

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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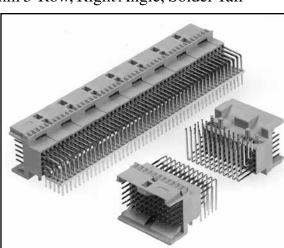






3M[™] MetPak[™] 2-FB Inverse Header

2 mm 5-Row, Right Angle, Solder Tail



MP2 Series

- Three levels of early mate, late break (EMLB)
- sequencing or selective loading options
- Footprint compatible with standard Futurebus+®
- Solder tail with true-position wafer
- Ideal for hot swapping applications
- End-to-end stackable
- · Right angle male for daughter card
- Mates with MP2-R for backplane applications and MP2-SXXXG for coplanar applications
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3Mconnectors.com for compliance information (RIA E1 & C1 apply)

Date Modified: September 17, 2013

TS-1122-C Sheet 1 of 4

Physical

Insulation:

Material: High Temp LCP Flammability: UL 94V-0 Color: Beige

Contact:

Material: Copper Alloy

Plating:

Underplating: 50 μ" [1.27 μm] Nickel Wiping Area: See Ordering Information Solder Tails: See Ordering Information

Electrical

Current Rating: Signal: 1.5 A – All contacts simultaneously

Insulation Resistance: $10^3 M\Omega$ **Withstanding Voltage:** $1000 V_{MC}$

Environmental

Temperature Rating: -55°C to +125°C

Process Temperature Rating: 260°C (Profile per J-STD-020C)

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

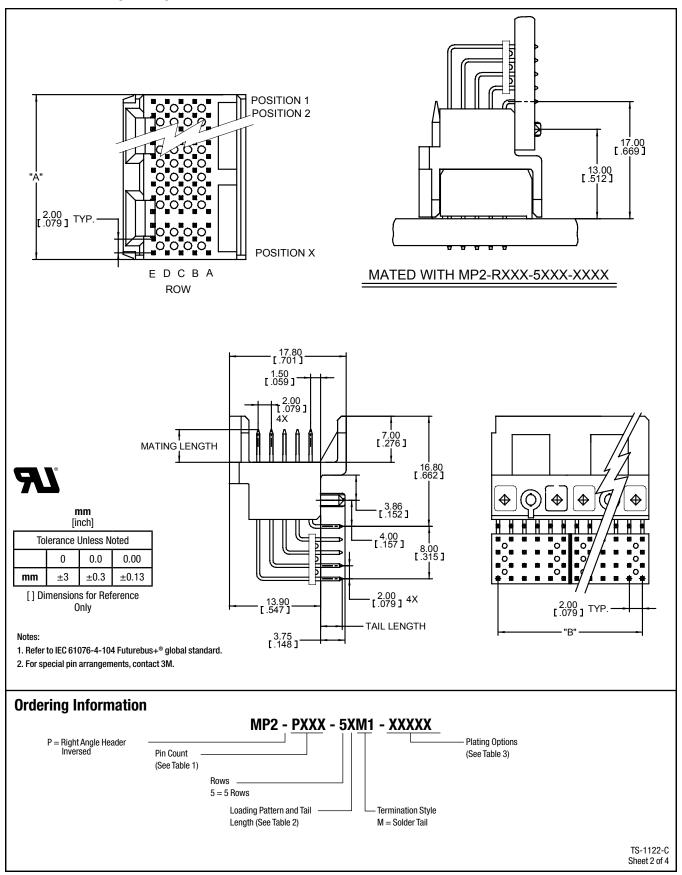
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UL File No.: E68080

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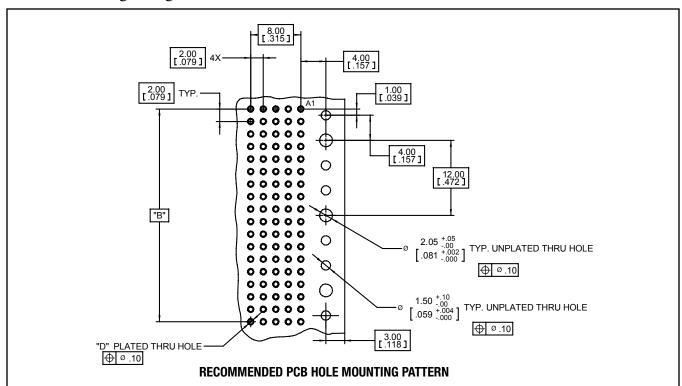


| Table 1 - Connector & Row Lengths | | | | | | |
|-----------------------------------|-----------------------|-----------------------------|------|--|--|--|
| Pin Count | Dim. "A" mm [inch] | Dim "B" mm [inch] | Rows | | | |
| 030 | 11.95 [0.471] | 10.00 [0.394] | 5 | | | |
| 060 | 23.95 [0.943] | 22.00 [0.866] | 5 | | | |
| 090 | 35.95 [1.415] | 34.00 [1.339] | 5 | | | |
| 120 | 47.95 [1.889] | 46.00 [1.811] | 5 | | | |
| 150 | 59.95 [2.36] | 58.00 [2.283] | 5 | | | |
| 180 | 71.95 [2.833] | 71.95 [2.833] 70.00 [2.756] | | | | |
| 210 | 83.95 [3.305] | 82.00 [3.228] | 5 | | | |
| 240 | 95.95 [3.778] | 94.00 [3.701] | 5 | | | |
| 270 | 107.95 [4.251] | 106.00 [4.173] | 5 | | | |
| 300 | 119.95 [4.722] | 118.00 [4.646] | 5 | | | |
| 420 | 167.95 [6.612] | 166.00 [6.535] | 5 | | | |

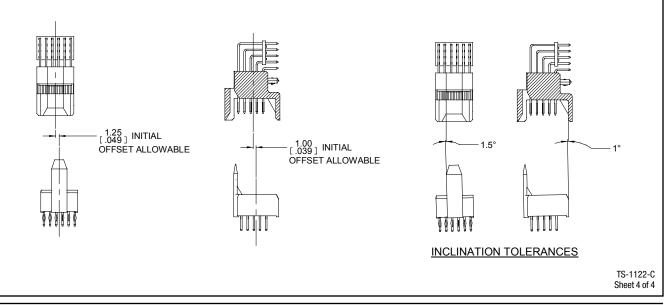
| Table 2 - Mate & Tail Lengths, mm vs. Loading Pattern | | | | | | | | | | | |
|---|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Loading Pattern Code | Description | Mate Length Row A | Mate Length Row B | Mate Length Row C | Mate Length Row D | Mate Length Row E | Tail Length Row A | Tail Length Row B | Tail Length Row C | Tail Length Row D | Tail Length Row E |
| 1 | All Positions Filled | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 3.30 | 3.30 | 3.30 | 3.30 | 3.30 |
| 2 | All Positions Filled | 4.25 | 5.00 | 5.00 | 5.00 | 5.00 | 4.05 | 3.30 | 3.30 | 3.30 | 3.30 |
| 3 | All Positions Filled | 3.50 | 4.25 | 4.25 | 5.00 | 5.00 | 4.80 | 4.05 | 4.05 | 3.30 | 3.30 |
| 4 | All Positions Filled | 4.25 | 5.00 | 4.25 | 4.25 | 4.25 | 4.05 | 3.30 | 4.05 | 4.05 | 4.05 |
| 5 | Rows A, B, C and D Filled | 5.00 | 5.00 | 5.00 | 5.00 | NA | 3.30 | 3.30 | 3.30 | 3.30 | NA |
| 6 | Rows A, B, C and D Filled | 5.00 | 4.25 | 4.25 | 5.00 | NA | 3.30 | 4.05 | 4.05 | 3.30 | NA |
| 7 | All Positions Filled | 4.25 | 5.00 | 4.25 | 5.00 | 4.25 | 4.05 | 3.30 | 4.05 | 3.30 | 4.05 |
| 8 | All Positions Filled | 4.25 | 4.25 | 4.25 | 4.25 | 4.25 | 4.05 | 4.05 | 4.05 | 4.05 | 4.05 |
| 9 | All Positions Filled | 5.00 | 3.50 | 3.50 | 3.50 | 4.25 | 3.30 | 4.80 | 4.80 | 4.80 | 4.05 |
| Α | All Positions Filled | 3.75 | 4.50 | 5.25 | 4.50 | 3.75 | 4.55 | 3.80 | 3.05 | 3.80 | 4.55 |
| В | All Positions Filled | 3.75 | 4.50 | 3.75 | 4.50 | 3.75 | 4.55 | 3.80 | 4.55 | 3.80 | 4.55 |
| С | All Positions Filled | 5.75 | 5.75 | 5.75 | 5.75 | 5.75 | 2.55 | 2.55 | 2.55 | 2.55 | 2.55 |
| D | All Positions Filled | 4.25 | 5.00 | 5.75 | 5.00 | 4.25 | 4.05. | 3.30 | 2.55 | 3.30 | 4.05 |
| E | All Positions Filled | 5.00 | 5.75 | 5.75 | 5.75 | 5.00 | 4.05 | 4.05 | 4.05 | 4.05 | 4.05 |
| G | Rows A, B, C and D Filled | 5.00 | 4.25 | 4.25 | 5.00 | NA | 3.30 | 4.05 | 4.05 | 3.30 | NA |

| Table 3 - Plating | | | | |
|---------------------------|---|--|--|--|
| Plating Suffix | x Plating Composition | | | |
| KR (RIA E1 & C1 apply) | 0.76 μm [30 μ"] Min. Au Contact Area | | | |
| | $2.54\mu m [100\mu"]$ Min. Matt Whisker Mitigating Sn Tail Area | | | |
| | 1.27 μm [50 μ"] Min. Ni all over | | | |
| LR (RIA E1 & C1 apply) | 0.08 μm [3 μ"] Min. Au Contact Area | | | |
| | 0.67 μm [27 μ"] Min. PdNi Contact Area | | | |
| | $2.54\mu m$ [100 $\mu"$] Min. Matt Whisker Mitigating Sn Tail Area | | | |
| | 1.27 μm [50 μ"] Min. Ni all over | | | |

TS-1122-C Sheet 3 of 4



| | Table 4 - HOLE PLATING FINISHES | | | | | | | |
|------|--|------------------------------|---|--|--|---|--|--|
| HOLE | IOLE Finished Dia. Cu Thickness [mm [in] | | Immersion Matte Sn Thickness microns [µ"] | Electrolytic Au Thickness microns [µ"] | OSP ENTEK Thickness microns [µ"] | Drilled Hole Dia. mm [in] | | |
| "D" | 0.700-0.800 [.02760315] | 0.025-0.045 [0.001-0.002] | 0.5 - 2.5 [20 - 100] | 0.1 - 0.5 [4 - 20] | 0.2 - 0.5 [8 - 20] | 0.830-0.860 [.0330- .0340] or 0.85 mm [#66] TWIST DRILL | | |



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the legal theory asserted.

unless expressly agreed upon, in writing, by an authorized officer of 3M.

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