

# 3M™ 4-Wall Header

.100" × .100" Latch/Ejector, Straight and Right Angle

3000 Series



- Military (with 3M's 3518 polarizing key) and centerbump polarization
- Standard ejector latches
- Mounting holes for securing header to board
- RoHS\* compliant
- Optional polarizing posts
- High temperature insulator suitable for “no lead” soldering operations
- Suitable for reflow soldering using “paste in hole” techniques

Date Modified: August 2, 2005

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## Physical

### Insulator

Material: Glass Filled Polyester (PCT)  
Flammability: UL 94V-0  
Color: Black

### Contact

Material: Copper Alloy

### Plating

Underplating: 100  $\mu$ " [ 2.54  $\mu$ m ] Nickel - Overall  
Wiping Area: 30  $\mu$ " [ 0.76  $\mu$ m ] Gold  
Solder Tails: 200  $\mu$ " [ 5.08  $\mu$ m ] Matte Tin  
Terminal Finish Indicator: e3 (per JESD97)

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

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## Electrical

Current Rating: 1 A

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

Withstanding Voltage: 1000 Vrms at Sea Level

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## 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.

UL File No.: E68080

# 3M™ 4-Wall Header

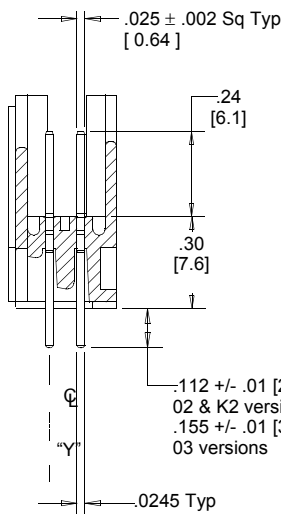
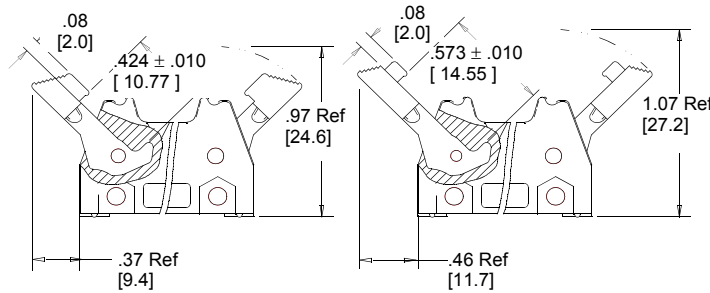
.100" × .100" Latch/Ejector, Straight and Right Angle

3000 Series

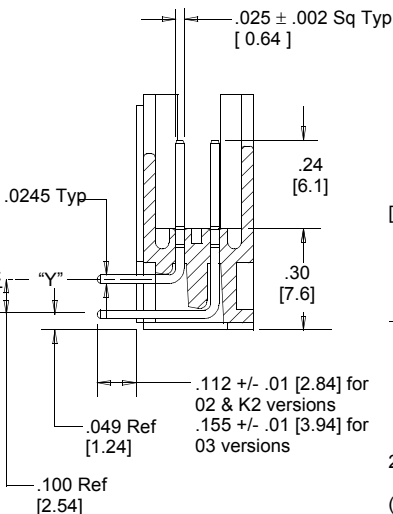
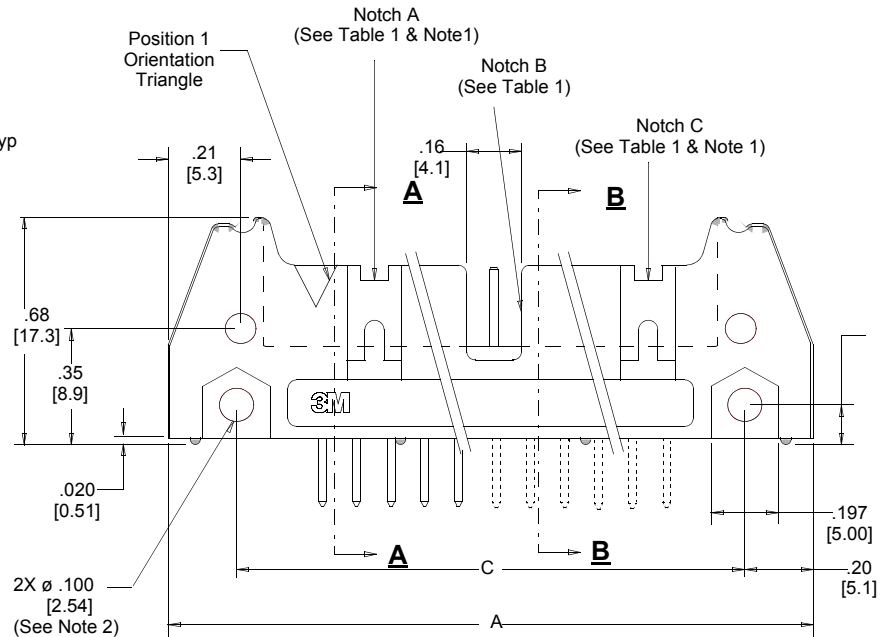
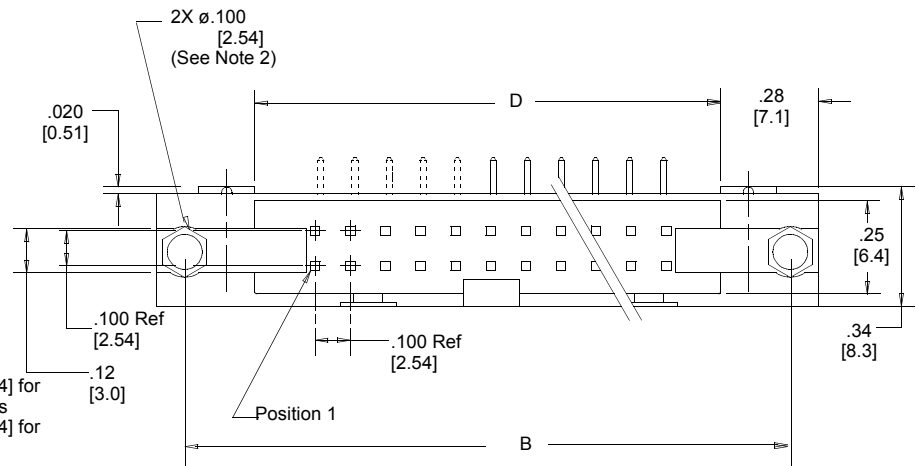


-X202  
Header with  
Short Ejector/Latch  
for 3M Sockets without  
Strain Relief

-X302  
Header with  
Long Ejector/Latch  
for 3M Sockets with  
Strain Relief



**Section A-A**  
(Straight)



**Section B-B**  
(Right Angle)

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# 3M™ 4-Wall Header

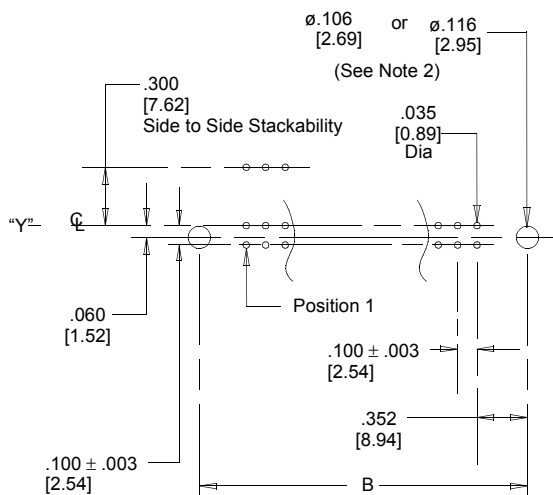
.100" × .100" Latch/Ejector, Straight and Right Angle

3000 Series

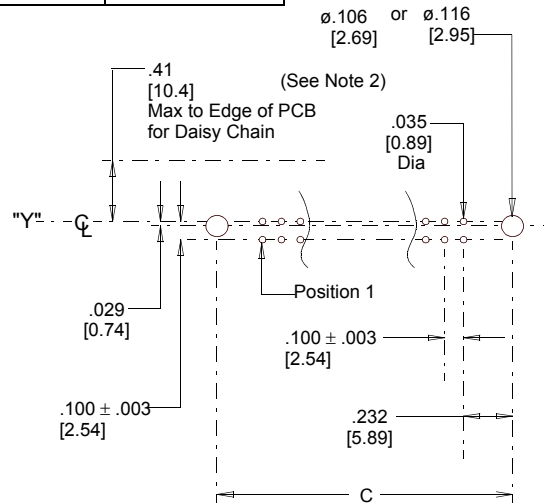
Table 1						
Pin Quantity	3M Part Number	Dimensions				Polarization Notches Provided
		A	B	C	D	
10	3793	1.26 [32.1]	1.105 [28.07]	.865 [21.97]	.71 [18.0]	B C
14	3314	1.46 [37.2]	1.305 [33.15]	1.065 [27.05]	.91 [23.1]	B C
16	3408	1.56 [39.7]	1.405 [35.69]	1.165 [29.59]	1.01 [25.6]	A B C
20	3428	1.76 [44.8]	1.605 [40.77]	1.365 [34.67]	1.21 [30.7]	A B C
24	3627	1.96 [49.8]	1.805 [45.85]	1.565 [39.75]	1.41 [35.8]	A B C
26	3429	2.06 [52.4]	1.905 [48.39]	1.665 [42.29]	1.51 [38.3]	A B C
30	3440	2.26 [57.4]	2.105 [53.47]	1.865 [47.37]	1.71 [43.43]	A B C
34	3431	2.46 [62.6]	2.305 [58.55]	2.065 [52.45]	1.91 [48.5]	A B C
40	3432	2.76 [70.2]	2.605 [66.17]	2.365 [60.07]	2.21 [56.1]	A B C
50	3433	3.26 [82.9]	3.105 [78.87]	2.865 [72.77]	2.71 [68.8]	A B C
60	3372	3.76 [95.6]	3.605 [91.57]	3.365 [85.47]	3.21 [81.5]	A B C
64	3764	3.96 [100.7]	3.805 [96.65]	3.565 [90.55]	3.41 [86.6]	A B C

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

[ ] Dimensions for Reference only



Recommended Mounting Hole Pattern (Straight)



Recommended Mounting Hole Pattern (Right Angle)

Notes:

- Notches A & C will accommodate 3M Polarizing Keys (3M Part #N3518).
- Mounting hardware: From solder side of pc board use #4-24 thread cutting screw (3M Part # 3341-5) and .116 [2.95] dia mounting hole. For right angle version only, #2-56 bolt and nut (3M Part # 3341-6) with .106 [2.69] dia mounting hole may be used.
- See page 4 for kink position details (K2 version).
- Contact tails  $.0245$  [0.622] crowned wire with  $.0075$  [0.191] corner radii &  $.028$  [0.72] diagonal.
- Contact your 3M sales representative for custom requirements.

## Ordering Information

**NXXXX-XXXXRB**

3M Part Number  
(See Table 1)

Pin Configuration  
5 = Right Angle  
6 = Straight

Latch/Ejector System  
0 = No Latch/Ejector installed  
2 = Short Roll Pin Latch/Ejectors  
(3M Part # N3505-2)  
3 = Long Roll Pin Latch/Ejectors  
(3M Part # N3505-3)

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

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# 3M™ 4-Wall Header

.100" × .100" Latch/Ejector, Straight and Right Angle, Accessories

3000 Series

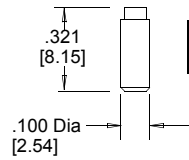
## Part Customization

This spec sheet details our standard offering.

3M has several capabilities that can provide a part tailored to your specific needs. Ask your 3M sales representative or customer service for more details.

- Use of snap-in style latch/ejectors in either short (N3XXX-X502) or long (N3XXX-X602) styles, installed or shipped separately
- Selective pin removal (ATA or other compatibility)

## Polarizing Post

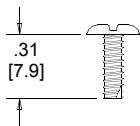


Part Number	Material	Color
3201-4	LCP	Black

Note: Insert Post into one mounting hardware hole on bottom of header. Set post to protrude .115".

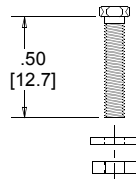
## Mounting Hardware

**3341-5**  
(Installed from bottom of board)



Panhead Thread Cutting Screw:  
#4-24 X 5/16"  
Type: USA Std BT, Federal BG

**3341-6**  
(Right angle product only)



Hex Head Bolt, Nut and Washer  
Bolt - #2-56 X 1/2"

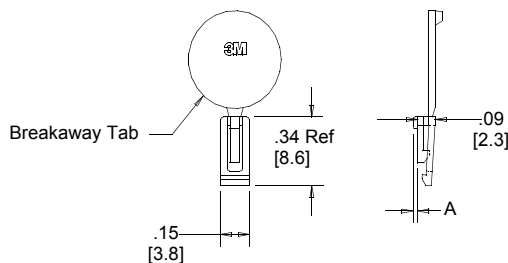
**3341-5 & 6**  
Material - Stainless Steel

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.

## Polarizing Keys

Part Number	Material	Color	Dim A
N3518	LCP	Black	0.02



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

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## Important Notice

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# 3M

## Electronics

6801 River Place Blvd.  
Austin, TX 78726-9000  
800/328-1368  
[www.3M.com/electronics](http://www.3M.com/electronics)

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