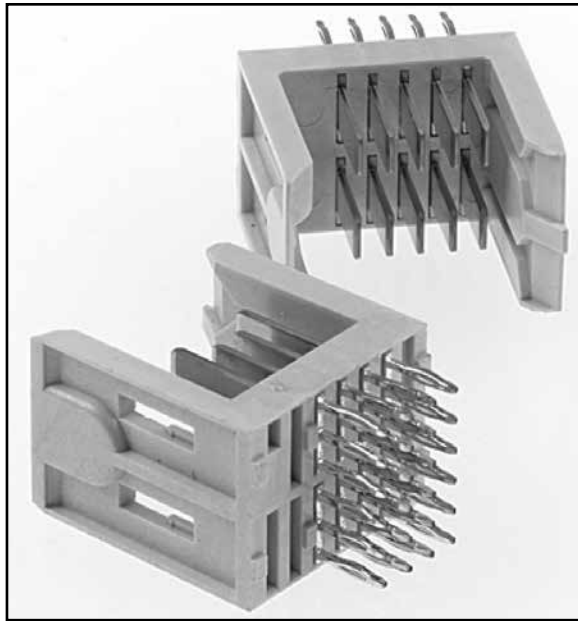


# 3M™ MetPak™ 2-FB Power Header

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**

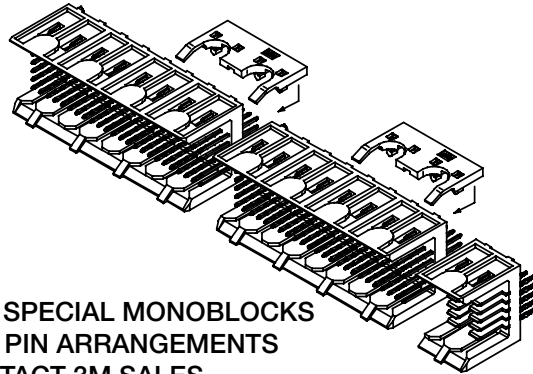
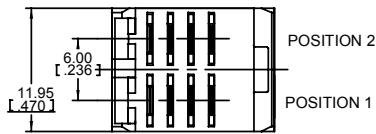
Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnectors.com>

3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

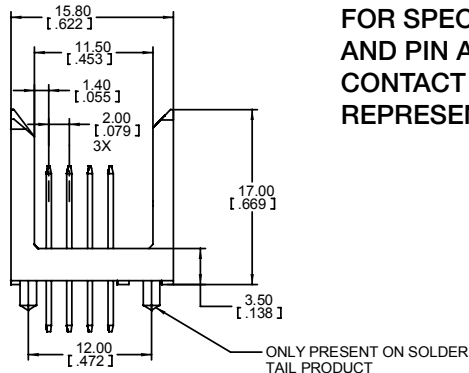
# 3M™ MetPak™ 2-FB Power Header

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

MP2 Series



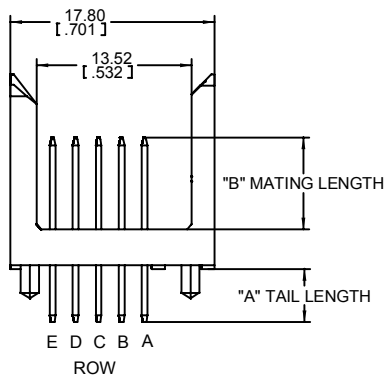
FOR SPECIAL MONOBLOCKS  
AND PIN ARRANGEMENTS  
CONTACT 3M SALES  
REPRESENTATIVE



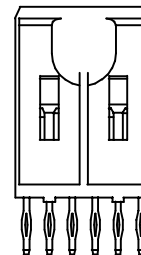
**4 ROW PRODUCT**

mm [inch]			
Tolerance Unless Noted			
	0	0.0	0.00
mm	±3	±0.3	±0.13

[ ] Dimensions for Reference Only



**5 ROW PRODUCT**



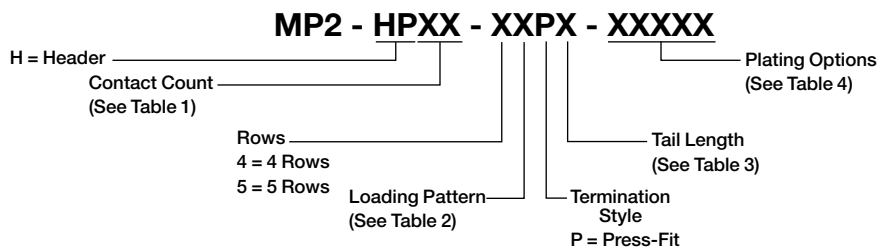
**PRESS FIT PRODUCT**

**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

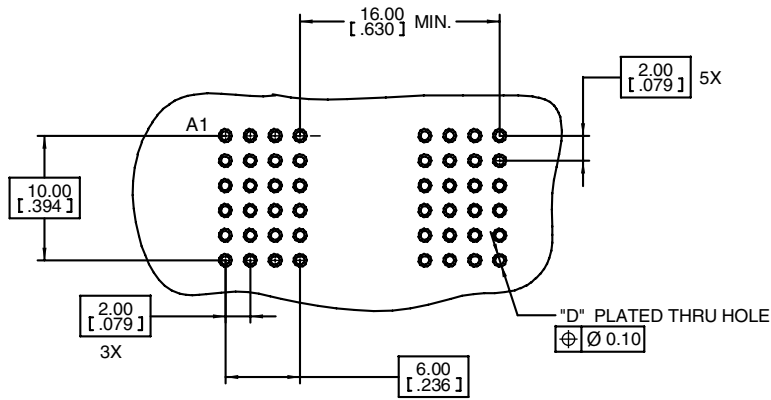
Table 4 - Plating	
Plating Suffix	Plating Composition
KR (RIA E1 & C1 apply)	0.76 µm [30 µ"] Min. Au Contact Area 2.54 µm [100 µ"] Min. Matt Whisker Mitigating Sn Tail Area 1.27 µm [50 µ"] Min. Ni all over
LR (RIA E1 & C1 apply)	0.08 µm [3 µ"] Min. Au Contact Area 0.67 µm [27 µ"] Min. PdNi Contact Area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

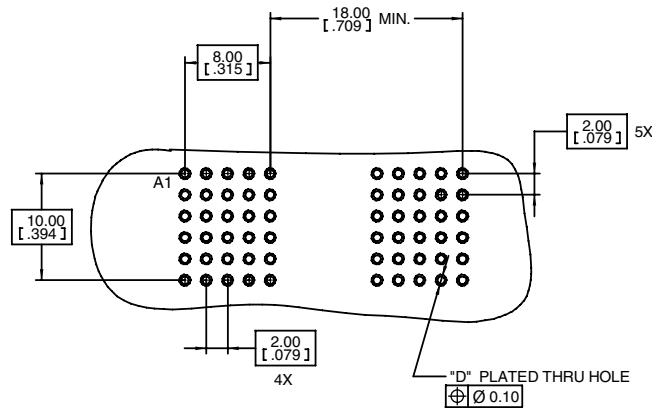
MP2 Series



**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

3M is a trademark of 3M Company.

### **Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

### **Warranty; Limited Remedy; Limited Liability.**

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



### **3M Electronics Solutions Division**

6801 River Place Blvd.  
Austin, TX 78726-9000  
U.S.A.  
1-800-225-5373  
[www.3Mconnectors.com](http://www.3Mconnectors.com)

Please recycle. Printed in USA.  
© 3M 2013. All rights reserved.  
RIA-2217B-E

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[3M:](#)

[MP2-HP10-54P1-KR](#) [MP2-HP10-54P1-LR](#) [MP2-HP10-5GP1-TR30](#) [MP2-HP10-51P2-KR](#) [MP2-HP10-53P1-TG30](#)  
[MP2-HP10-5DP1-KR](#) [MP2-HP10-51P2-TG30](#) [MP2-HP08-42P1-TG30](#) [MP2-HP10-53P1-TR30](#) [MP2-HP10-5CP1-TR30](#)  
[MP2-HP08-41P1-TR30](#) [MP2-HP10-5GP1-TG](#) [MP2-HP08-41P1-TG30](#) [MP2-HP10-51P1-TG30](#) [MP2-HP08-41P1-KR](#)  
[MP2-HP08-42P1-TR30](#) [MP2-HP08-43P1-LR](#) [MP2-HP10-51P1-KR](#) [MP2-HP10-51P1-TR40B](#) [MP2-HP10-55P1-TR30](#)  
[MP2-HP10-52P1-TR40B](#) [MP2-HP10-51P1-LR](#) [MP2-HP10-51P1-TR30](#) [MP2-HP10-52P1-TR30](#) [MP2-HP10-5CP1-](#)  
[TG30](#) [MP2-HP08-46P1-KR](#)