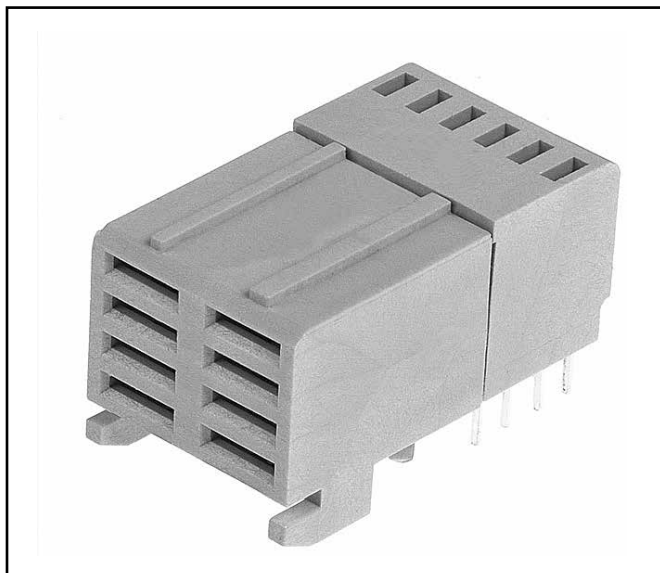


# 3M™ MetPak™ 2-FB Power Socket

2 mm 4/5-Row, Right Angle, Solder or Press-Fit Tail

MP2 Series



- 6.50 Amps per contact
- End-to-end stackable
- Press or heat stake peg (solder tail)
- Futurebus+® compatible
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3Mconnectors.com](http://www.3Mconnectors.com) for compliance information (RIA E1 & C1 apply)

Date Modified: February 14, 2017

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## Physical

### Insulation:

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

### Contact:

Material: Copper Alloy

### Plating:

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

## Electrical

**Current Rating:** Power: 6.50 A per power socket contact at 70°C

**Insulation Resistance:** 10<sup>3</sup> MΩ

**Withstanding Voltage:** 1,500 V<sub>AC</sub> for 60 seconds

## 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)

UL File No.: E68080

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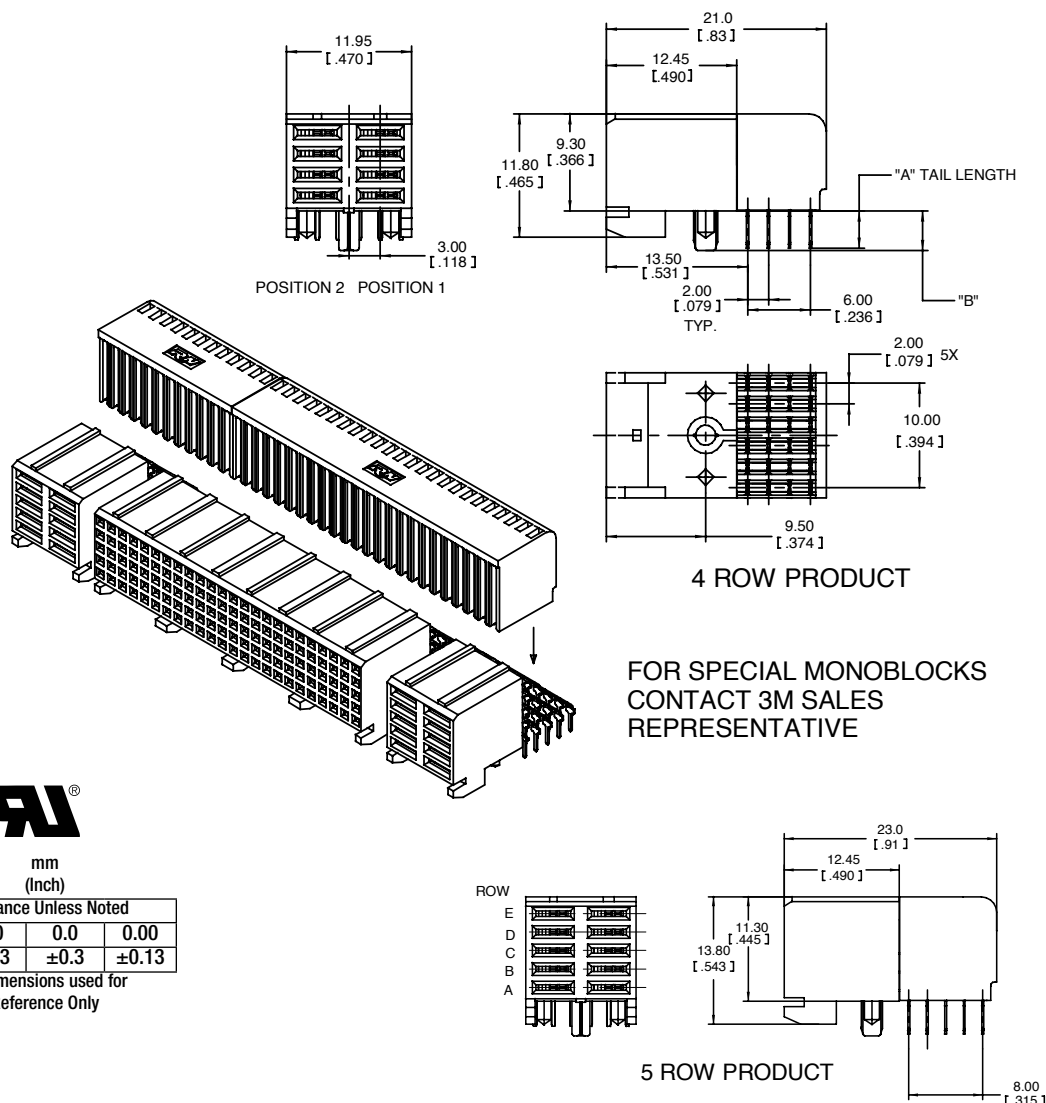
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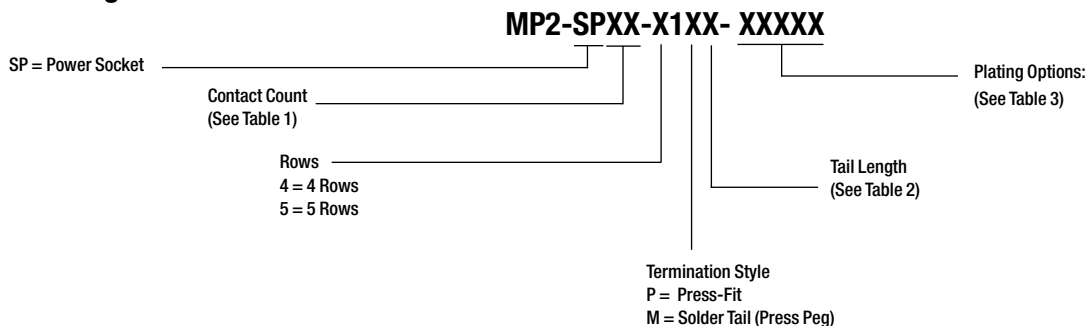


| Tolerance Unless Noted                |    |      |       |
|---------------------------------------|----|------|-------|
|                                       | 0  | 0.0  | 0.00  |
| mm                                    | ±3 | ±0.3 | ±0.13 |
| () Dimensions used for Reference Only |    |      |       |

## Note:

1. Refer to IEC 61076-4-104 Futurebus+® global standard.
2. "Press Fit" describes a contact tail having a compliant section designed to make a reliable electrical connection with a plated through-hole (PTH) in a printed circuit board, typically a "back plane."

## Ordering Information



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# 3M™ MetPak™ 2-FB Power Socket

2 mm 4/5-Row, Right Angle, Solder or Press-Fit Tail

MP2 Series

| Table 1   |            |
|-----------|------------|
| Pin Count | No of Rows |
| 08        | 4          |
| 10        | 5          |

| Table 2 - Tail & Post Lengths                   |            |              |              |
|-------------------------------------------------|------------|--------------|--------------|
| Contact-to-PC Board Tail Termination Option No. |            | Dim. "A"     | Dim. "B"     |
| Solder                                          | Press-Fit* |              |              |
| S1                                              |            | 2.72 [0.107] | 5.20 [0.205] |
| S2                                              |            | 3.53 [0.139] | 6.00 [0.256] |
| M1                                              |            | 2.72 [0.107] | 3.75 [0.148] |
| M2                                              | P1         | 3.53 [0.139] | 3.75 [0.148] |

\*Compliant-Pin Tail

| Table 3 - Plating |                   |                   |                                                                                                                                                                                                                                                                             |
|-------------------|-------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Plating Suffix    | Press-Fit Tails*  | Solder Tails      | Plating Composition                                                                                                                                                                                                                                                         |
| KR                | RIA E1 & C1 apply | RIA E1 & C1 apply | 0.76 $\mu\text{m}$ [30 $\mu\text{m}$ ] Min. Au Contact Area<br>2.54 $\mu\text{m}$ [100 $\mu\text{m}$ ] Min. Matt Whisker Mitigating Sn Tail Area<br>1.27 $\mu\text{m}$ [50 $\mu\text{m}$ ] Min. Ni all over                                                                 |
| LR                | RIA E1 & C1 apply | RIA E1 & C1 apply | 0.08 $\mu\text{m}$ [3 $\mu\text{m}$ ] Min. Au Contact Area<br>0.67 $\mu\text{m}$ [27 $\mu\text{m}$ ] Min. PdNi Contact Area<br>2.54 $\mu\text{m}$ [100 $\mu\text{m}$ ] Min. Matt Whisker Mitigating Sn Tail Area<br>1.27 $\mu\text{m}$ [50 $\mu\text{m}$ ] Min. Ni all over |

\*Compliant-Pin Tail

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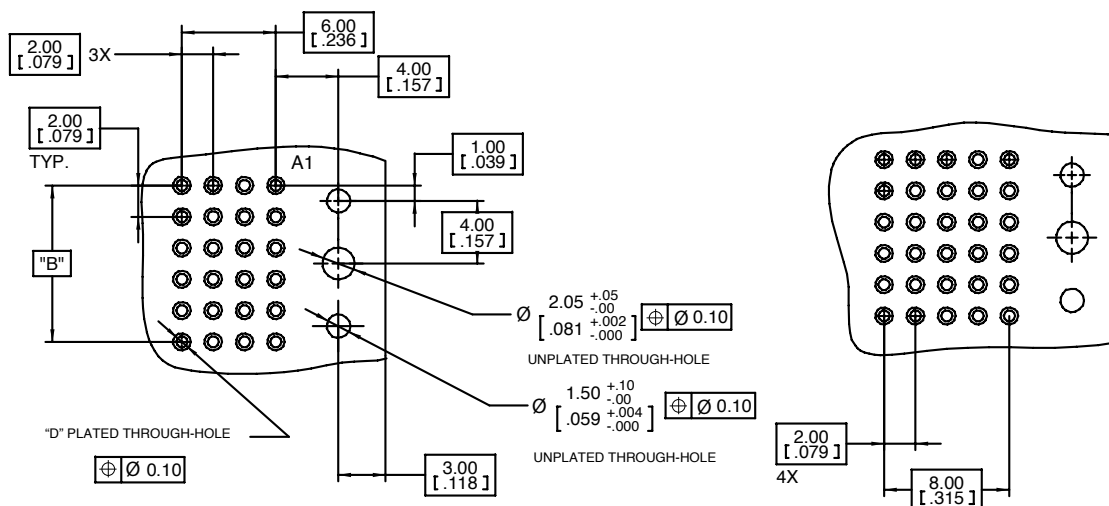
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**Recommended 4 Row PCB Hole Mounting Pattern**

**Recommended 5 Row PCB Hole Mounting Pattern**

**Table 4 - HOLE PLATING FINISHES**

| HOLE | Finished Dia.<br>mm [in]     | Cu Thickness<br>mm [in]      | Immersion Matte<br>Sn Thickness<br>microns [μ"] | Electrolytic Au<br>Thickness<br>microns [μ"] | OSP ENTEK<br>Thickness<br>microns [μ"] | Drilled Hole Dia.<br>mm [in]                             |
|------|------------------------------|------------------------------|-------------------------------------------------|----------------------------------------------|----------------------------------------|----------------------------------------------------------|
| "D"  | 0.700-0.800<br>[.0276-.0315] | 0.025-0.045<br>[0.001-0.002] | 0.5 - 2.5<br>[20 - 100]                         | 0.1 - 0.5<br>[4 - 20]                        | 0.2 - 0.5<br>[8 - 20]                  | 0.830-0.860 [.0330-.0340] or<br>0.85mm [#66] TWIST DRILL |

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