

.100" × .100" Low Profile Header

Straight & Right Angle, 4 Wall, High Temp Option

2500 Series



243

- 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: April 23, 2001

TS-0770-10
Sheet 1 of 3

Physical

Insulation

Material: Glass Filled Polyester (PBT)
Glass Filled Polyester (PCT)(High Temp Option)
Flammability: UL 94V-0
Color: Gray
Beige (High Temp Option)
Marking: 3M Logo, and Orientation Triangle
Contact
Material: Copper Alloy
Plating
Underplate: 100 μ " [2.54 μ m] Nickel — QQ-N-290, Class 2
Wiping Area: Gold — MIL-G-45204, Type II, Grade C
Solder Tails: 200 μ " [5.08 μ m] 60/40 Tin Lead — MIL-P-81728
Wrap Tails: Gold Flash (Normal Temp Only)

Electrical

Current Rating: 2 A
Insulation Resistance: $>1 \times 10^9 \Omega$ at 500 Vdc
Withstanding Voltage: 1000 Vrms at Sea Level

Environmental

Temperature Rating: -55°C to $+105^\circ\text{C}$
Processing: Maximum 235°C , with 90 seconds over 215°C (High Temp Option)

UL File No.: E68080

3M Interconnect Solutions Division

6801 River Place Blvd.
Austin, TX 78726-9000

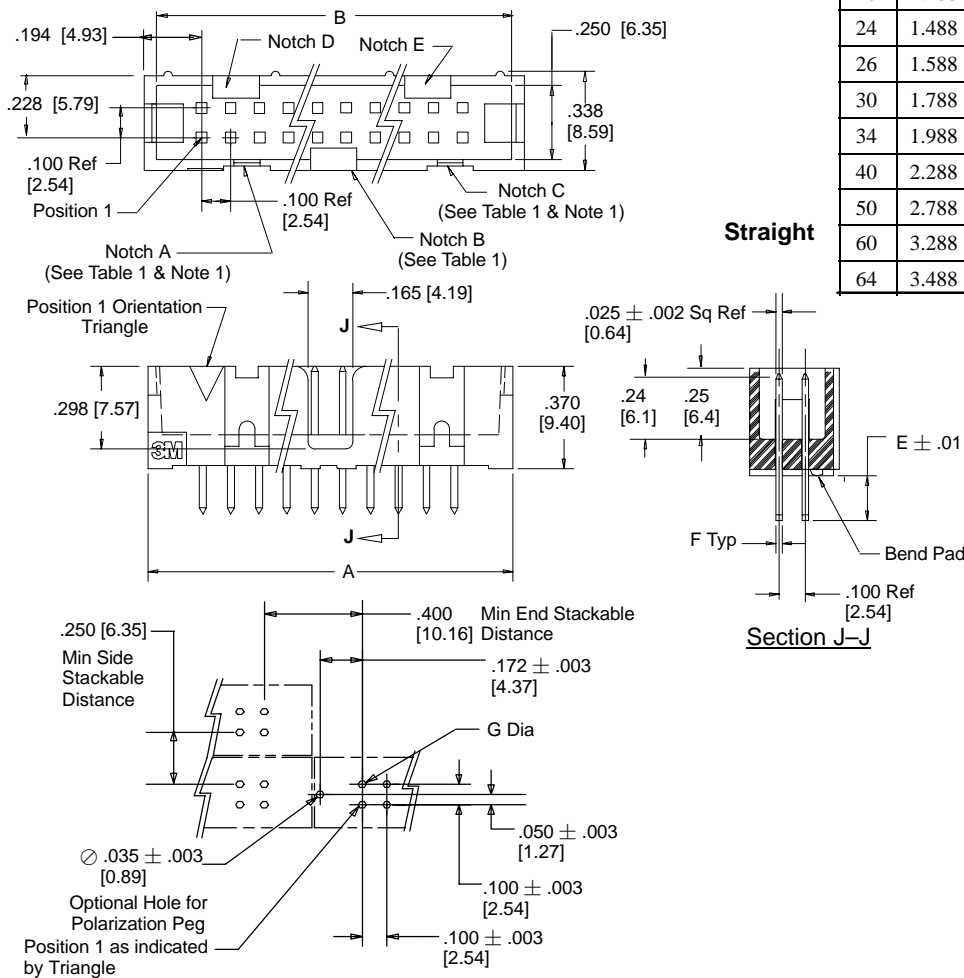
For technical, sales or ordering information call
800-225-5373

.100" × .100" Low Profile Header Straight & Right Angle, 4 Wall, High Temp Option

2500 Series

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



Inch
[mm]

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

[] Dimensions for Reference Only

Recommended P.C. Board Hole Pattern
(Shown for mounting side of board.)

- Notes:
- Notches "A" and "C" will accommodate 3M Polarizing Keys 3518.
 - 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.

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)
TS-0770-10
Sheet 2 of 3

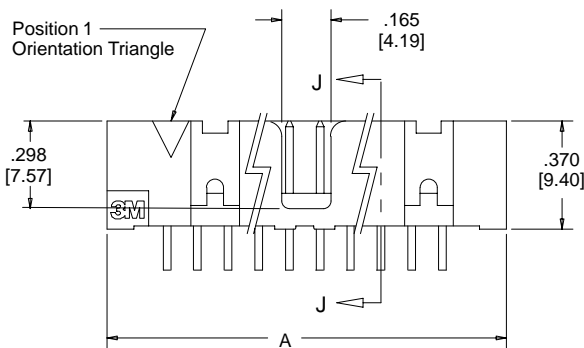
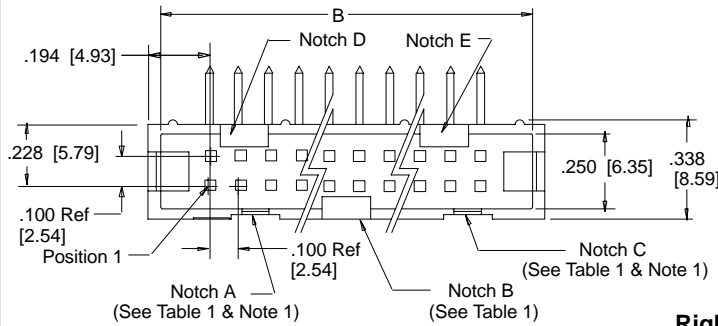
.100" × .100" Low Profile Header

Straight & Right Angle, 4 Wall, High Temp Option

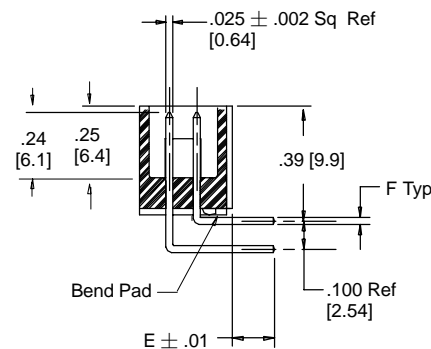
2500 Series

Table 2					
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]

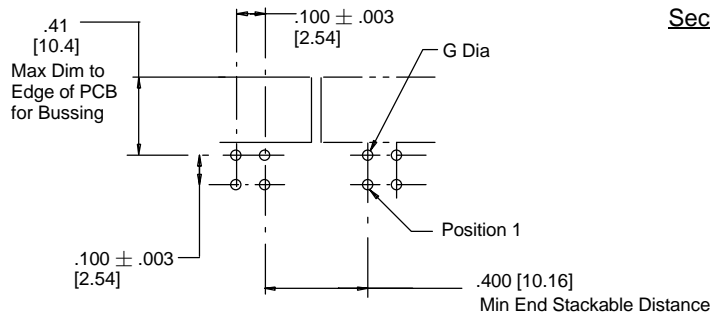
Table 1			
Pin Qty	Dimensions		Polarizing Notches
	A	B	
10	.788 [20.02]	.708 [17.98]	B C
14	.988 [25.10]	.908 [22.06]	B C D E
16	1.088 [27.64]	1.008 [25.60]	A B C D E
20	1.288 [32.72]	1.208 [30.68]	A B C D E
24	1.488 [37.80]	1.408 [35.76]	A B C D E
26	1.588 [40.34]	1.508 [38.30]	A B C D E
30	1.788 [45.42]	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



Right Angle



Section J-J



Recommended Mounting Hole Pattern

Notes:

- Notches "A" and "C" will accommodate 3M Polarizing Keys 3518.
- 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 position kinked.



Inch
[mm]

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

[] Dimensions for Reference Only

Ordering Information

X25XX-50XXX

Blank = Standard
N = High Temperature

Pin Quantity:
(See Table 1)

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)

TS-0770-10
Sheet 3 of 3

3M Interconnect Solutions Division

6801 River Place Blvd.
Austin, TX 78726-9000

For technical, sales or ordering information call
800-225-5373