass, (profile per J-STD-020C)

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

*RoHS = Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment
"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

.100" x .100" Low Profile, Straight and Right Angle

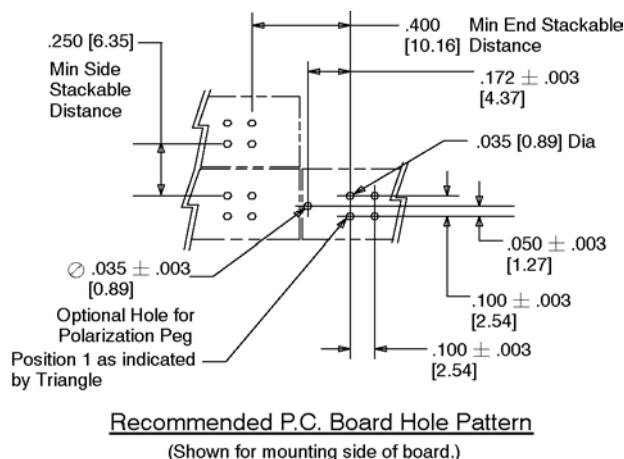
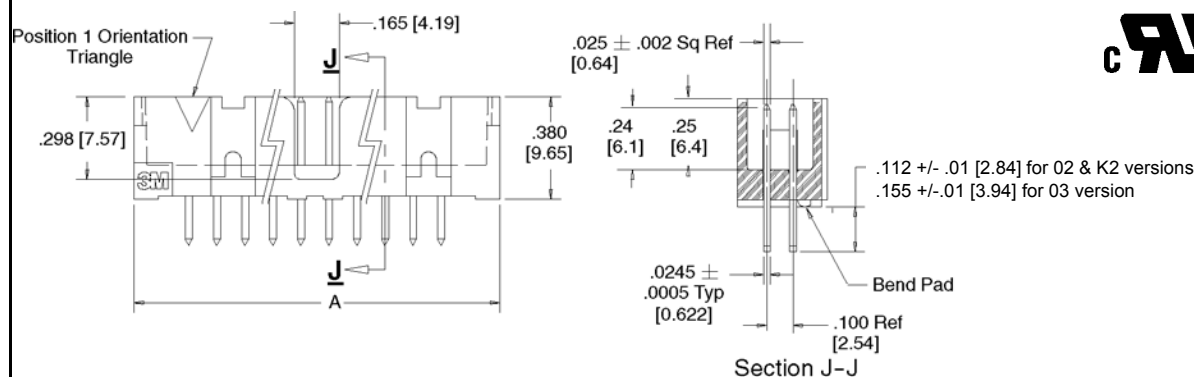
2500 Series



Straight

Inch [mm]			
Tolerance Unless Noted			
	.0	.00	.000
Inch	± .1	± .01	± .005

[] Dimensions for Reference only



Recommended P.C. Board Hole Pattern
(Shown for mounting side of board.)

Pin Qty	Dimensions		Polarizing Notches
	A	B	
10	.788 [20.02]	.708 [17.98]	BC
14	.988 [25.10]	.908 [22.06]	B C D E
16	1.088 [27.64]	1.008 [25.60]	A B C D E
20	1.288 [32.72]	1.208 [30.68]	A B C D E
24	1.488 [37.80]	1.408 [35.76]	A B C D E
26	1.588 [40.34]	1.508 [38.30]	A B C D E
30	1.788 [45.42]	1.708 [43.38]	A B C D E
34	1.988 [50.50]	1.908 [48.46]	A B C D E
40	2.288 [58.12]	2.208 [56.08]	A B C D E
50	2.788 [70.82]	2.708 [68.78]	A B C D E
60	3.288 [83.52]	3.208 [81.48]	A B C D E
64	3.488 [88.60]	3.408 [86.56]	A B C D E

Notes:

1. Notches A & C will accommodate 3M Polarizing Keys (3M Part #N3518).
2. Contact tails .0245 [0.622] crowned wire with .0075 [0.191] corner radii & .028 [.072] diagonal.
3. See page 4 for kink tail positions.
4. Solder stand offs facilitate .01 clearance above board for reflow soldering.

Ordering Information

N25XX-60XX-RB

Pin Quantity: –
(See Table 1)

– Tail

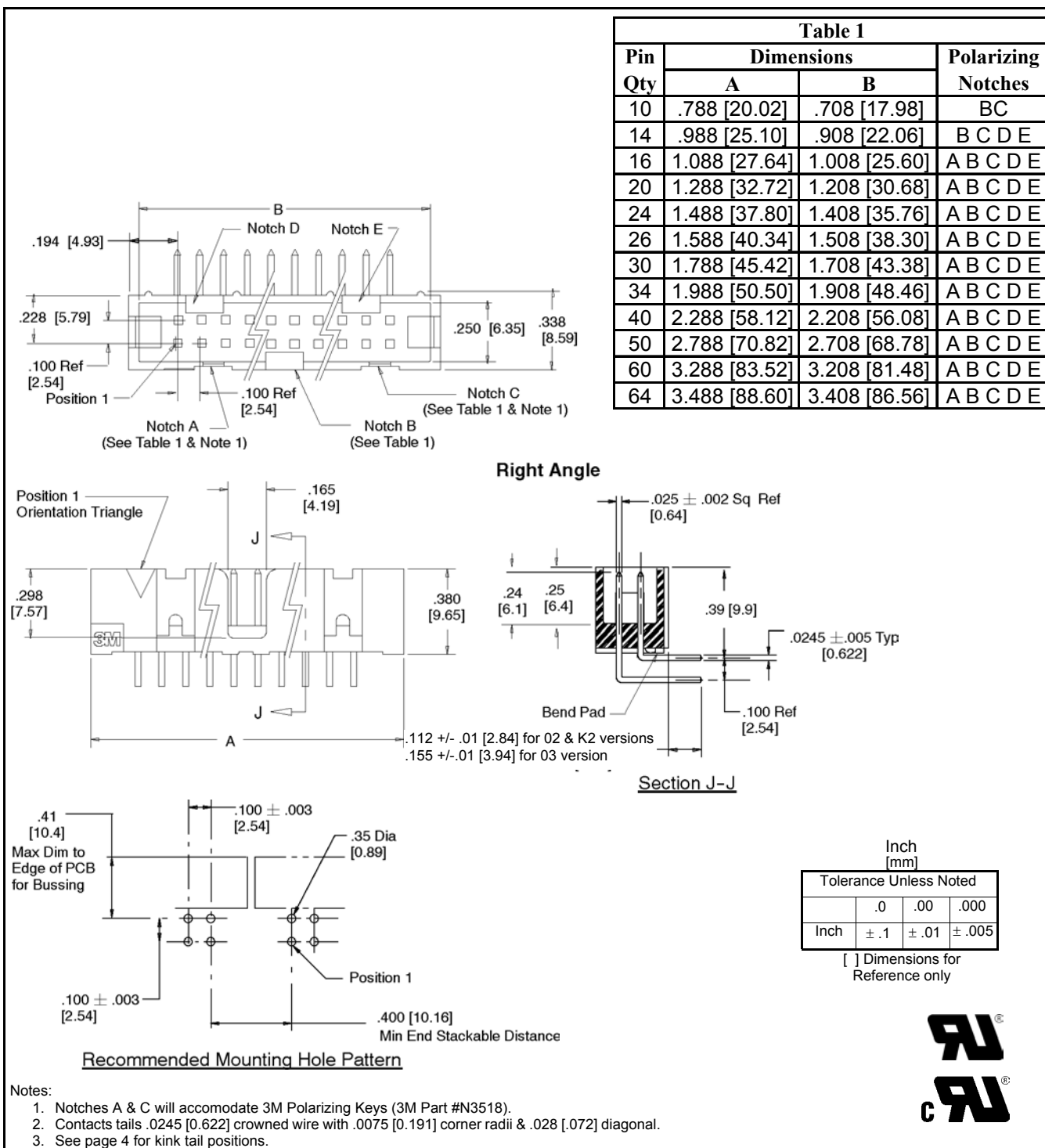
02 = for .062 [1.57] thick board
03 = for .094 to .125 [2.39 to 3.18] thick board
K2 = kinked for .062 [1.57] thick board

TS-0770-15
Sheet 2 of 4

3M™ 4-Wall Header

.100" × .100" Low Profile, Straight and Right Angle

2500 Series



Ordering Information

N25XX-50XX-RB

Pin Quantity:
(See Table 1)

Tail
02 = for .062 [1.57] thick board
03 = for .094 to .125 [2.39 to 3.18] thick board
K2 = kinked for .062 [1.57] thick board

TS-0770-15
Sheet 3 of 4

3M

Interconnect Solutions

<http://www.3M.com/interconnects/>

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3M™ 4-Wall Header

.100" × .100" Low Profile, Straight and Right Angle, Accessories

2500 Series

2500 & 3000 Series Shrouded Header					
Total Number of Pins	Number of Tails Kinked	Positions Kinked			
		3	4	7	8
10	4	3	4	7	8
14	4	3	4	11	12
16	4	3	4	13	14
20	4	3	4	17	18
24	4	3	4	21	22
26	4	3	4	23	24
30	4	5	6	25	26
34	4	7	8	27	28
36	4	7	8	27	28
40	4	7	8	33	34
50	4	7	8	43	44
60	4	11	12	49	50
64	4	11	12	53	54

Kinked Tail Detail:

Kink is located .05" below bottom surface of plastic.
External radius of kink toward part centerline.

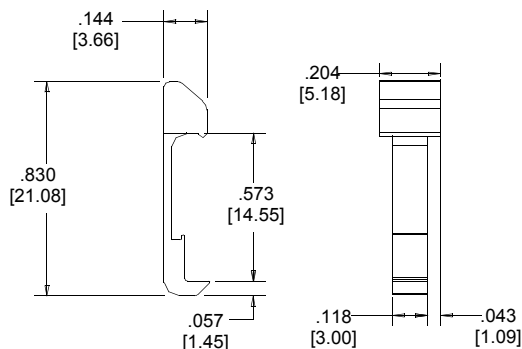
Connector Pin Qty	Dimension A
10	.81 [20.6]
14	1.02 [25.9]
16	1.12 [28.4]
20	1.32 [33.5]
24	1.52 [38.7]
26	1.63 [41.4]
30	1.83 [46.4]
34	2.03 [51.6]
40	2.33 [59.2]
50	2.83 [71.9]
60	3.33 [84.6]
64	3.53 [89.7]

3505-8XXX

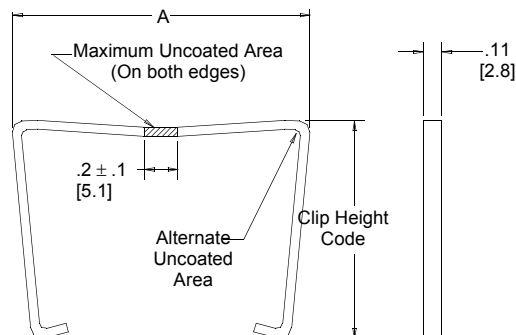
Connector Pin Count:
(See Table)

Clip Height Code
0 = .31 [7.9] for Sockets W/O
Strain Relief
1 = .53 [13.5] for Sockets with
Strain Relief

Part Number	Material	Color
3505-33	Nylon	Black



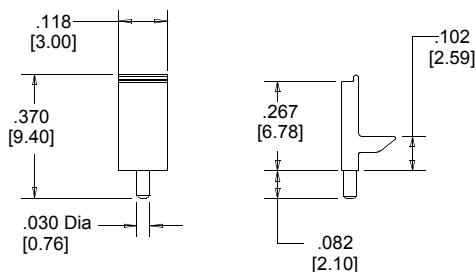
Long Snap In Latch



Short/Long Socket Retainer Clip

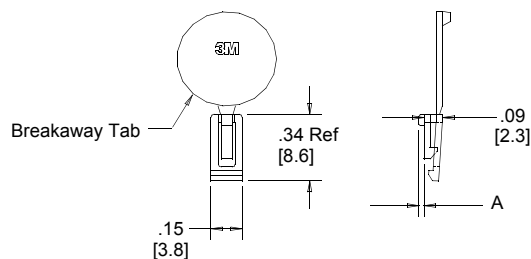
Note: Stainless steel with polyurethane coating.

Part Number	Material	Color
3201-3	PCT	Black



Polarizing Post

Part Number	Material	Color	Dim A
N3518	LCP	Black	0.02



Note: #2216 B/A Scotchweld can be used to adhere keys.

Polarizing Keys

TS-0770-15
Sheet 4 of 4



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