

# 3M™ Surface Mount Header

.100" × .100" High Temperature

N4600 Series



- Compliant gull wing leads make a reliable surface mount connection which is easily inspectable
- Optional ejector latches
- Shrouded to prevent physical and chemical pin damage
- High temperature plastic for vapor phase reflow process
- Slotted mounting flanges for securing header to board
- Raised body for easy inspection and repair
- Leads are protected within the body shadow
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the “RoHS Compliance” section of [www.3Mconnectors.com](http://www.3Mconnectors.com) for compliance information.

Date Modified: May 8, 2013

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## 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

Wiping Area: 30 μ" [ 0.76 μm ] Gold

Solder Tails: 200 μ" [ 5.08 μm ] 60/40 Tin Lead or 300 μ" Matte Tin (See Ordering Information)

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

## Electrical

**Current Rating:** 4.75 A, 1 Line Powered  
2.25 A, 6 Adjacent Lines Powered  
1.25 A, All Lines 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:**  $>1 \times 10^9$  W 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:** 260°C (per J-STD-020C)

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

UL File No.: E68080

**3M**

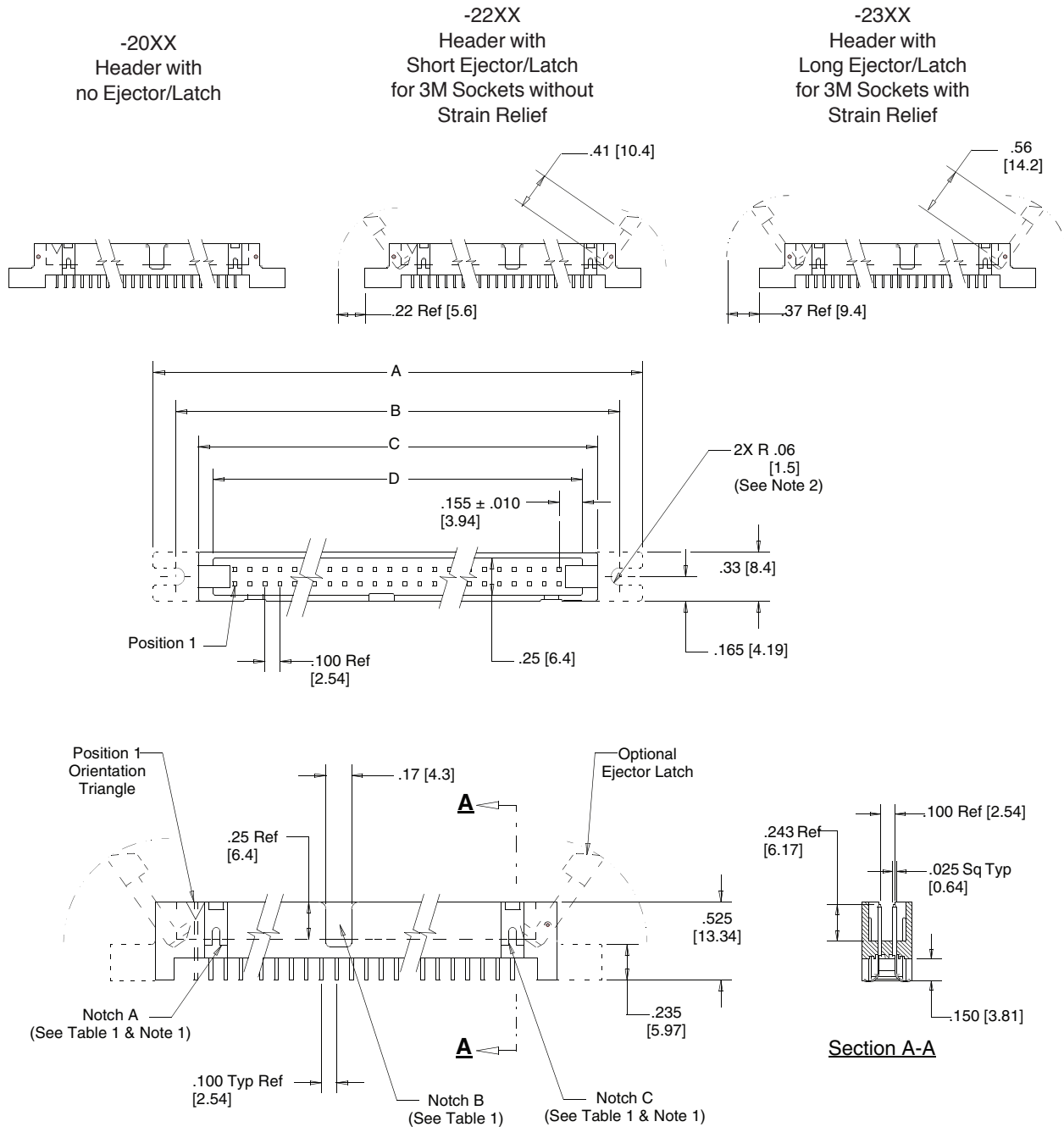
Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnectors.com>

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**800-225-5373**

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**Notes:**

1. Notches A and C will accommodate 3M™ Polarization Key N3518.
2. Accepts a #4, #2, or 3 mm Panhead Machine Screw and Nut.
3. Mounting ears provide mechanical protection to solder joints and are recommended.  
For applications where there is not room for mounting ears, ejector/latches should be used.

| Inch (mm)              |      |       |        |
|------------------------|------|-------|--------|
| Tolerance Unless Noted |      |       |        |
|                        | .0   | .00   | .000   |
| Inch                   | ± .1 | ± .01 | ± .005 |

[ ] Dimensions for Reference only

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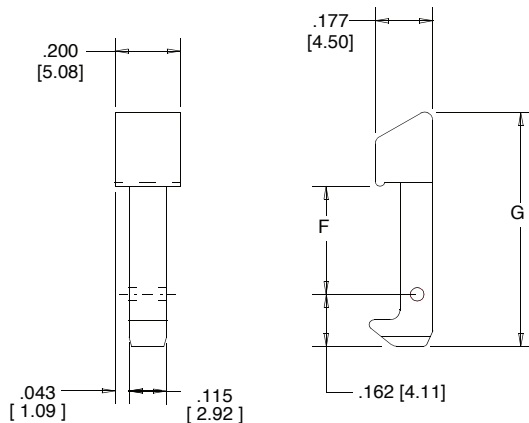
# 3M™ Surface Mount Header

.100" × .100" High Temperature

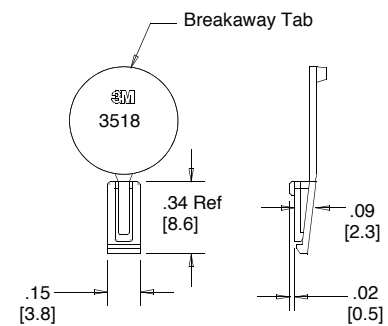
N4600 Series

| Table 1 |             |              |             |             |             |                    |
|---------|-------------|--------------|-------------|-------------|-------------|--------------------|
| Pin Qty | Part Number | Dimensions   |             |             |             | Polarizing Notches |
|         |             | A            | B           | C           | D           |                    |
| 10      | N4610       | 1.50 [38.2]  | 1.20 [30.5] | 0.90 [22.9] | 0.71 [18.0] | B                  |
| 14      | N4614       | 1.70 [43.2]  | 1.40 [35.6] | 1.10 [28.0] | 0.91 [23.1] | BC                 |
| 16      | N4616       | 1.80 [45.8]  | 1.50 [38.2] | 1.20 [30.5] | 1.01 [25.6] | ABC                |
| 20      | N4620       | 2.00 [50.9]  | 1.70 [43.2] | 1.40 [35.6] | 1.21 [30.7] | ABC                |
| 26      | N4626       | 2.30 [58.5]  | 2.00 [50.9] | 1.70 [43.2] | 1.51 [38.3] | ABC                |
| 34      | N4634       | 2.70 [68.6]  | 2.40 [61.0] | 2.10 [53.4] | 1.91 [48.5] | ABC                |
| 40      | N4640       | 3.00 [76.3]  | 2.70 [68.6] | 2.40 [61.0] | 2.21 [56.1] | ABC                |
| 50      | N4650       | 3.50 [89.0]  | 3.20 [81.3] | 2.90 [73.7] | 2.71 [68.8] | ABC                |
| 60      | N4660       | 4.00 [101.7] | 3.70 [94.0] | 3.40 [86.4] | 3.21 [81.5] | ABC                |

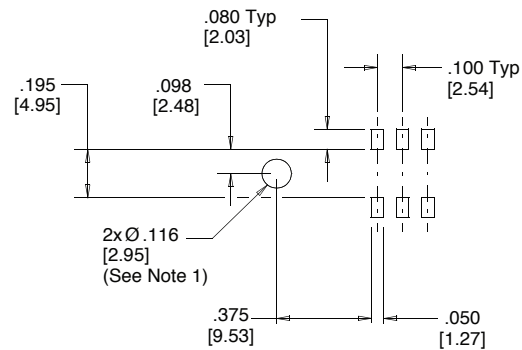
| Table 2        |              |                          |               |
|----------------|--------------|--------------------------|---------------|
| 3M Part Number | Latch Descr. | Latch/Ejector Dimensions |               |
|                |              | F                        | G             |
| N3505-22       | Short        | 0.335 [ 8.51]            | 0.726 [18.44] |
| N3505-23       | Long         | 0.484 [12.29]            | 0.875 [22.23] |



**Latch/Ejector**  
Material: Glass Filled Polyester (PCT)



**3M Part No. N3518**  
**Polarizing Key**  
Material: Black LCP



**Recommended Printed Circuit Board Pattern**

## Ordering Information

**N46XX-2XXX-XX**

Pin Quantity: (See Table 1)

Latch Option:  
0 = No ejector latch  
2 = Short ejector latch  
3 = Long ejector latch

Body Style:  
0 = with mounting ears  
1 = without mounting ears

Polarization:  
0 = for pin qty 14 to 60  
5 = for pin qty 10

Plating suffix:  
blank = tin-lead solder tails (RIA E3 & C2 Apply)  
RB = matte tin solder tails (RIA E1 & C1 Apply)

**Polarizing Key**  
(Order separately)  
**N3518 (black only)**

**Ejector Latch**  
(May be ordered separately for use with N46XX-20XX-XX version)

N3505-22B (short, black)  
N3505-23B (long, black)

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