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

TS-0770-10
Sheet 1 of 3
Date Modified: April 23, 2001

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 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)

Electrical

- Current Rating: 2 A
- Insulation Resistance: >1 × 10^9 Ω at 500 Vdc
- Withstanding Voltage: 1000 Vrms at Sea Level

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
.100" × .100" Low Profile Header
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<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tail</strong></td>
</tr>
<tr>
<td>X2</td>
</tr>
<tr>
<td>03</td>
</tr>
<tr>
<td>05</td>
</tr>
</tbody>
</table>

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.

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**Table 1**

<table>
<thead>
<tr>
<th>Pin Qty</th>
<th><strong>Dimensions</strong></th>
<th>Polarizing Notches</th>
</tr>
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<tbody>
<tr>
<td>10</td>
<td>.788 [20.02]</td>
<td>A B C D E</td>
</tr>
<tr>
<td>16</td>
<td>1.088 [27.64]</td>
<td>1.008 [25.60]</td>
</tr>
<tr>
<td>24</td>
<td>1.488 [37.80]</td>
<td>1.408 [35.76]</td>
</tr>
<tr>
<td>26</td>
<td>1.588 [40.14]</td>
<td>1.508 [38.10]</td>
</tr>
<tr>
<td>30</td>
<td>1.788 [45.42]</td>
<td>1.708 [43.38]</td>
</tr>
<tr>
<td>34</td>
<td>1.988 [50.50]</td>
<td>1.908 [48.46]</td>
</tr>
<tr>
<td>40</td>
<td>2.288 [58.12]</td>
<td>2.208 [56.08]</td>
</tr>
<tr>
<td>50</td>
<td>2.788 [70.82]</td>
<td>2.708 [68.78]</td>
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<td>60</td>
<td>3.288 [83.52]</td>
<td>3.208 [81.48]</td>
</tr>
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<td>64</td>
<td>3.488 [88.60]</td>
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**Notes:**

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Refer to TS-0972 for the positions kinked.

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

(Shown for mounting side of board.)

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Refer to TS-0972 for the positions kinked.

**Ordering Information**

- **X25XX-X0XXX**

- **Blind** = 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.

- **Mating Plating Thickness:**
  - Solder Tail Versions
    - USG = 15 µ" [0.38 µm]
    - UB = 30 µ" [0.76 µm]
  - Wrap Tail Versions
    - EB = 30 µ" [0.76 µm]

For technical, sales or ordering information call
800-225-5373
.100" × .100" Low Profile Header
Straight & Right Angle, 4 Wall, High Temp Option

## Table 2

<table>
<thead>
<tr>
<th>Tail</th>
<th>Dim E</th>
<th>Pin Cross Section</th>
<th>Dimension F</th>
<th>Diagonals</th>
<th>Corner Radii</th>
<th>Dim G ± .003</th>
</tr>
</thead>
<tbody>
<tr>
<td>X2</td>
<td>.112</td>
<td>.0245 ± .0005</td>
<td>[0.622]</td>
<td>.028 ± .001</td>
<td>.0075 Ref [0.191]</td>
<td>.035 [0.89] (See Note 2)</td>
</tr>
<tr>
<td>03</td>
<td>.155</td>
<td>.0245 ± .0005</td>
<td>[0.622]</td>
<td>.028 ± .001</td>
<td>.0075 Ref [0.191]</td>
<td>.035 [0.89]</td>
</tr>
<tr>
<td>05</td>
<td>.61 Ref [15.5]</td>
<td>.0250 ± .002</td>
<td>[0.635]</td>
<td>.035 ± .003</td>
<td>.003 Max [0.08]</td>
<td>.045 [1.14]</td>
</tr>
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### Right Angle

- **Position 1** Orientation Triangle
- **Position 1** Max Dim to Edge of PCB for Bussing .41 [10.4]

### Section J–J

- **Bend Pad** 0.25 ± .002 Sq Ref [0.64]
- **G Dia** 0.100 ± .003 [2.54]

### Recommended Mounting Hole Pattern

- **Position 1**: Min End Stackable Distance 0.400 [10.16]

### Ordering Information

- **Blank = Standard**
- **N = High Temperature**
- **Pin Quantity:** (See Table 1)

- **Tail**: X25XX-50XXXX

- **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

### Notes:

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