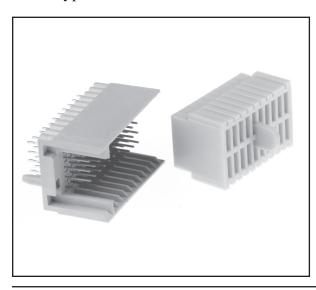
# 3M<sup>™</sup> MetPak<sup>™</sup> HM Header

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<sup>™</sup> MetPak<sup>™</sup> CP2, HM and HSHM products
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of 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):  $1 \text{ A} @ 70^{\circ} \text{ C}$  Signal Insulation Resistance:  $1 \text{ x } 10^{4} \text{ M}\Omega @ 100 \text{ V}_{DC}$ 

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

#### **Environmental**

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

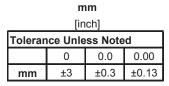
**Process Rating:** Maximum 260°C (per J-STD-020C)

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

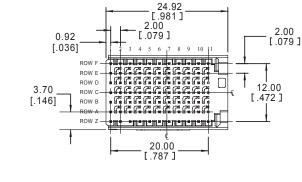
UL File No.: E68080 Metpak is a trademark of 3M Company.

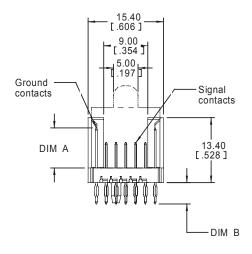
2 mm Type CL, 55/77 Contacts, 5 Rows, Straight



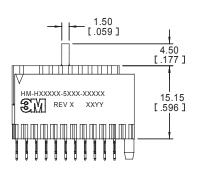


[] Dimensions for Reference Only





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: Plating μm [μ"]:

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

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)

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Standard configuration

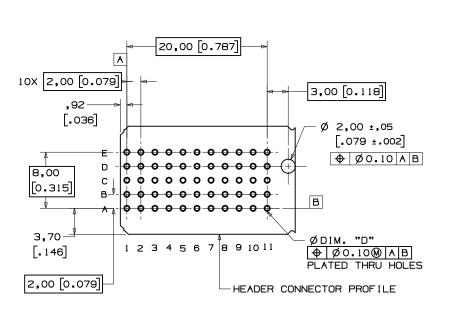
representative.

DIM B = 4.4 mm

DIM A = 5.3 mm for rows A through E

For non-standard configurations contact sales

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



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 [.00100018]	0.008-0.018 [.00030007]	0.686-0.727 [.02700286]

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