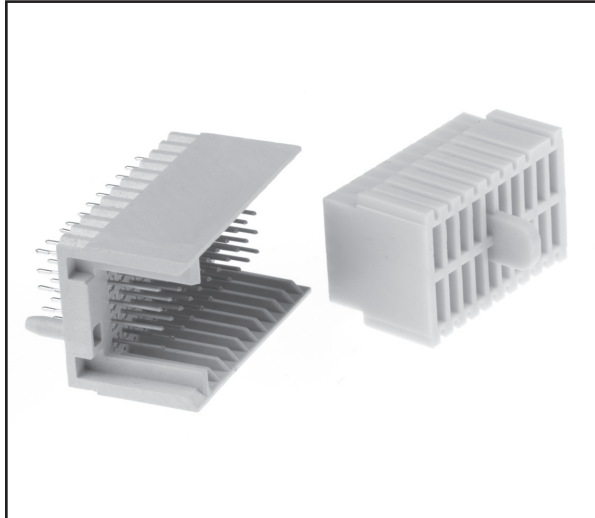


# 3M™ MetPak™ HM Header

2 mm Type CL, 55/77 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
- 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.3M.com/Interconnect](http://www.3M.com/Interconnect) for compliance information (RIA E1 & C1 apply)

Date Modified: November 17, 2010

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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

## 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 not suitable for stand-alone use. (Refer to IEC-61076-4-101)

### 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)

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

UL File No.: E68080

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Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnector.com>

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**800-225-5373**

# 3M™ MetPak™ HM Header

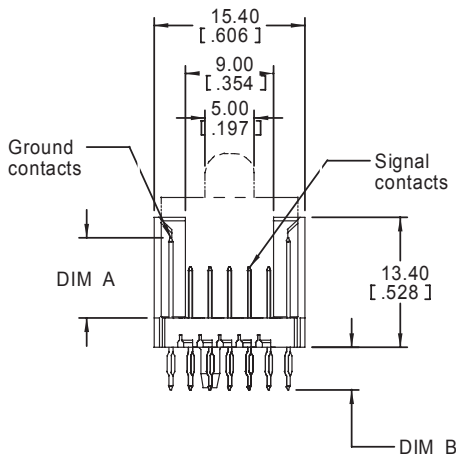
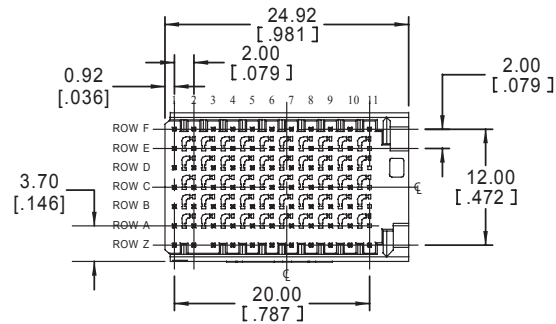
2 mm Type CL, 55/77 Contacts, 5 Rows, Straight

HM Series

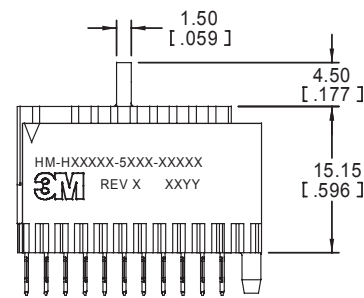


Tolerance Unless Noted			
	mm	[inch]	
	0	0.0	0.00
mm	±3	±0.3	±0.13

[ ] Dimensions for Reference Only



DIM A = Pin mating length  
DIM B = Pin tail length



This view shown with protective cap\*

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

## Ordering Information

**HM - H055CL1 - 5CX1 - XXXXX** (rows F and Z not loaded)

**HM - H077CL2 - 5BX1 - XXXXX** (rows F and Z loaded 8.3 mm mate length)

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

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

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 E

DIM B = 4.4 mm

For non-standard configurations contact sales representative.

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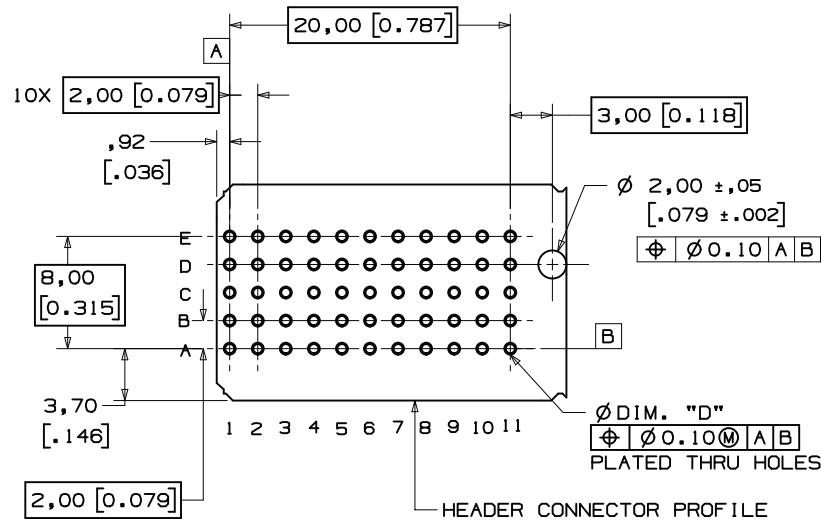
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RECOMMENDED PCB HOLE PATTERN

HOLE PLATING SPECIFICATION				
HOLE	Finished Dia. mm [in]	Cu Thickness	SnPb Thickness microns [μ"]	Drilled Hole Dia. mm [in]
"D"	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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