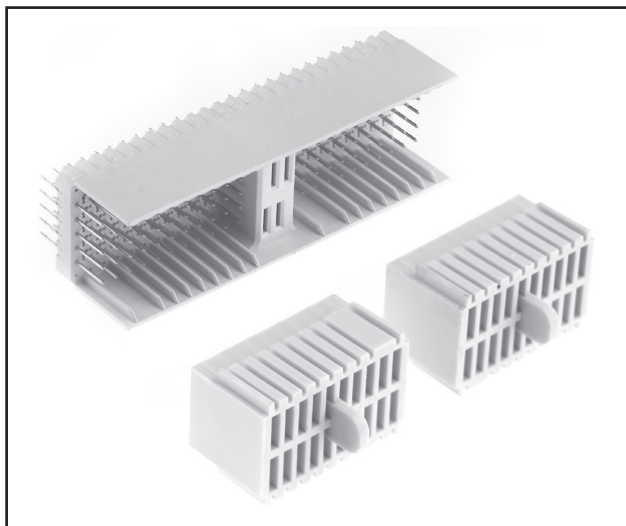


# 3M™ MetPak™ HM Power Header

2 mm Type A, 110/44/4 Signal/Ground/Power Contacts, 5 Rows, Straight

HM Series



- Modular/scalable format IEC 61076-4-101
- Press-fit or solder tail version
- 63 mated lines per linear inch
- Four integrated 8.25 A power blades
- Ships with protective cap, which also serves as an insertion tool
- End-to-end stackable with 5 row 3M™ MetPak™ CP2, HM and HSHM products
- 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, 0.98 N [100 g] Power

Engagement Force (Nominal): 0.32 N [33 g] Signal, 1.42 N [145 g] Power

Separation Force (Nominal): 0.20 N [20 g] Signal, 0.89 N [91 g] Power

Wipe (Nominal, Shortest Contact): 2.67 mm [0.105 in] Signal, 1.93 mm [.076 in] Power

Mate/Unmate Cycles: 250

Application: This module is suitable for stand-alone use with pin lengths up to 6.80 mm.  
Limited capture of 0.75 mm in longitudinal and 1.00 mm in transverse directions.

### Electrical:

Current Rating (Fully Loaded): 1 A @ 70° C Signal, 8.25 A at 70°C Power

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

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2 mm Type A, 110/44/4 Signal/Ground/Power Contacts, 5 Rows, Straight

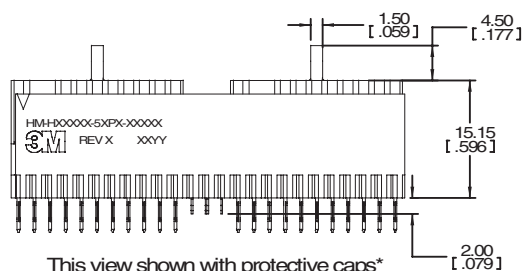
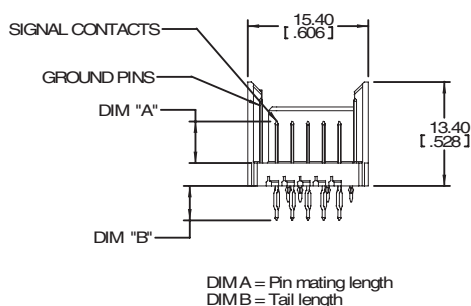
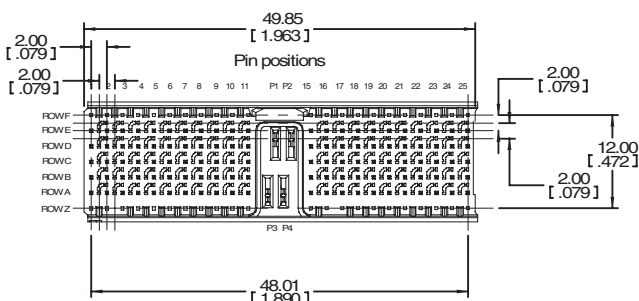
HM Series



mm  
(Inch)

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

[ ] Dimensions for  
Reference Only



## Ordering Information

**HM - H110APWR1 - 5CX1 - XXXXX** (rows F and Z not loaded)

**HM - H154APWR2 - 5BX1 - XXXXX** (rows F and Z loaded 8.3 mm mate length)

Tail Style:

P = Press-fit tail

S = Solder tail

Plating  $\mu\text{m}$  [ $\mu$ ]:

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 E

DIM B = 4.4 mm

For non-standard configurations contact sales representative

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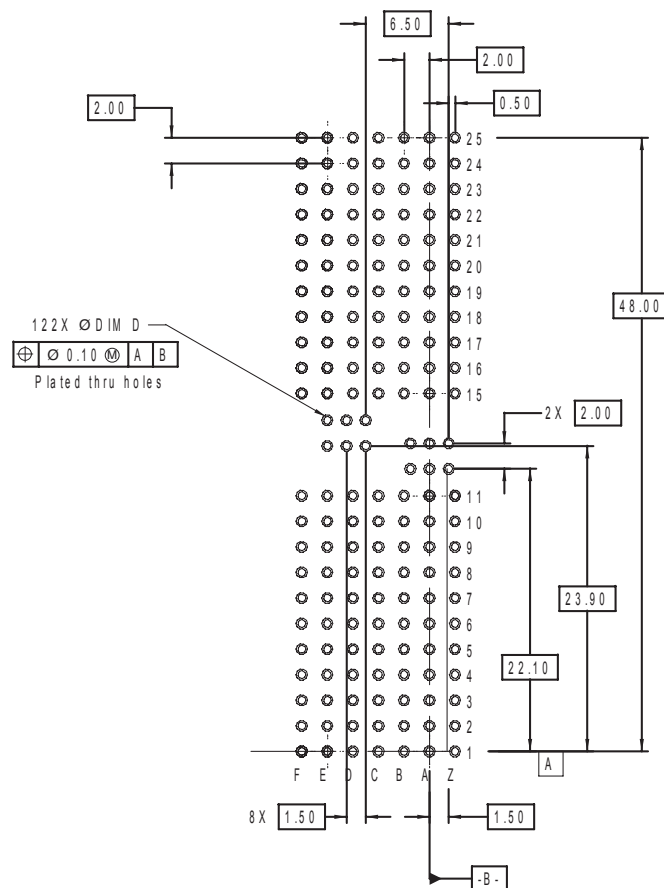


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HM Series



### 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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