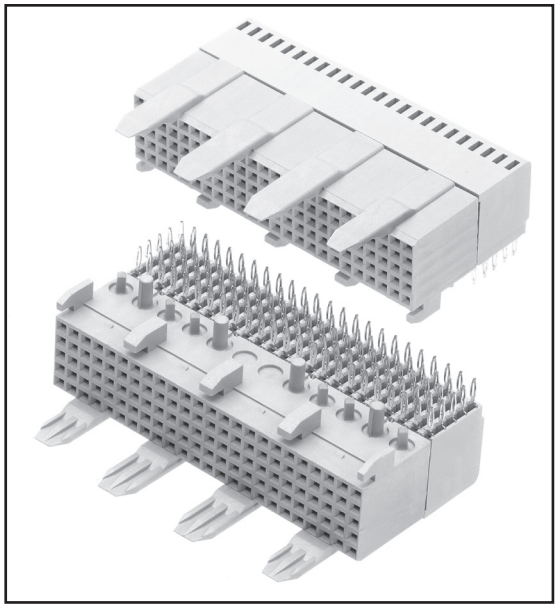
3M™ MetPak™ 2-FB Socket

2 mm 5-Row, Right Angle, Solder or Press-Fit Tail, Guide Fingers MP2 Series



- End-to-end stackable
- Offset dual-beam contact minimizes insertion force
- Molded guide fingers provide integrated alignment
- Alignment wafer for true position
- Mates with MP2-P inverse headers and elevated inverse headers, MP2-PXXXE, for extended card applications
- Protective Push-Cap on Press-Fit Only
- Meets IEC 61076-4-104 Futurebus+® global standard
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3Mconnectors.com for compliance information (RIA E1 & C1 apply)

Date Modified: September 17, 2013

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: Signal: 1.5 A – All contacts simultaneously
Insulation Resistance: 10^3 MΩ
Withstanding Voltage: 1000 V_{AC}

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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Futurebus+ is a registered trademark of the Institute of Electrical and Electronic Engineers, Inc. (IEEE)

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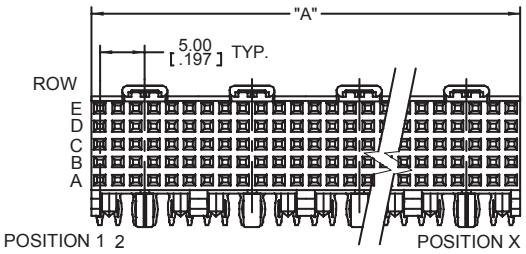
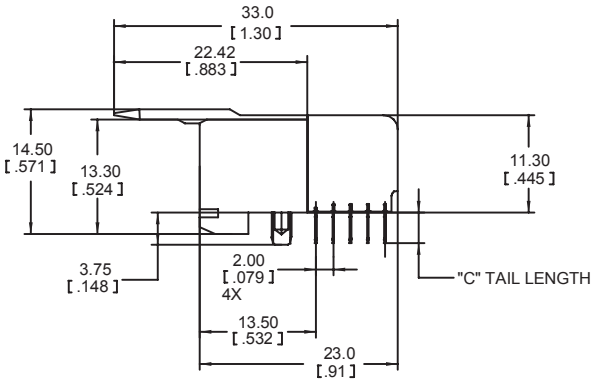
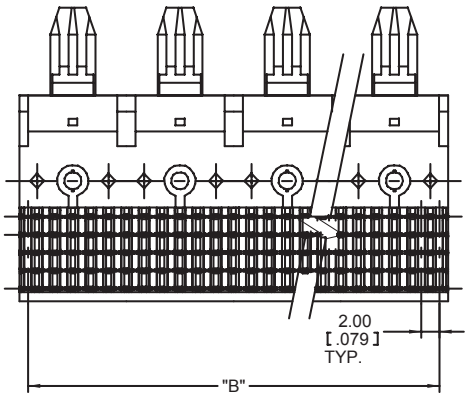
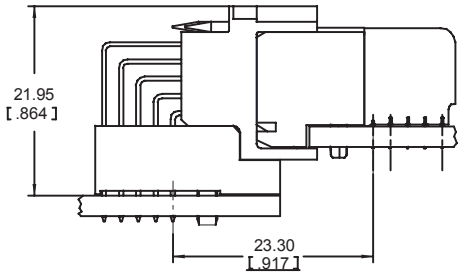


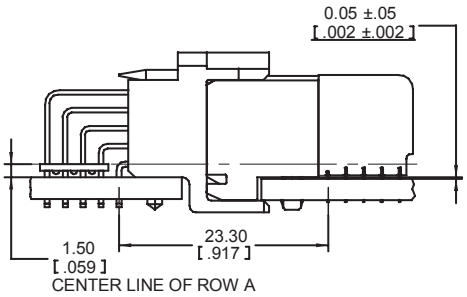


PRESS-FIT AND SOLDER TAIL PRODUCT (CAPPED)





MATED WITH MP2-PXXXE-5XXX-XXXX



ASSEMBLED TO PCB AND MATED WITH MP2-PXXX-5XXX-XXXX

mm
[inch]

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

[ ] Dimensions for Reference Only

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

MP2 - SXXXG - 5XXX - C - XXXXX

- S = Socket
- Contact Count (See Table 1)
- Guide Finger
- Rows: 5 = 5 Rows
- Contact Arrangement: 1 = All rows filled*
- Termination Style: M = Solder Tail (Press Peg); P = Press-Fit (with Tail Cover)
- Tail Length (See Table 2)
- C = Capped Solder Tail; Blank = Press-Fit
- Plating Options (See Table 3)

*Contact 3M Sales Representative for information on special fill patterns and mono blocked pairs

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Table 1 - Connector & Row Lengths				
Pin Count	Dim. "A" mm [inch]	Dim "B" mm [inch]	Rows	Block Count
030	11.95 [0.471]	10.00 [0.394]	5	1
060	23.95 [0.943]	22.00 [0.866]	5	2
090	35.95 [1.415]	34.00 [1.339]	5	3
120	47.95 [1.888]	46.00 [1.811]	5	4
150	59.95 [2.361]	58.00 [2.283]	5	5
180	71.95 [2.833]	70.00 [2.756]	5	6
210	83.95 [3.305]	82.00 [3.228]	5	7
240	95.95 [3.778]	94.00 [3.701]	5	8

Table 2 - Tail Length		
Contact-to-PC Board Tail Termination Option No.		Dim. "C"
Solder	Press-Fit*	
1		4.35 [0.171]
	1	3.53 [0.139]

*Compliant-Pin Tail

Table 3 - Plating & Regulatory			
Plating Suffix	Press-Fit Tails*	Solder Tails	Plating Composition
KR	RIA E1 & C1 apply	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	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

*Compliant-Pin Tail

3M

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

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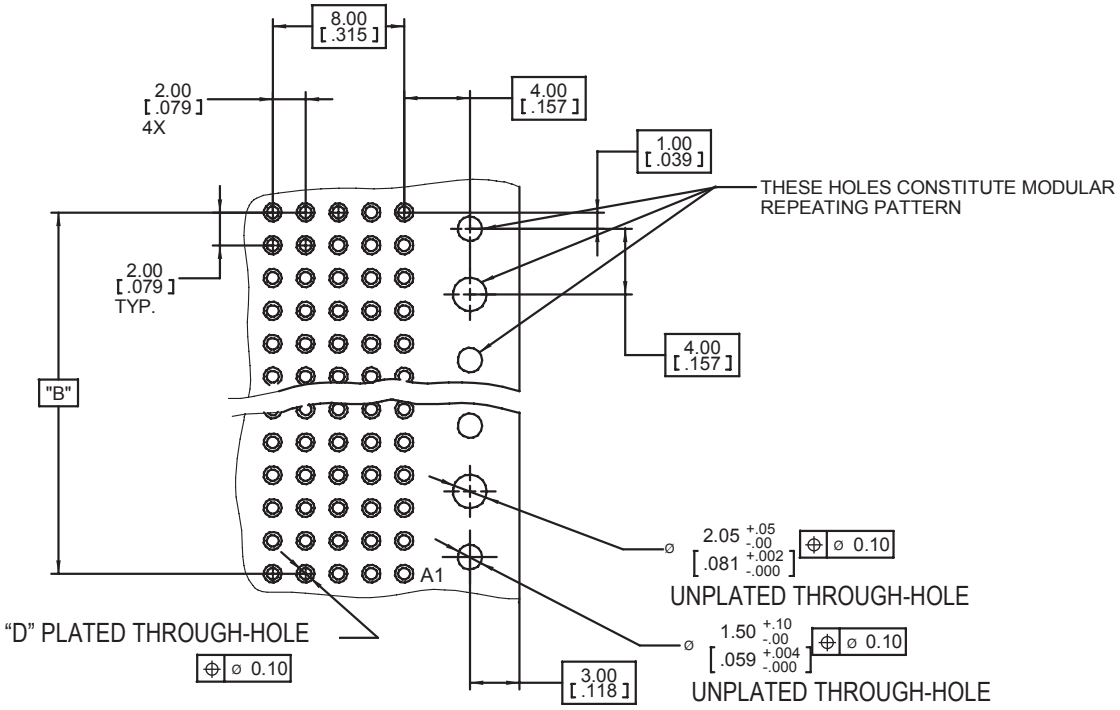

RECOMMENDED PCB HOLE MOUNTING PATTERN

Table 4 - HOLE PLATING FINISHES

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

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