

3M™ Surface Mount Header

.100" × .100" High Temp

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 version (RB plating suffix) available

Date Modified: September 23, 2005

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Physical

Insulation Material: Glass Filled Polyester (PCT)

Flammability: UL 94V-0

Color: Beige or Black (RB plating suffix)

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 300u" [7.62 μm] Matte Tin
(see ordering information)

Terminal Finish Indicator: e3 (for RB plating suffix) (per JESD-97)

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

Electrical

Current Rating: 1 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

Processing: Maximum 260°C (per J-STD-020C)

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

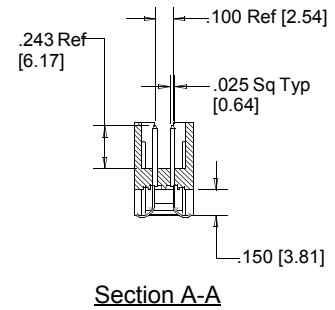
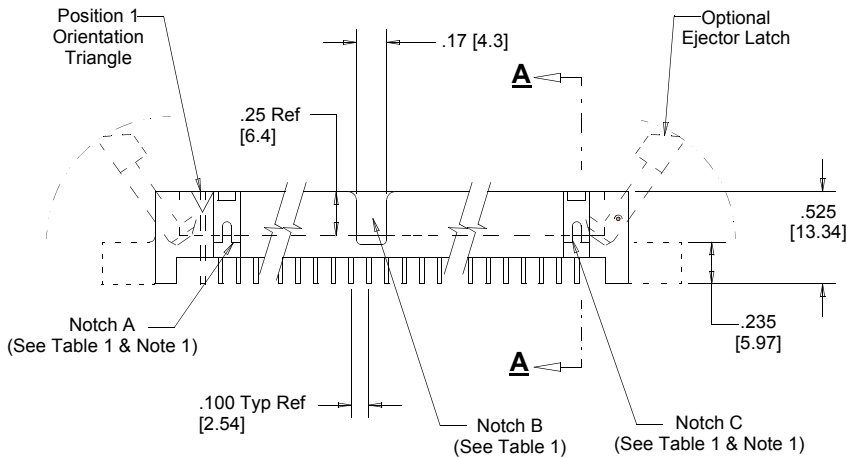
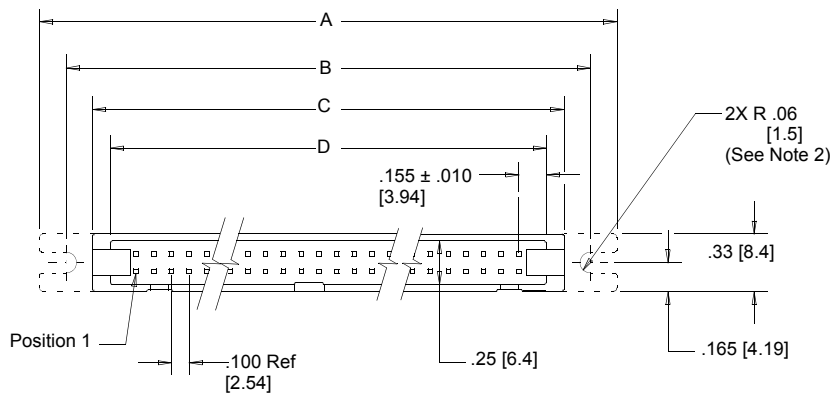
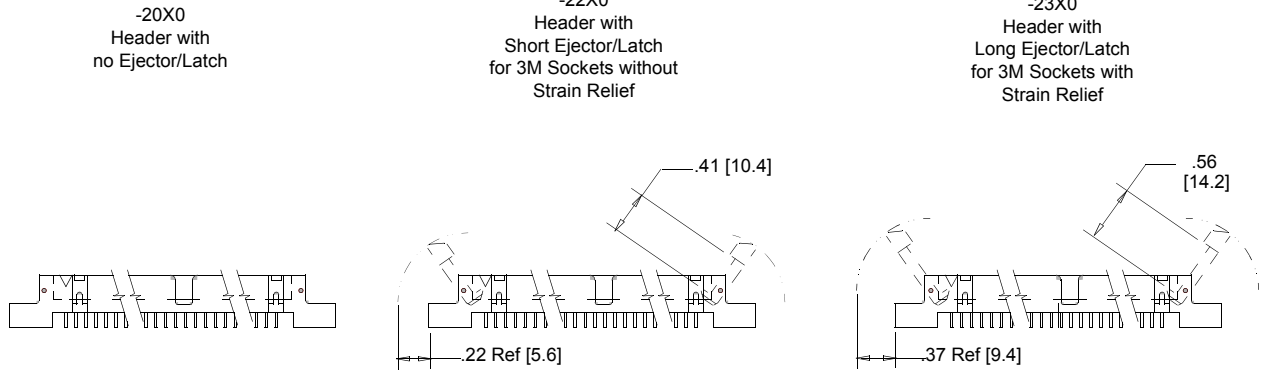
"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent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

UL File No.: E68080

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Inch
[mm]

| Tolerance Unless Noted | | | |
|------------------------|-----|------|-------|
| | .0 | .00 | .000 |
| inch | ±.1 | ±.01 | ±.005 |

[] Dimensions for Reference Only

Notes:

1. Notches A and C will accommodate 3M Polarization Keys N3518.
2. Accepts a #4, #2, or 3mm 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.

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3M™ Surface Mount Header

.100" × .100" High Temp

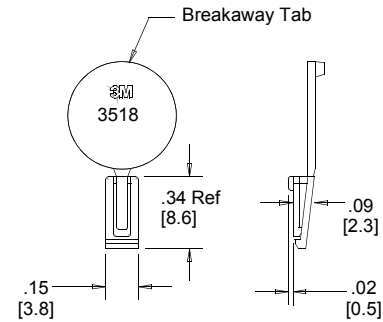
N4600 Series

Table 1

| Pin Quantity | Part Number | Dimensions | | | | Polarization 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] | B C |
| 16 | N4616 | 1.80 [45.8] | 1.50 [38.2] | 1.20 [30.5] | 1.01 [25.6] | A B C |
| 20 | N4620 | 2.00 [50.9] | 1.70 [43.2] | 1.40 [35.6] | 1.21 [30.7] | A B C |
| 26 | N4626 | 2.30 [58.5] | 2.00 [50.9] | 1.70 [43.2] | 1.51 [38.3] | A B C |
| 34 | N4634 | 2.70 [68.6] | 2.40 [61.0] | 2.10 [53.4] | 1.91 [48.5] | A B C |
| 40 | N4640 | 3.00 [76.3] | 2.70 [68.6] | 2.40 [61.0] | 2.21 [56.1] | A B C |
| 50 | N4650 | 3.50 [89.0] | 3.20 [81.3] | 2.90 [73.7] | 2.71 [68.8] | A B C |
| 60 | N4660 | 4.00 [101.7] | 3.70 [94.0] | 3.40 [86.4] | 3.21 [81.5] | A B C |

Table 2

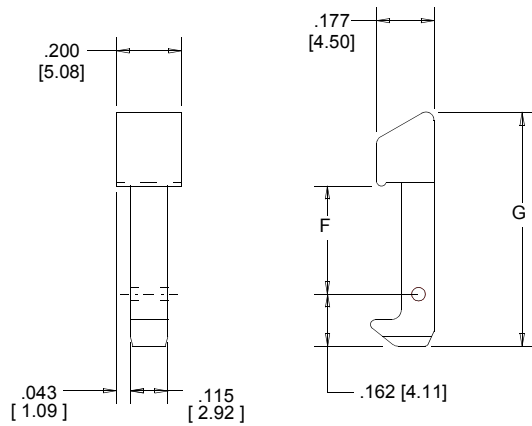
| 3M Part Number | Latch Descr. | Latch/Ejector Dimensions | |
|----------------|--------------|--------------------------|---------------|
| | | F | G |
| N3505-22 | Short | 0.335 [8.51] | 0.726 [18.44] |
| N3505-23 | Long | 0.484 [12.29] | 0.875 [22.23] |



3M Part No. N3518

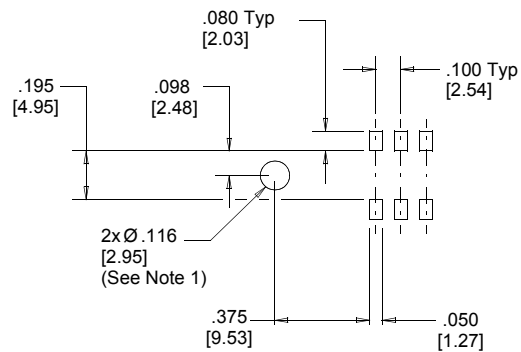
Polarizing Key

Material: Black LCP



Latch/Ejector

Material: Glass Filled Polyester (PCT)



Recommended Printed
Circuit Board Pattern

Ordering Information

N46XX-20XX-XX

Pin Qty
(See Table 1)
Polarization:
0 = for pin qty 14 to 60
5 = for pin qty 10

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

Plating suffix:
blank = tin-lead solder tails
RB = matte tin solder tails
(RoHS compliant)

Ejector Latch

(Order Separately)

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

Polarizing Key

(Order Separately)

N3518

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Interconnect Solutions

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