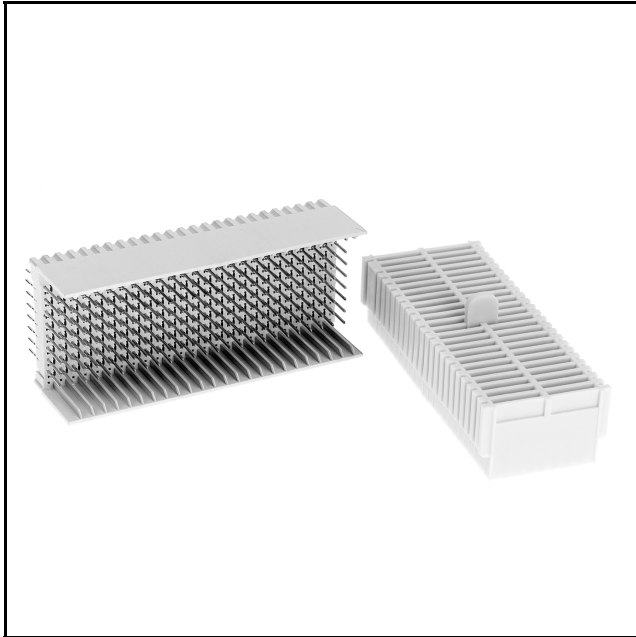


# 3M™ MetPak™ HM Header

2 mm Type E, 200 Signal Contacts, 8 Rows, Straight

HM Series



- Modular/scalable format IEC 61076-4-101
- Press-fit or solder tail version
- 101 mated lines per linear inch
- 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 Regulatory Information Appendix (RIA) for chemical compliance information

Date Modified: April 5, 2007

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## Physical

### Insulation

Material: High Temperature Thermoplastic (LCP)

Flammability: UL 94V-0

### Contact

Material: Copper Alloy

Plating: See Ordering Information

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

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## 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

Durability: 250 cycles with TR40B plating (Lubricated)

Application: This module is not suitable for stand-alone use.

### Electrical

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

Insulation Resistance:  $1 \times 10^4$  M $\Omega$  at 100 V<sub>DC</sub>

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

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## Environmental

Temperature Rating: -55°C to +125°C

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

Moisture Sensitivity Level: 1 (per J-STD-020C)

UL File No.: E68080

Metpak is a trademark of 3M Company.

# 3M™ MetPak™ HM Header

2 mm Type E, 200 Signal Contacts, 8 Rows, Straight

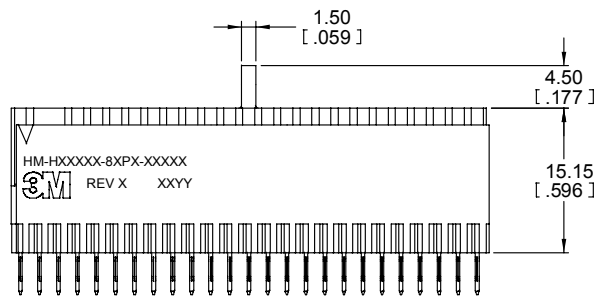
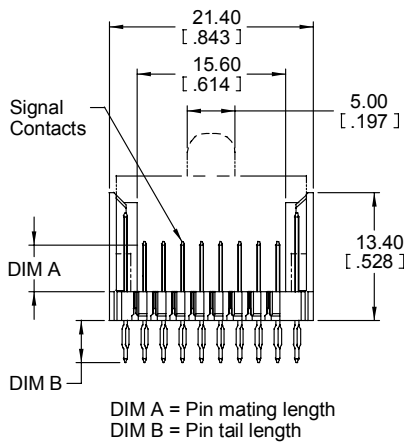
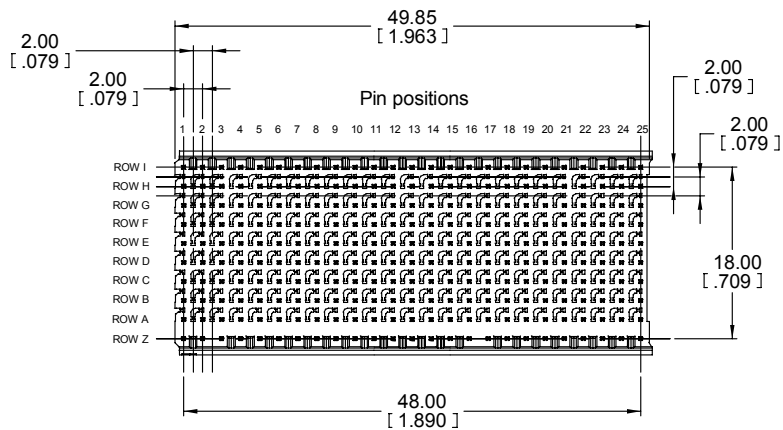
HM Series



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 - H200E1 - 8CX1 - XXXXX** (rows I and Z not loaded)

**HM - H250E2 - 8BX1 - XXXXX** (rows I and Z loaded 8.3 mm mate length)

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

Plating Options:  
(See Plating Chart)

Standard configuration

DIM A = 5.3 mm for rows A through H  
DIM B = 4.4 mm

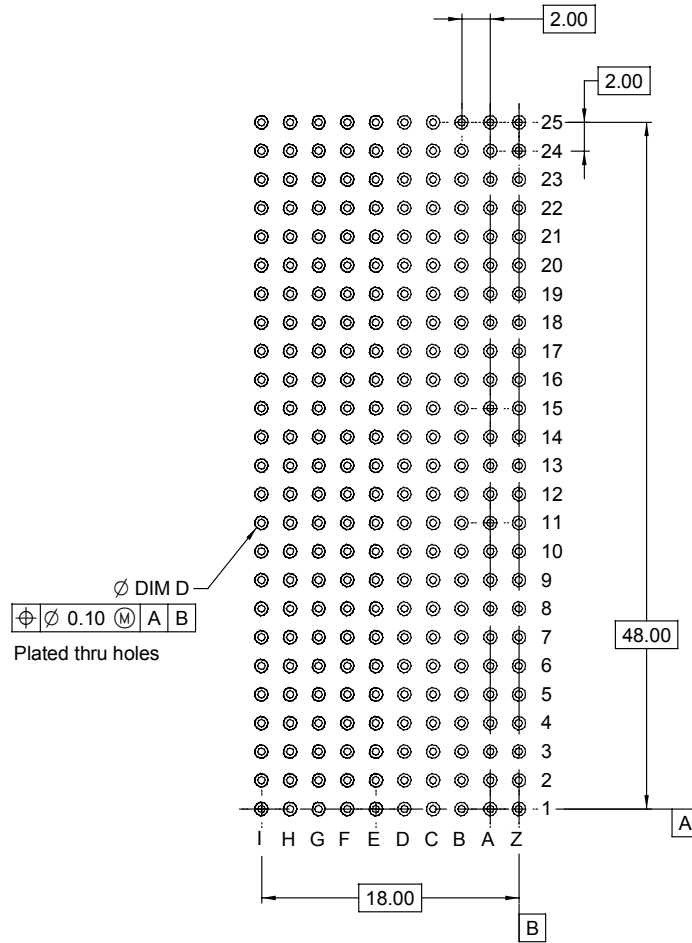
For non-standard configurations contact sales representative

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# 3M™ MetPak™ HM Header

2 mm Type E, 200 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]

Plating Chart

Plating Suffix	Press-Fit Terminations	Solder Tail Terminations	Plating Composition
TG30	(RIA E2 & C2 apply)	(RIA E3 & C2 apply)	0.76 µm [30 µ"] Min. Au Contact Area 2.54 µm [100 µ"] Min. SnPb Tail Area 1.27 µm [50 µ"] Min. Ni all over
TR40B	(RIA E2 & C2 apply)	(RIA E3 & C2 apply)	0.127 µm [5 µ"] Min. Hard Au over 1.02 µm [40 µ"] Min. Pd/Ni over 0.10 µm [4 µ"] Min. Pd Strike Contact Area 2.54 µm [100µ"] Min SnPb Terminal Area 1.27 µm [50 µ"] Min. Ni all over (Lubricated Contact Area)

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## Regulatory Information Appendix

### 3M Electronic Solutions Division/Interconnect

#### EUROPE

##### **Appendix E1: European Union RoHS**

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

**This product is RoHS Compliant 2005/95/EC.**

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

##### **Appendix E2: European Union RoHS**

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC

**This product contains lead in the compliant pin area in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/747/EC.**

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

##### **Appendix E3: European Union RoHS**

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment as amended by Commission Decision 2005/618/EC.

**This product contains lead in the solder tail area in excess of the maximum concentration value allowed.**

Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

##### **Appendix E4: European Union RoHS**

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

This product contains decaBDE in the insulating material in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/17/EC.

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.