

# 3M™ Pak 100 4-Wall Header

.100" × .100" Low Profile, Straight and Right Angle, High Temp Option

2500 Series



- Low profile, space saving design
- Socket compatibility for current design validation
- Center slot polarization prevents mis-insertions and reduces insertion time
- Dual slot polarization means broader compatibility with competitive polarization designs
- Optional retainer clamp for locking sockets in place and increasing connection reliability in vibration-prone environments
- Optional snap-in latches available
- Optional polarizing post available
- Exposed solder tails (on right angle version) provide ease of cleaning and reduced repair costs

Date Modified: May 30, 2003

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## Physical

**Insulation**  
Material: Glass Filled Polyester (PBT)  
Glass Filled Polyester (PCT) (High Temp Option)  
Flammability: UL 94V-0  
Color: Gray  
Beige (High Temp Option)

**Contact**  
Material: Copper Alloy

**Plating**  
Underplate: 100 μ" [ 2.54 μm ] Nickel — QQ-N-290, Class 2  
Wiping Area: Gold — MIL-G-45204, Type II, Grade C  
Solder Tails: 200 μ" [ 5.08 μm ] 60/40 Tin Lead — MIL-P-81728  
Wrap Tails: Gold Flash (Normal Temp Only)

**Marking:** 3M Logo, and Orientation Triangle

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## Electrical

**Current Rating:** 2 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  
**Processing:** Maximum 235°C, with 90 seconds over 215°C (High Temp Option)

UL File No.: E68080

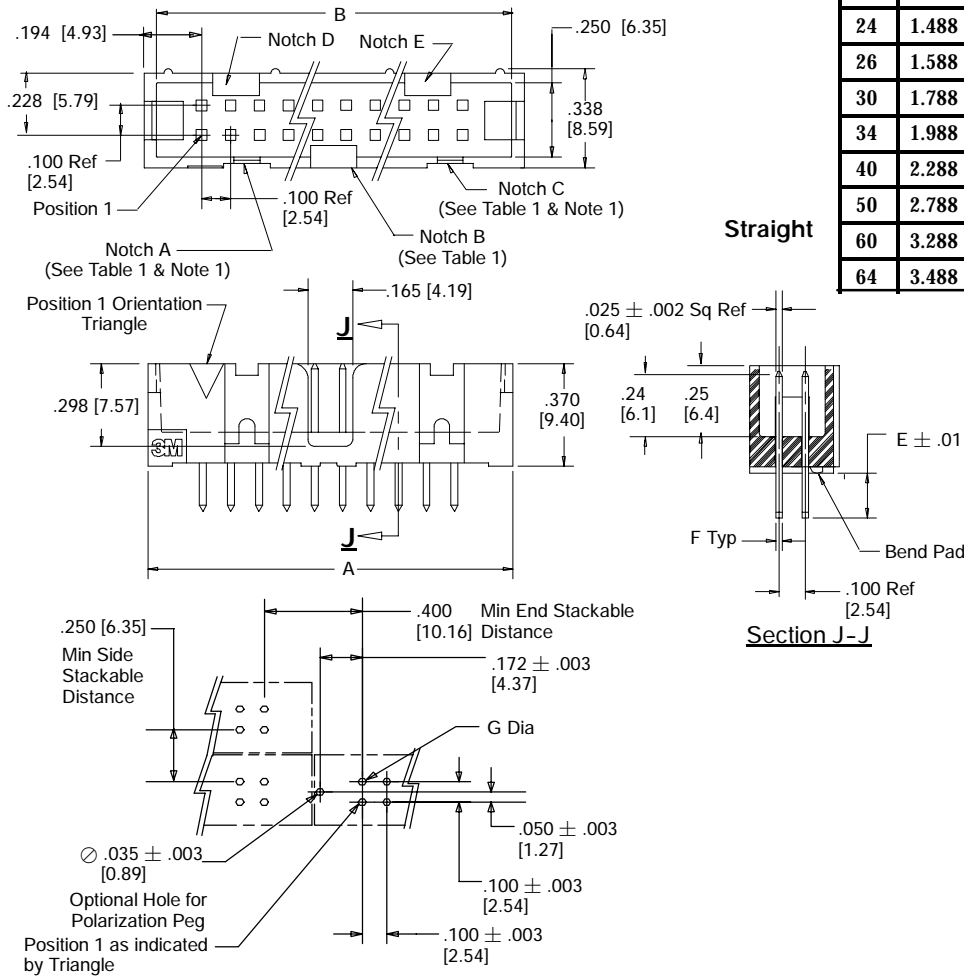
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Tail	Dim E	Pin Cross Section			Dim G ± .003
		Dimension F	Diagonals	Corner Radii	
X2	.112 [ 2.84]	.0245 ± .0005 [0.622]	.028 ± .001 [0.71]	.0075 Ref [0.191]	.035 [0.89] (See Note 2)
03	.155 [ 3.94]	.0245 ± .0005 [0.622]	.028 ± .001 [0.71]	.0075 Ref [0.191]	.035 [0.89]
05	.61 Ref [15.5]	.0250 ± .002 [0.635]	.035 ± .003 [0.90]	.003 Max [0.08]	.045 [1.14]

Pin Qty	Dimensions		Polarizing Notches
	A	B	
10	.788 [20.02]	.708 [17.98]	B C
14	.988 [25.10]	.908 [22.06]	B C D E
16	1.088 [27.64]	1.008 [25.60]	A B C D E
20	1.288 [32.72]	1.208 [30.68]	A B C D E
24	1.488 [37.80]	1.408 [35.76]	A B C D E
26	1.588 [40.34]	1.508 [38.30]	A B C D E
30	1.788 [45.42]	1.708 [43.38]	A B C D E
34	1.988 [50.50]	1.908 [48.46]	A B C D E
40	2.288 [58.12]	2.208 [56.08]	A B C D E
50	2.788 [70.82]	2.708 [68.78]	A B C D E
60	3.288 [83.52]	3.208 [81.48]	A B C D E
64	3.488 [88.60]	3.408 [86.56]	A B C D E



**Recommended P.C. Board Hole Pattern**

(Shown for mounting side of board.)

Notes:

1. Notches "A" and "C" will accommodate 3M Polarizing Keys 3518.
2. The recommended PCB hole size for the kinked tail positions on the .112" solder tail connector is .035" ± .002. Refer to TS-0972 for the positions kinked.



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

[ ] Dimensions for Reference Only

## Ordering Information

**X25XX-X0XXXX**

Blank = Standard  
N = High Temperature

Pin Quantity:  
(See Table 1)

Bend Pad Option:  
6 = Straight pin product with bend pad in High temp or normal plastics  
7 = Straight pin product w/o bend pad in High temp only

Tail

02 = Solder Tails for .062 [ 1.57 ] Thick Board.  
K2 = Kinked Solder Tails for .062 [ 1.57 ] Thick Board.  
03 = Solder Tails for .094 to .125 [ 2.39 to 3.18 ] Thick Board.  
05 = Wrap Tails for up to 3 Levels of Wire Wrap.  
(Normal temp only)

Mating Plating Thickness:  
Solder Tail Versions

UG = 15 μ" [ 0.38 μm ]  
UB = 30 μ" [ 0.76 μm ]

Wrap Tail Versions

EB = 30 μ" [ 0.76 μm ]  
(Normal temp Only)

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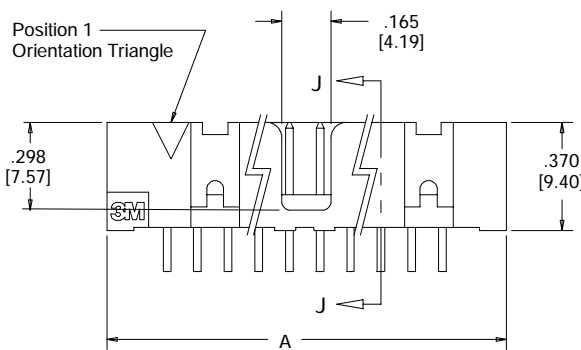
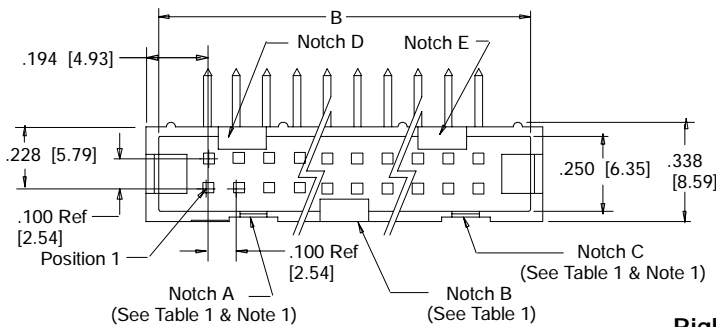
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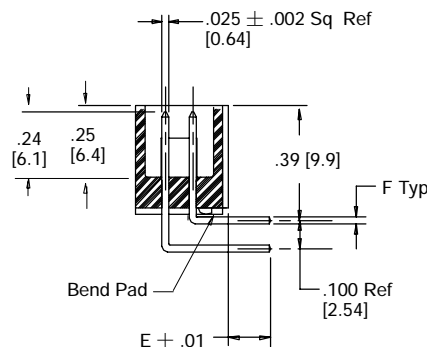
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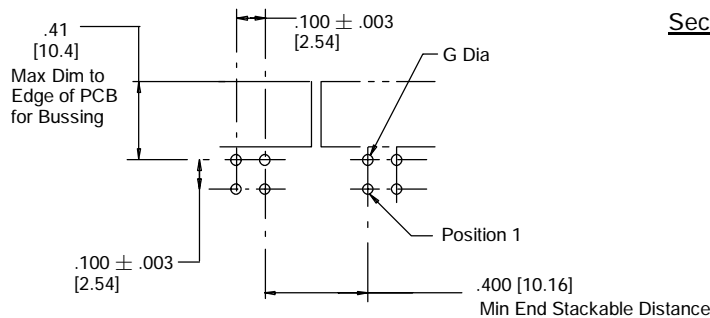
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### Right Angle



### Section J-J



### Recommended Mounting Hole Pattern

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Inch  
[mm]

Tolerance Unless Noted			
	.0	.00	.000
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N = High Temperature

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

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