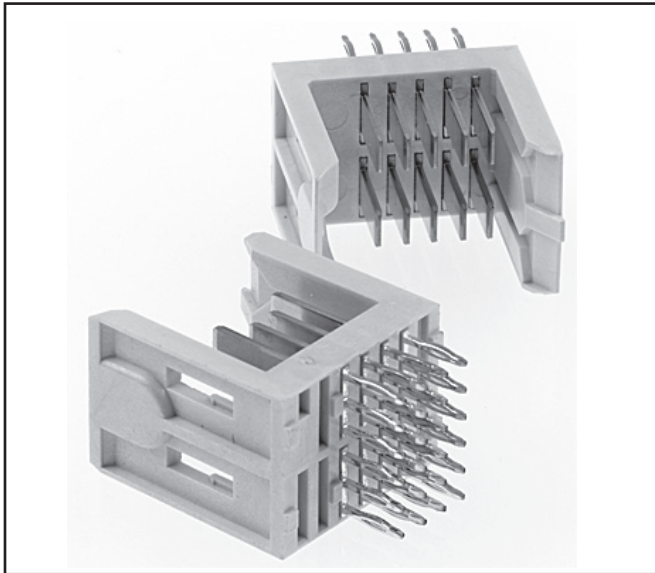


# 3M™ MetPak™ 2-FB Power Header

2 mm 4/5-Row, Vertical, Press-Fit Tail

MP2 Series



- 6.50 Amps per contact
- Early mate late break (EMLB) for hot swap or selective loading options
- End-to-end stackable
- Optional feed-through tail (Press-Fit)
- Futurebus+® compatible
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3M.com/interconnects](http://www.3M.com/interconnects) for compliance information (RIA E1 & C1 apply)

Date Modified: August 21, 2009

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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

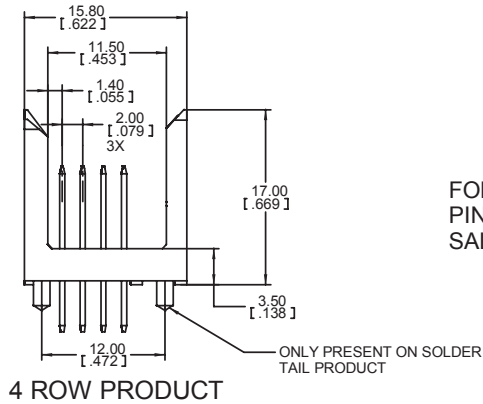
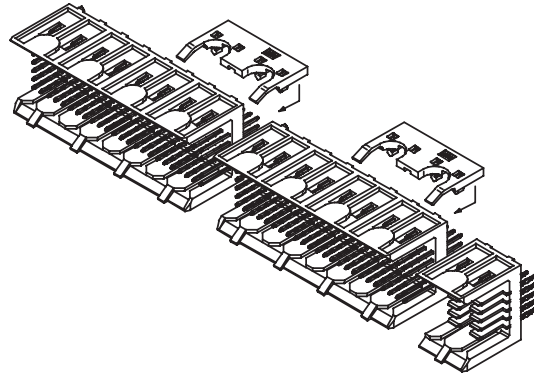
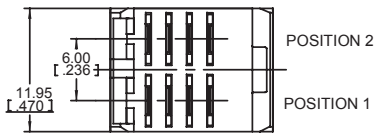
UL File No.: E68080

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MP2 Series

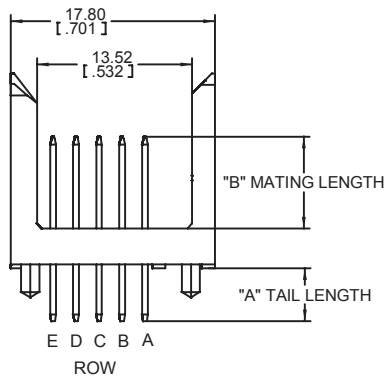


4 ROW PRODUCT

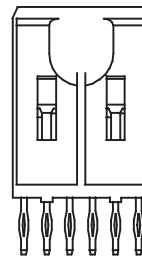
FOR SPECIAL MONOBLOCKS AND PIN ARRANGEMENTS CONTACT 3M SALES REPRESENTATIVE

mm (Inch)			
Tolerance Unless Noted			
	0	0.0	0.00
mm	±3	±0.3	±0.13

( ) Dimensions used for Reference Only



5 Row Product



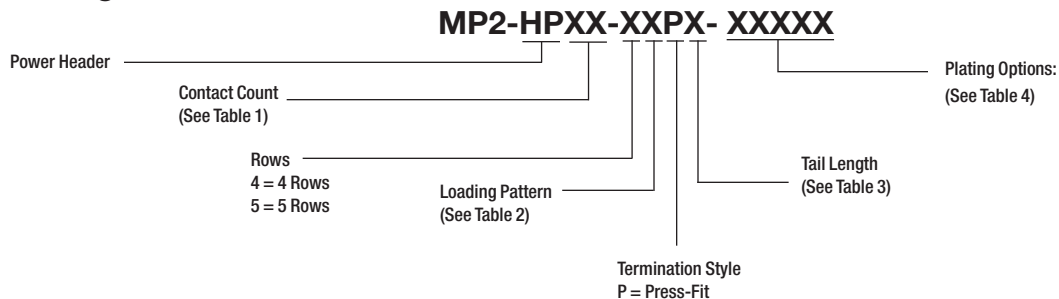
Press-Fit Product

**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 Header

2 mm 4/5-Row, Vertical, Press-Fit Tail

MP2 Series

Table 1	
Contact Count	No of Rows
08	4
10	5

Table 2 - Mate Length						
Loading Pattern Code	Description	Mate length Row A	Mate length Row B	Mate length Row C	Mate length Row D	Mate length Row E (5-Row Prod. Only)
1	All Positions Filled	6.50 [0.256]	6.50 [0.256]	6.50 [0.256]	6.50 [0.256]	6.50 [0.256]
2	All Positions Filled	8.00 [0.315]	8.00 [0.315]	7.25 [0.285]	6.50 [0.256]	6.50 [0.256]
3	All Positions Filled	6.50 [0.256]	8.00 [0.315]	6.50 [0.256]	6.50 [0.256]	6.50 [0.256]
4	All Positions Filled	6.50 [0.256]	7.25 [0.285]	7.25 [0.285]	8.00 [0.315]	8.00 [0.315]
5	All Positions Filled	7.25 [0.285]	8.00 [0.315]	7.25 [0.285]	6.50 [0.256]	6.50 [0.256]
6	All Positions Filled	8.00 [0.315]	8.00 [0.315]	8.00 [0.315]	8.00 [0.315]	8.00 [0.315]
7	All Positions Filled	7.25 [0.285]	7.25 [0.285]	7.25 [0.285]	7.25 [0.285]	7.25 [0.285]
8	All Positions Filled	8.00 [0.315]	6.50 [0.256]	8.00 [0.315]	7.25 [0.285]	7.25 [0.285]
9	All Positions Filled	8.00 [0.315]	7.25 [0.285]	6.50 [0.256]	6.50 [0.256]	6.50 [0.256]
A	All Positions Filled	8.00 [0.315]	8.00 [0.315]	7.25 [0.285]	7.25 [0.285]	7.25 [0.285]
C	All Positions Filled	8.00 [0.315]	8.00 [0.315]	8.00 [0.315]	6.50 [0.256]	6.50 [0.256]
D	All Positions Filled	8.00 [0.315]	6.50 [0.256]	6.50 [0.256]	6.50 [0.256]	6.50 [0.256]
G	All Positions Filled	8.00 [0.315]	8.00 [0.315]	8.00 [0.315]	8.00 [0.315]	5.75 [0.226]
H	All Positions Filled	8.00 [0.315]	8.00 [0.315]	7.25 [0.285]	8.00 [0.315]	8.00 [0.315]

Table 3	
Press-Fit Tail Termination Option No.	Dim. "A"
1	4.60 [0.181]
2	3.86 [0.152]

\*Compliant-Pin Tail

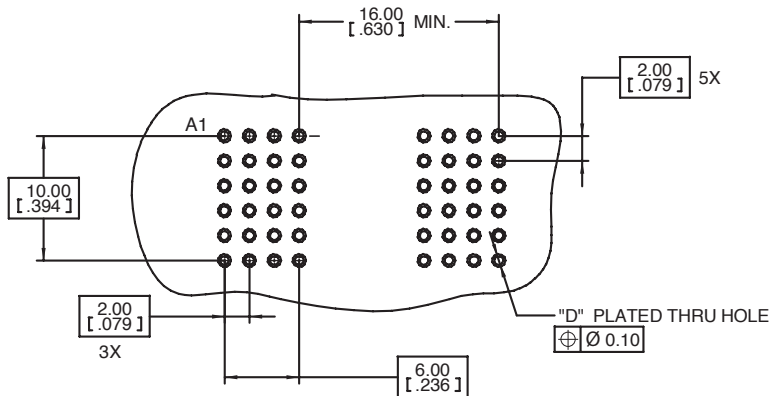
Table 4 - Plating			
Plating Suffix	Plating Composition	Plating Suffix	Plating Composition
TG (RIA E2 & C2 apply)	0.25 µm [10 µm] Min. Au Contact Area 2.54 µm [100 µm] Min. SnPb Tail Area 1.27 µm [50 µm] Min. Ni all over	FJ (RIA E1 & C1 apply)	0.25 µm [10 µm] Min. Au Contact Area 5.08 µm [200 µm] Min. Matt Whisker Mitigating Sn Tail Area 1.27 µm [50 µm] Min. Ni all over
TG30 (RIA E2 & C2 apply)	0.76 µm [30 µm] Min. Au Contact Area 2.54 µm [100 µm] Min. SnPb Tail Area 1.27 µm [50 µm] Min. Ni all over	KR (RIA E1 & C1 apply)	0.76 µm [30 µm] Min. Au Contact Area 5.08 µm [200 µm] Min. Matt Whisker Mitigating Sn Tail Area 1.27 µm [50 µm] Min. Ni all over
TR30 (RIA E2 & C2 apply)	0.08 µm [3 µm] Min. Au Contact Area 0.67 µm [27 µm] Min. PdNi Contact Area 2.54 µm [100 µm] Min. SnPb Tail Area 1.27 µm [50 µm] Min. Ni all over	RF (RIA E1 & C1 apply)	1.27 µm [50 µm] Min. Au Contact Area, Lubricated 5.08 µm [200 µm] Min. Matt Whisker Mitigating Sn Tail Area 1.27 µm [50 µm] Min. Ni all over
TR40B (RIA E2 & C2 apply)	0.13 µm [5 µm] Min. Hard Au Contact Area, Lubricated 1.02 µm [40 µm] Min. PdNi Contact Area 0.10 µm [4 µm] Min. Pd Contact Area 2.54 µm [100 µm] Min. SnPb Tail Area 1.27 µm [50 µm] Min. Ni all over	LR (RIA E1 & C1 apply)	0.08 µm [3 µm] Min. Au Contact Area 0.67 µm [27 µm] Min. PdNi Contact Area 5.08 µm [200 µm] Min. Matt Whisker Mitigating Sn Tail Area 1.27 µm [50 µm] Min. Ni all over
		PD (RIA E1 & C1 apply)	0.13 µm [5 µm] Min. Hard Au Contact Area, Lubricated 1.02 µm [40 µm] Min. PdNi Contact Area 0.10 µm [4 µm] Min. Pd Contact Area 5.08 µm [200 µm] Min. Matt Whisker Mitigating Sn Tail Area 1.27 µm [50 µm] Min. Ni all over

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# 3M™ MetPak™ 2-FB Power Header

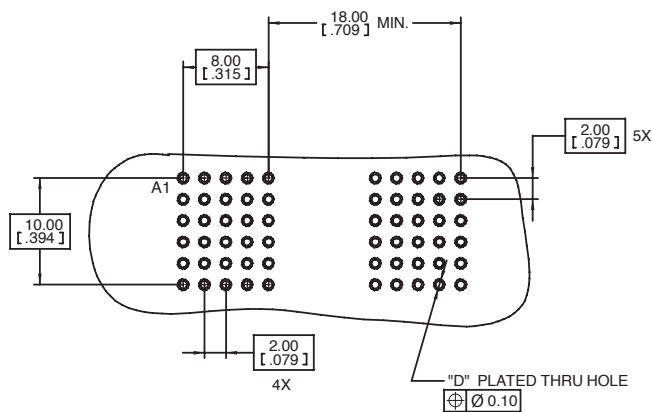
2 mm 4/5-Row, Vertical, Press-Fit Tail

MP2 Series



## Recommended 4 Row Press-Fit PCB Hole Mounting Pattern

Table 5 -- HOLE PLATING SPECIFICATION				
HOLE	Finished Dia. mm [in]	Cu Thickness	SnPb Thickness microns [μ"]	Drilled Hole Dia. mm [in]
"D"	0.65-0.80 [.0256-.0315]	0.025 [.001] min	15 [600] max	0.81-0.86 [.0319-.0339]



## Recommended 5 Row Press-Fit PCB Hole Mounting Pattern

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