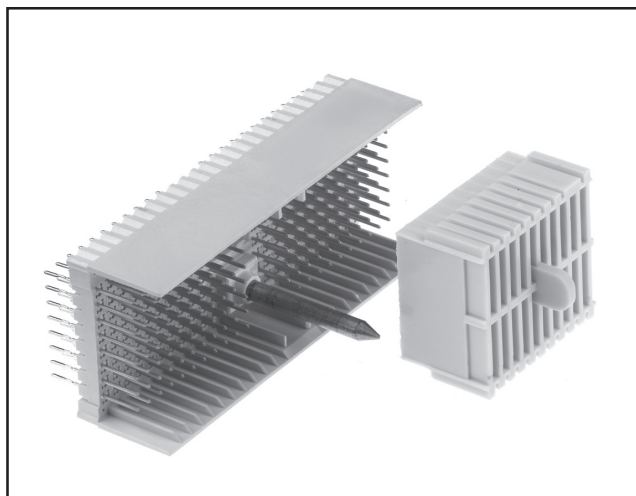


3M™ MetPak™ HM Header

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

HM Series



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

Date Modified: November 16, 2010

TS-2072-B
Sheet 1 of 3

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_{DC}

Withstanding Voltage: 750 V_{rms}

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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Interconnect Solutions
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3M™ MetPak™ HM Header

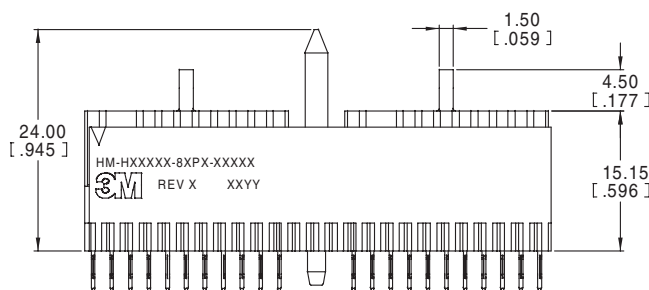
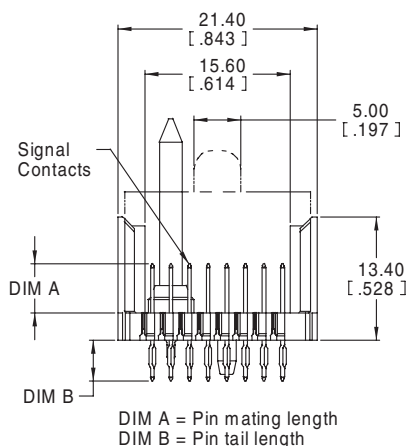
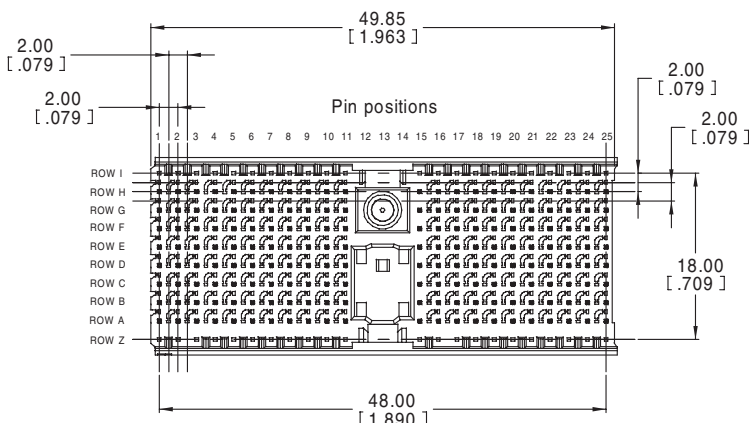
2 mm Type DG, 176 Signal Contacts, 8 Rows, Straight

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 - H176DG1 - 8CX1 - XXXXX (rows I and Z not loaded)

HM - H220DG2 - 8BX1 - XXXXX (rows I and Z loaded 8.3 mm mate length)

Tail Style:

P = Press-fit tail

S = Solder tail

Plating μm [μin]:

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

TS-2072-B
Sheet 2 of 3



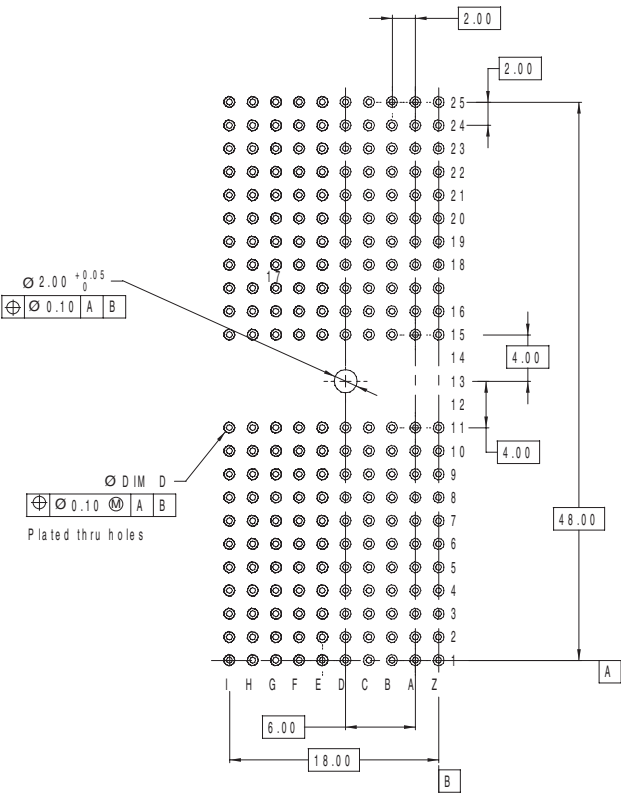
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3M™ MetPak™ HM Header

2 mm Type DG, 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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