

# 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

TS-0168-E  
Sheet 1 of 3

## 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

TS-0168-E  
Sheet 2 of 3

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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)

TS-0168-E  
Sheet 3 of 3

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