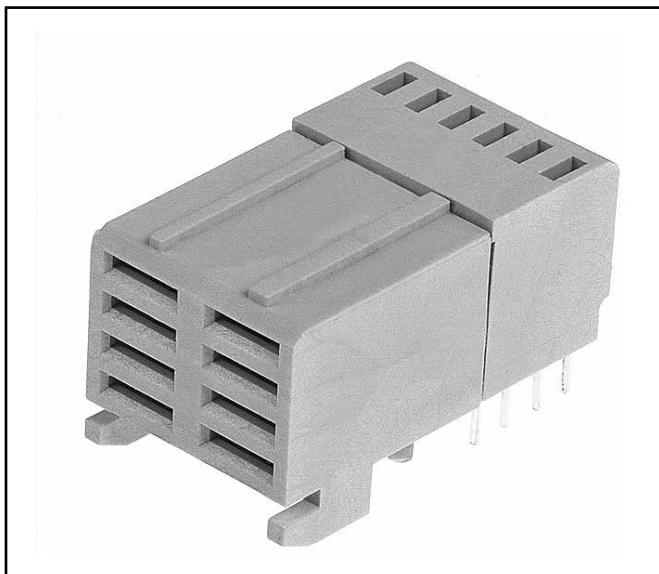


# 3M™ MetPak™ 2-FB Power Socket

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: September 17, 2013

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## Physical

### Insulation:

Material: High Temperature LCP

Flammability: UL 94V-0

Color: Beige

### Contact:

Material: Copper Alloy

### Plating:

Underplating: 50  $\mu$ " [1.27  $\mu$ m] 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:**  $10^3$  M $\Omega$

**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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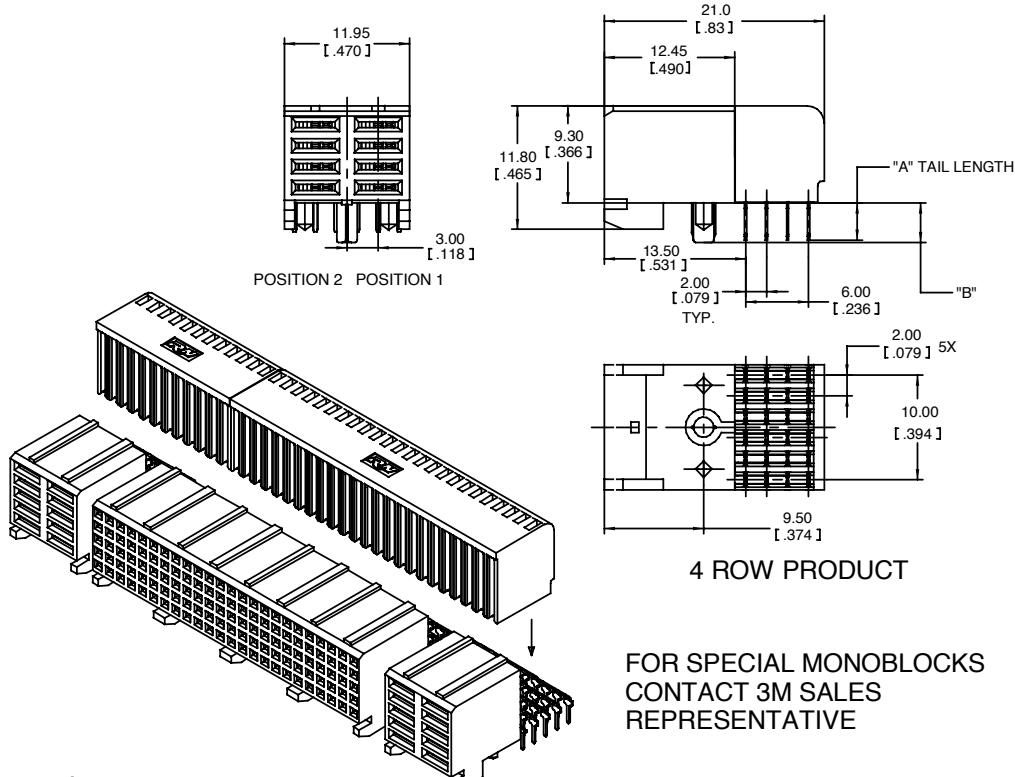
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# 3M™ MetPak™ 2-FB Power Socket

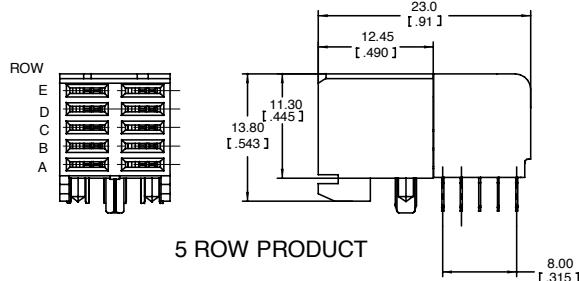
2 mm 4/5-Row, Right Angle, Solder or Press-Fit Tail

MP2 Series



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

( ) 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

MP2-SPXX-X1XX- XXXXX

SP = Power Socket	Plating Options: (See Table 3)
Contact Count	
(See Table 1)	
Rows	Tail Length (See Table 2)
4 = 4 Rows	
5 = 5 Rows	
Termination Style	
P = Press-Fit	
M = Solder Tail (Press Peg)	

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Sheet 2 of 4



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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]	3.57 [0.141]
M2	P1	3.53 [0.139]	3.57 [0.141]

\*Compliant-Pin Tail

Table 3 - Plating

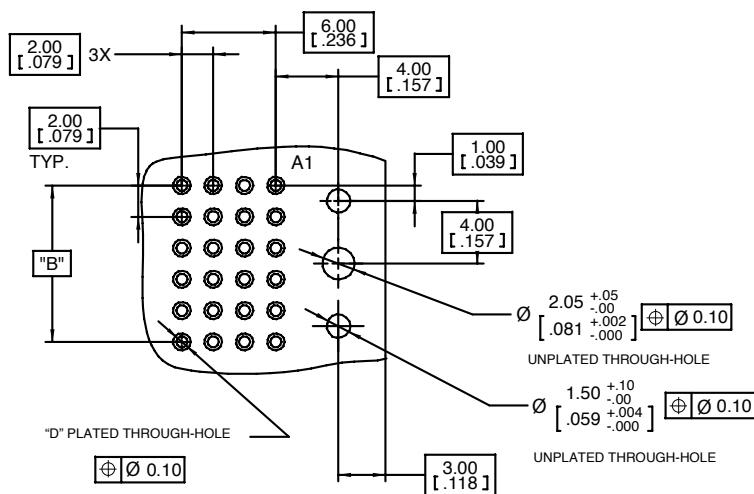
Plating Suffix	Press-Fit Tails*	Solder Tails	Plating Composition
KR	RIA E1 & C1 apply	RIA E1 & C1 apply	0.76 $\mu$ m [30 $\mu$ "] Min. Au Contact Area 2.54 $\mu$ m [100 $\mu$ "] Min. Matt Whisker Mitigating Sn Tail Area 1.27 $\mu$ m [50 $\mu$ "] Min. Ni all over
LR	RIA E1 & C1 apply	RIA E1 & C1 apply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

\*Compliant-Pin Tail

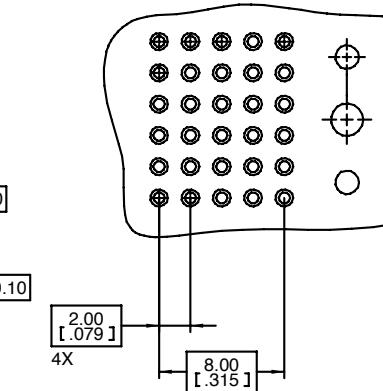
# 3M™ MetPak™ 2-FB Power Socket

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

MP2 Series



**Recommended 4 Row PCB Hole  
Mounting Pattern**



**Recommended 5 Row PCB Hole  
Mounting Pattern**

**Table 4 - HOLE PLATING FINISHES**

HOLE	Finished Dia. mm [in]	Cu Thickness mm [in]	Immersion Matte Sn Thickness microns [ $\mu$ "]	Electrolytic Au Thickness microns [ $\mu$ "]	OSP ENTEK Thickness microns [ $\mu$ "]	Drilled Hole Dia. mm [in]
"D"	0.700-0.800 [.0276-.0315]	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 0.85mm [#66] TWIST DRILL

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