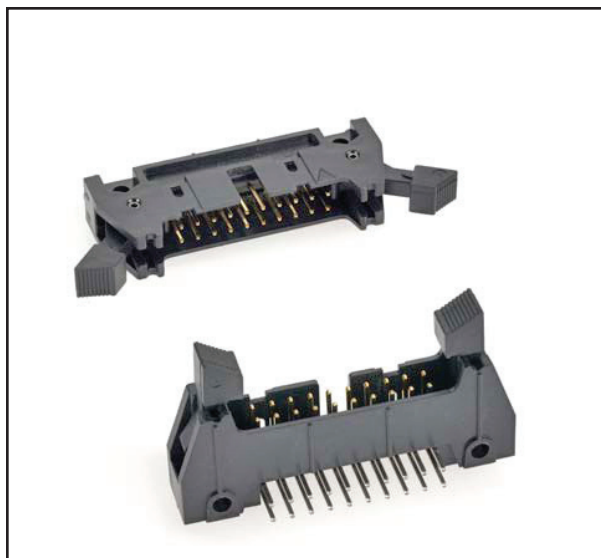


# 3M™ Four-Wall Header

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

D3000 Series



- Military (with 3M's 3518 & N3518 polarizing key) and centerbump polarization
- Optional ejector latches
- Mounting holes for securing header to board
- Optional polarizing posts available
- High temperature insulator suitable for "no lead" soldering operations
- High temperature insulator in through-hole version suitable for "paste in hole" reflow soldering
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of [www.3Mconnectors.com](http://www.3Mconnectors.com) for compliance information (RIA E1 and C1 apply)

Date Modified: May 21, 2012

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## Physical

### Insulator:

Material: High Temp Glass Filled Polyester (PCT)

Flammability: UL 94V-0

Color: Black (PCT)

### Contact:

Material: Brass

### Plating:

Underplating: 50 -150 μ" [ 1.25 μm ] Ni

Wiping Area: 15 μ" [0.381 μm] Gold

Solder Tails: 40 - 120 μ" [ 1-3 μm ] Matte Tin

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

## Electrical

**Current Rating:** 5.00 A, 1 Contact Powered

3.00 A, 6 Contacts Powered

1.75 A, All Contacts Powered

Rating Conditions: EIA-364-070 Method 2, 30°C maximum temperature rise, 20% derated. Reference appropriate 3M Product Specification for detailed current derating curves.

**Insulation Resistance:**  $>1 \times 10^9 \Omega$  at 500 V<sub>DC</sub>

**Withstanding Voltage:** 1,000 V<sub>RMS</sub> at Sea Level

## Environmental

**Temperature Rating:** -55°C to +105°C

**Process Rating:** 260°C, profile per J-STD-020C, single pass

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

UL File No.: E68080



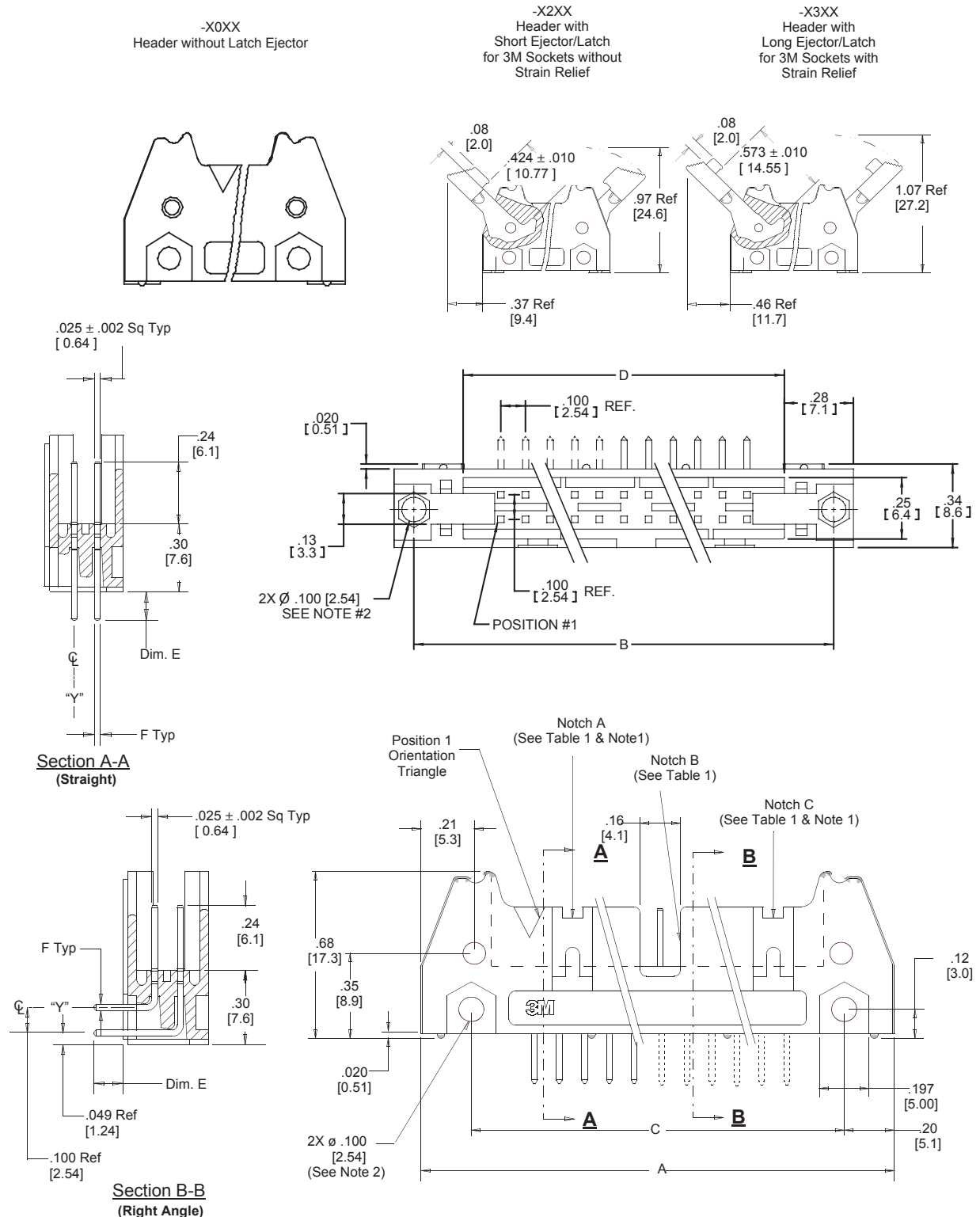
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# 3M™ Four-Wall Header

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

D3000 Series



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Sheet 2 of 4

# 3M™ Four-Wall Header

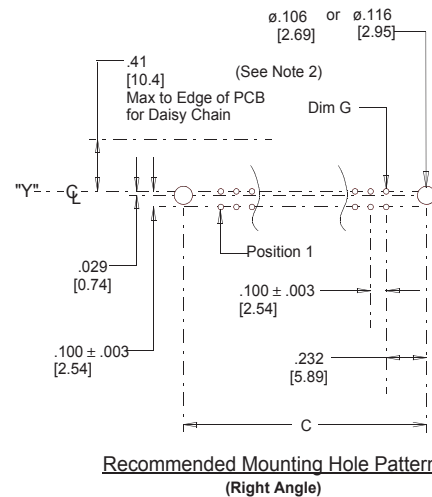
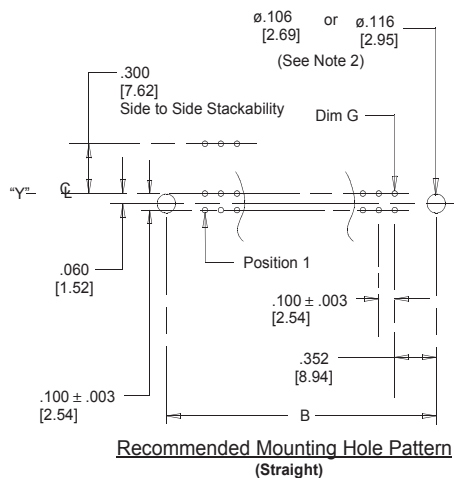
.100" × .100" Latch/Ejector, Straight and Right Angle

D3000 Series

| Table 1 |                |                |               |               |               |                    |
|---------|----------------|----------------|---------------|---------------|---------------|--------------------|
| Pin Qty | 3M Part Number | Dimensions     |               |               |               | Polarizing Notches |
|         |                | A              | B             | C             | D             |                    |
| 06      | 3869           | 1.065 (27.05)  | 0.905 (22.99) | 0.665 (16.89) | 0.505 (12.83) | B*                 |
| 08      | 3889           | 1.165 (29.59)  | 1.005 (25.53) | 0.765 (19.43) | 0.605 (15.37) | B*                 |
| 10      | 3793           | 1.265 (32.13)  | 1.105 (28.04) | 0.865 (21.97) | 0.705 (17.91) | BC                 |
| 14      | 3314           | 1.465 (37.21)  | 1.305 (33.12) | 1.065 (27.05) | 0.905 (22.99) | BC                 |
| 16      | 3408           | 1.565 (39.75)  | 1.405 (35.66) | 1.165 (29.59) | 1.005 (25.53) | ABC                |
| 20      | 3428           | 1.765 (44.83)  | 1.605 (40.74) | 1.365 (34.67) | 1.205 (30.61) | ABC                |
| 24      | 3627           | 1.965 (49.91)  | 1.805 (45.82) | 1.565 (39.75) | 1.405 (35.69) | ABC                |
| 26      | 3429           | 2.065 (52.45)  | 1.905 (48.36) | 1.665 (42.29) | 1.505 (38.23) | ABC                |
| 30      | 3440           | 2.265 (57.53)  | 2.105 (53.44) | 1.865 (47.37) | 1.705 (43.31) | ABC                |
| 34      | 3431           | 2.465 (62.61)  | 2.305 (58.52) | 2.065 (52.45) | 1.905 (48.39) | ABC                |
| 40      | 3432           | 2.765 (70.23)  | 2.605 (66.14) | 2.365 (60.07) | 2.205 (56.01) | ABC                |
| 50      | 3433           | 3.265 (82.93)  | 3.105 (78.84) | 2.865 (72.77) | 2.705 (68.71) | ABC                |
| 60      | 3372           | 3.765 (95.63)  | 3.605 (91.54) | 3.365 (85.47) | 3.205 (81.41) | ABC                |
| 64      | 3764           | 3.965 (100.71) | 3.805 (96.62) | 3.565 (90.55) | 3.405 (86.49) | ABC                |

\* Available without center notch B. Contact 3M.

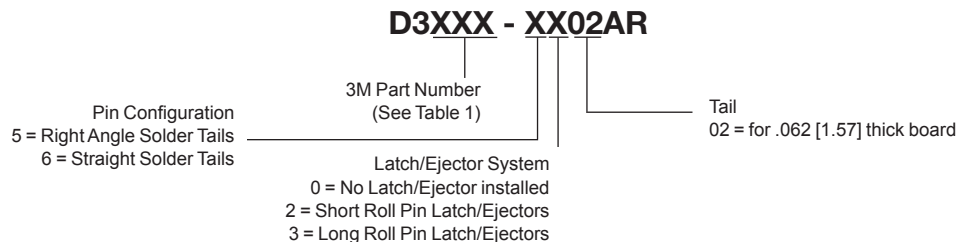
| Table 2               |                                                  |                       |                          |                       |                      |                                     |
|-----------------------|--------------------------------------------------|-----------------------|--------------------------|-----------------------|----------------------|-------------------------------------|
| 3M Part Number Suffix | Contact Tail                                     | Dim E                 | Pin Cross Section        |                       |                      | Dimension G                         |
|                       |                                                  |                       | Dim F                    | Diagonals             | Corner Radii         |                                     |
| -5XX2                 | Solder Tail for<br>.062 [1.57]<br>Thick PC Board | .112 ± .010<br>[2.84] | .0245 ± .0005<br>[0.622] | .028 ± .001<br>[0.71] | .0075 Ref<br>[0.191] | Ø.035 ± .003<br>[0.89] (See Note 3) |
| -6XX2                 |                                                  |                       |                          |                       |                      |                                     |



## Notes:

- Notches A & C will accommodate 3M Polarizing Keys (3M Part #3518 or #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 illustrations on page 4.
- Contact your 3M sales representative for custom requirements.

## Ordering Information



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# 3M™ Four-Wall Header

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

D3000 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.

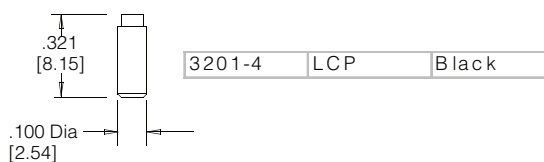
- The -2 & -3 roll pin latches (may be ordered separately with roll pins included)
- Snap-in style latch/ejectors in either short (N3XXXXX5XXX) or long (N3XXX-X6XX) styles, may also be ordered separately, and are functional and dimensional equivalents to the -2 and -3 roll pin latches.

If ordering latches separately, please use the below chart

|                        | Short Latch | Long Latch | Latch Style | Color |
|------------------------|-------------|------------|-------------|-------|
| High Temperature (PPA) | N3505-30B   | N3505-31B  | Snap In     | Black |
| High Temperature (PCT) | N3505-2B    | N3505-3B   | Roll Pin    | Black |

- Selective pin removal (ATA or other compatability)

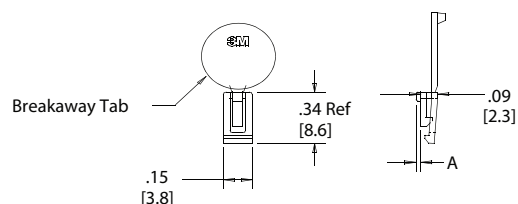
## Polarizing Post



Note: Insert Post into one mounting hardware hole on bottom of header. Set post to protrude .115" [2.92]

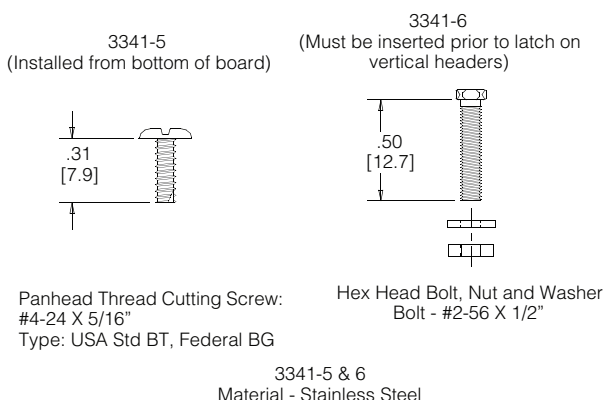
## Polarizing Keys

| N3518 | LCP | Black | .02 |
|-------|-----|-------|-----|
|-------|-----|-------|-----|



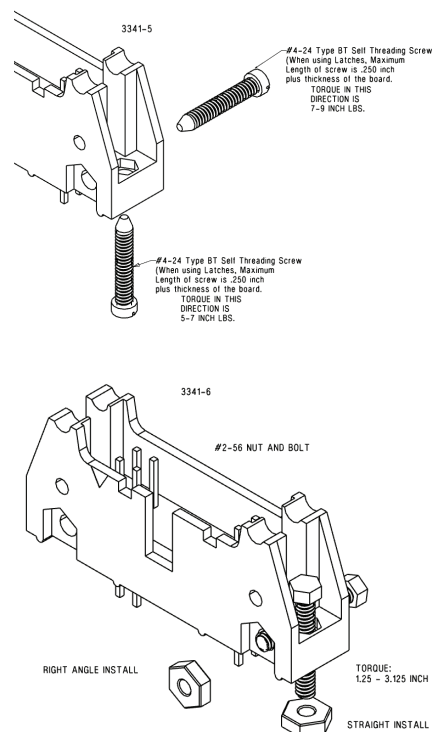
Note: #2216 B/A Scotchweld can be used to adhere keys.

## Mounting Hardware



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

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



RIGHT ANGLE INSTALL  
STRAIGHT INSTALL  
TORQUE: 1.25 - 3.125 INCH LBS.

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