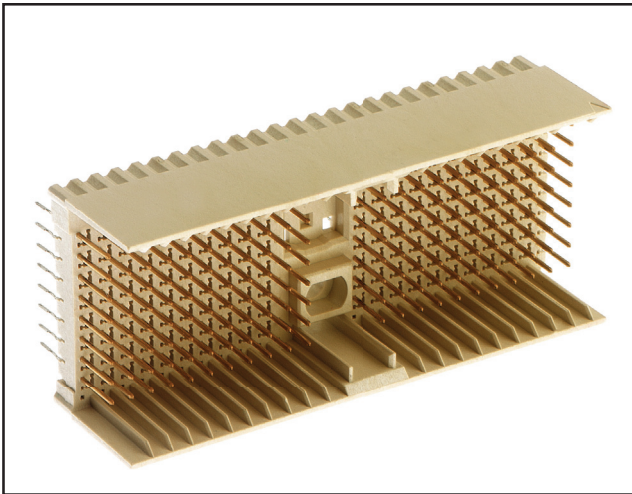


# 3M™ MetPak™ HM Header

2 mm Type D, 176 Signal Contacts, 8 Rows, Straight

HM Series



- Modular/scalable format IEC 61076-4-101
- Press-fit or solder tail versions
- 101 mated lines per linear inch
- Multi-purpose center (MPC) keying and guidance
- End-to-end stackable with 8 row 3M™ MetPak™ HM and HSHM products
- Ships with protective cap, which also serves as an insertion tool
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3mconnector.com](http://www.3mconnector.com) for compliance information

Date Modified: November 16, 2010

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## Physical

### Insulation:

Material: High Temperature Thermoplastic (LCP)

Flammability: UL 94V-0

### Color:

Material: Copper Alloy

Plating: See Ordering information

**Marking:** 3M Logo, Part Number, Revision, Date Code

## Performance

### Mechanical:

Normal Force (Nominal): 0.57 N [58 g] Signal

Engagement Force (Nominal): 0.32 N [33 g] Signal

Separation Force (Nominal): 0.20 N [20 g] Signal

Wipe (Nominal, Shortest Contact): 2.67 mm [0.105 in] Signal

Mate/Unmate Cycles: 250

Application: This module is suitable for stand-alone use.

### Electrical:

Current Rating (Fully Loaded): 1 A @ 70° C Signal

Insulation Resistance:  $1 \times 10^4 \text{ M}\Omega$  @ 100 V<sub>DC</sub>

Withstanding Voltage: 750 V<sub>rms</sub>

## Environmental

**Temperature Rating:** -55° C to 125° C

**Process Rating:** Maximum 260°C (per J-STD-020C)

**Withstanding Voltage:** 1 (per J-STD-020C)

UL File No.: E68080

MetPak is a trademark of 3M Company.

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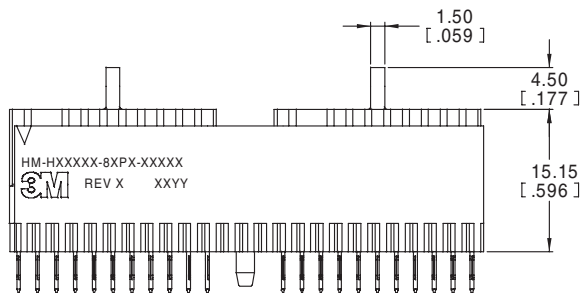
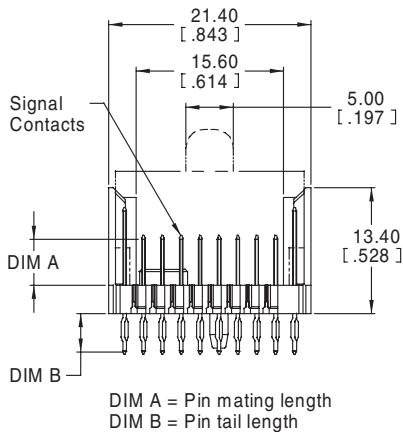
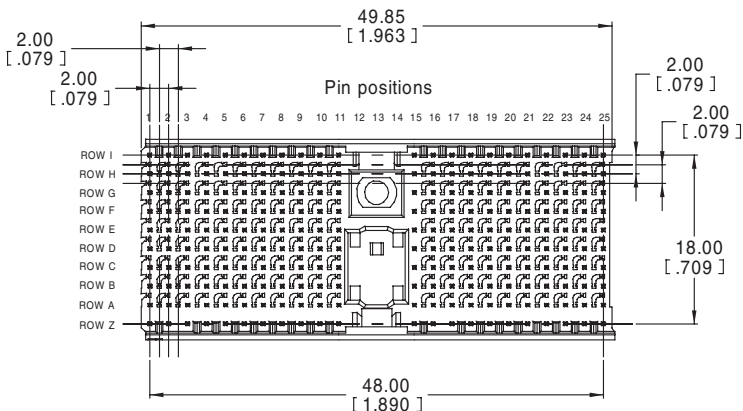
HM Series



mm  
(Inch)

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

[ ] Dimensions for Reference Only



Shown with protective caps\*

\* Caps to be removed after press-fit installation process

## Ordering Information

**HM - H176D1 - 8CX1 - XXXXX** (rows I and Z not loaded)  
**HM - H220D2 - 8BX1 - XXXXX** (rows I and Z loaded 8.3 mm mate length)

Tail Style:  
P = Press-fit tail  
S = Solder tail

Plating  $\mu\text{m}$  [ $\mu\text{in}$ ]:  
TG30 = 0.76 [30] Min. Au Contact Area  
2.54 [100] Min. SnPb Terminal Area (RIA C2 & E2 apply)  
1.27 [50] Min. Ni All over  
Standard Option  
TG30L = 0.76 [30] Min. Au Contact Area, Lubricated  
2.54 [100] Min. SnPb Terminal Area (RIA C2 & E2 apply)  
1.27 [50] Min. Ni All over  
Typically higher make order quantities as compared to TG30.  
TG50 = 1.27 [50] Min. Au Contact Area, Lubricated  
2.54 [100] Min. SnPb Terminal Area (RIA C2 & E2 apply)  
1.27 [50] Min. Ni All over  
Non-Standard Option (Available with longer lead times and higher make order quantities, MOQ)

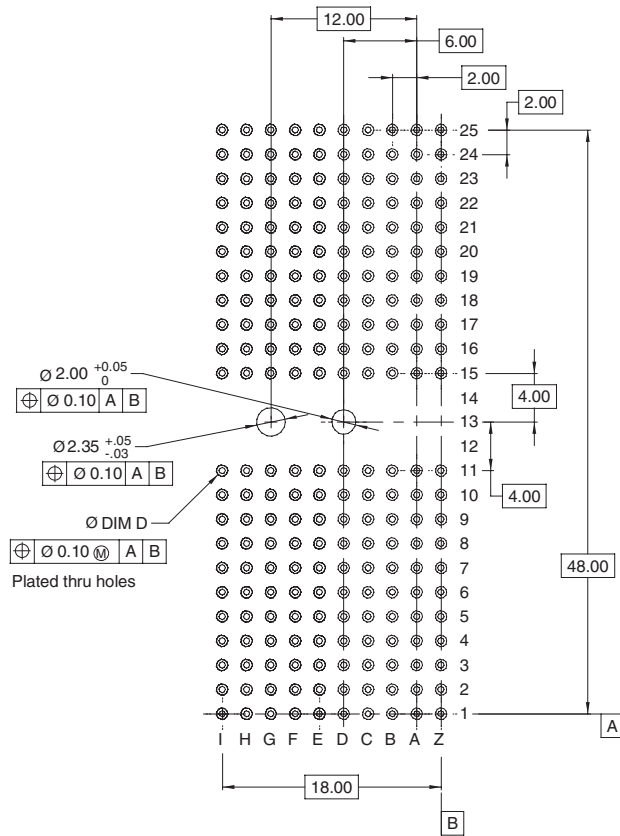
Standard configuration  
DIM A = 5.3 mm for rows A through H  
DIM B = 4.4 mm  
For non-standard configurations contact sales representative

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# 3M™ MetPak™ HM Header

2 mm Type D, 176 Signal Contacts, 8 Rows, Straight

HM Series



Recommended PCB hole mounting pattern

Hole Plating Table

Finished Hole Dia. "D"	Cu. Thickness	SnPb Thickness	Drilled Hole Dia.
0.550 - 0.650 [.0217 - .0256]	0.025 - 0.045 [.0010 - .0018]	0.008 - 0.018 [.0003 - .0007]	0.686 - 0.727 [.0270 - .0286]

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