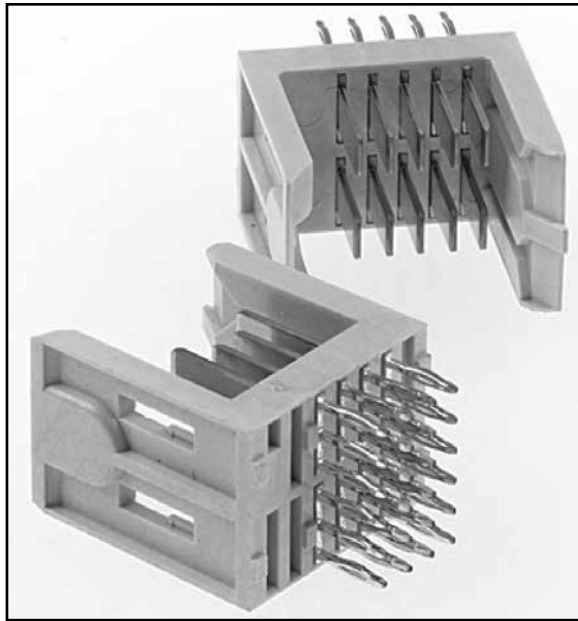


# 3M™ MetPak™ 2-FB Power Header

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
- RoHS Compliant. 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

TS-1126-E  
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:** 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

**3M**

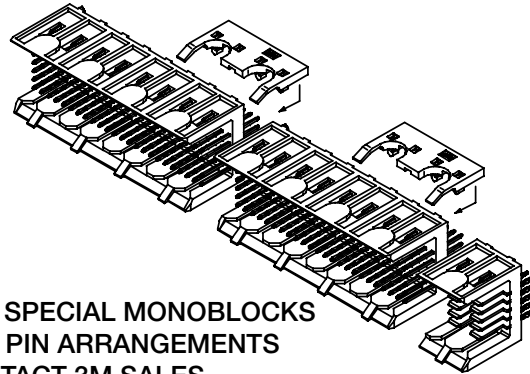
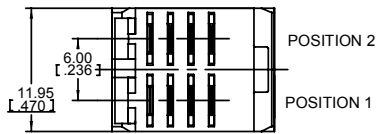
Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnectors.com>

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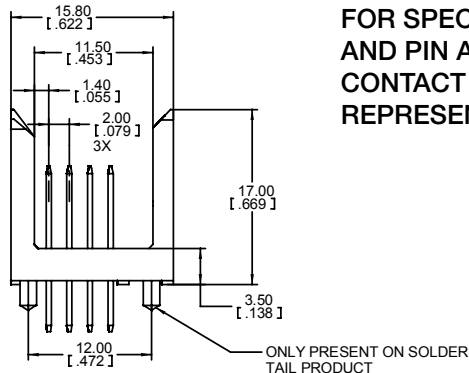
# 3M™ MetPak™ 2-FB Power Header

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

MP2 Series



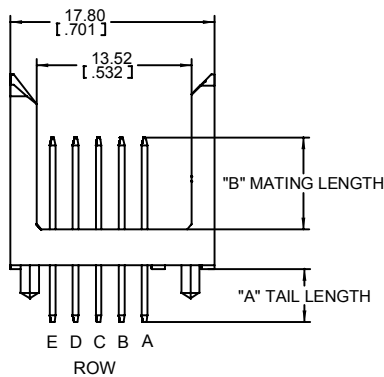
FOR SPECIAL MONOBLOCKS  
AND PIN ARRANGEMENTS  
CONTACT 3M SALES  
REPRESENTATIVE



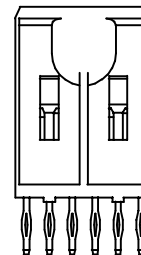
**4 ROW PRODUCT**

Tolerance Unless Noted			
	0	0.0	0.00
mm	±3	±0.3	±0.13

[ ] Dimensions for Reference Only



**5 ROW PRODUCT**



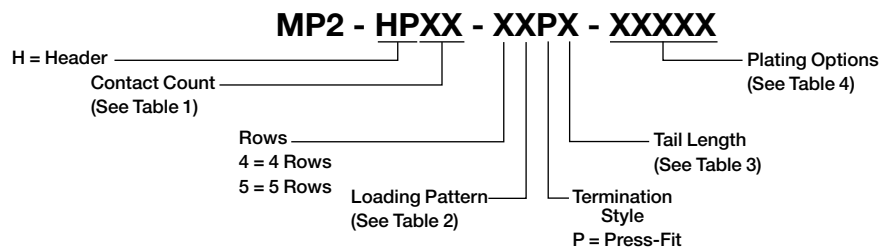
**PRESS FIT PRODUCT**

**Notes:**

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



TS-1126-E  
Sheet 2 of 4

# 3M™ MetPak™ 2-FB Power Header

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

MP2 Series

Table 1 - Connector & Row Lengths	
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 - Tail Length Options	
Press-Fit* Tail Termination Option No.	Dim. "A"
1	4.60 [0.181]

\*Compliant-Pin Tail

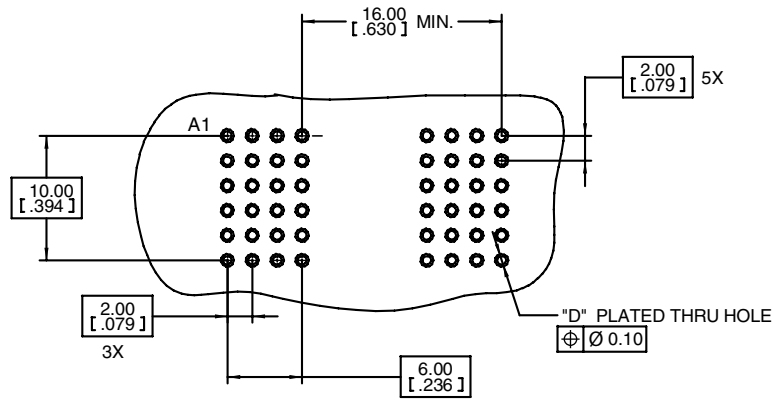
Table 4 - Plating	
Plating Suffix	Plating Composition
KR (RIA E1 & C1 apply)	0.76 µm [30 µ"] Min. Au Contact Area 2.54 µm [100 µ"] Min. Matt Whisker Mitigating Sn Tail Area 1.27 µm [50 µ"] Min. Ni all over
LR (RIA E1 & C1 apply)	0.08 µm [3 µ"] Min. Au Contact Area 0.67 µm [27 µ"] Min. PdNi Contact Area 2.54 µm [100 µ"] Min. Matt Whisker Mitigating Sn Tail Area 1.27 µm [50 µ"] Min. Ni all over

TS-1126-E  
Sheet 3 of 4

# 3M™ MetPak™ 2-FB Power Header

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

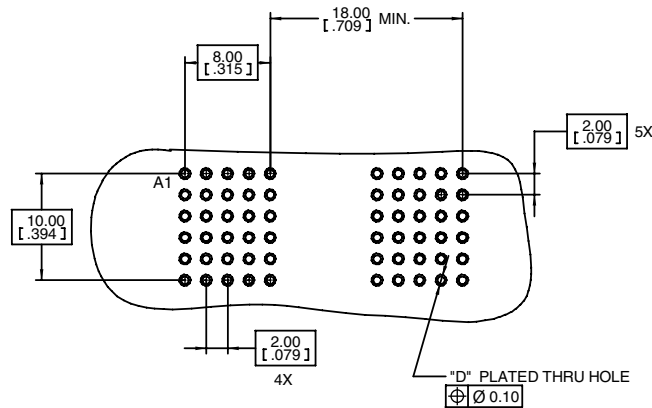
MP2 Series



**RECOMMENDED 4 ROW PRESS-FIT  
PCB HOLE MOUNTING PATTERN**

**Table 5 - HOLE PLATING for KR and LR FINISHES ONLY**

HOLE	Finished Dia. MM [in]	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 [.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 0.85 mm [#66] TWIST DRILL



**RECOMMENDED 5 ROW PRESS-FIT  
PCB HOLE MOUNTING PATTERN**

TS-1126-E  
Sheet 4 of 4

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