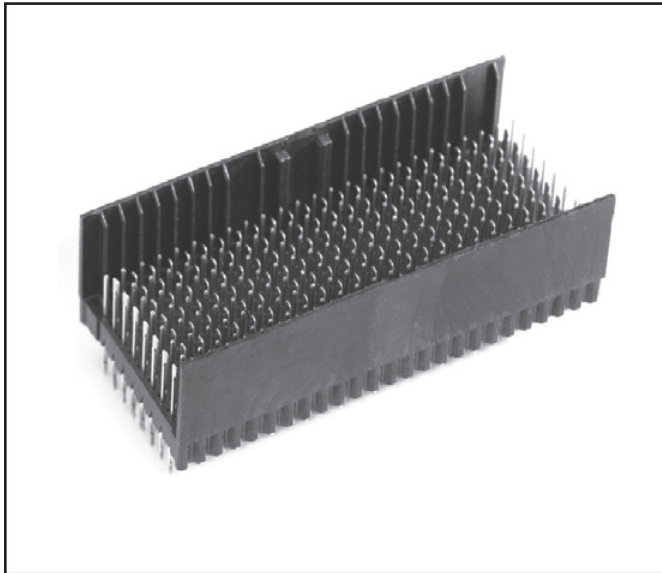


3M™ MetPak™ HSHM Press-Fit Header

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

HSHM Series



- Up to 5 Gb/s data rates
- Low crosstalk at high frequencies
- 50/100 Ω (single-ended /differential) impedance
- Modular/scalable format IEC 61076-4-101
- 101 mated lines per linear inch
- Integrated guide pin
- End-to-end stackable with 8 row 3M™ MetPak™ CP2, HM and HSHM headers
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3mconnector.com for compliance information

Date Modified: October 22, 2010

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Sheet 1 of 3

Physical

Insulation:

Material: High Temperature Thermoplastic (LCP)
Flammability: UL 94V-0

Contact:

Material: Copper Alloy
Plating: See Ordering Information

Performance

Mechanical:

Normal Force (Nominal): 0.57 N [58 g] Signal, 0.74 N [75 g] Shield
Engagement Force (Nominal): 0.32 N [33 g] Signal, 0.22 N [22 g] Shield
Separation Force (Nominal): 0.20 N [20 g] Signal, 0.20 N [20 g] Shield
Wipe (Nominal, Shortest Contact): 2.67 mm [0.105 in] Signal, 1.57 mm [0.062 in] Shield
Mate/Unmate Cycles: 250
Application: This module is not suitable for stand-alone use. (Refer to IEC-61076-4-101)

Electrical:

Data Rate: 5 Gb/s
Characteristic Impedance: 50 Ω Single-ended, 100 Ω Differential
Current Rating (Fully Loaded): 1 A @ 70° C Signal
Insulation Resistance: 10⁴ M Ω @ 100 V_{DC}
Withstanding Voltage: 750 V_{rms}

Environmental

Temperature Rating: -55° C to 125° C

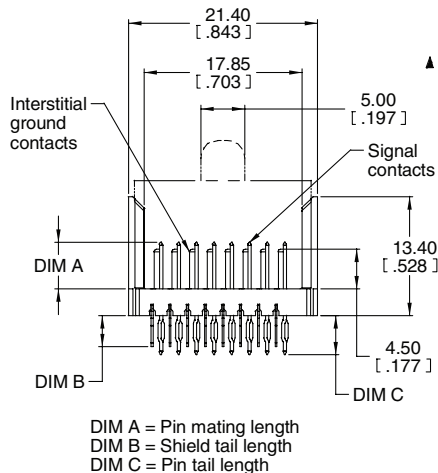
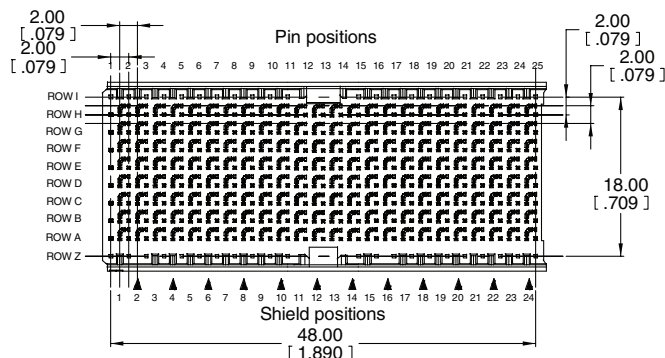
UL File No.: E68080

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3M™ MetPak™ HSHM Press-Fit Header

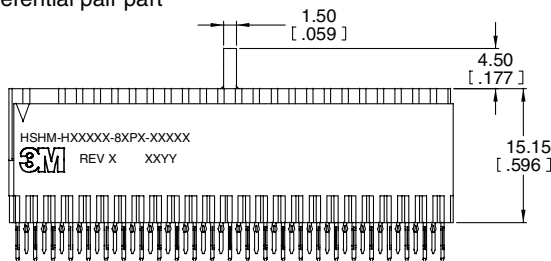
2 mm Type DE, 200 Signal Contacts, 8 Rows, Straight

HSHM Series

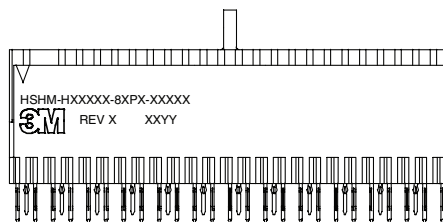


DIM A = Pin mating length
 DIM B = Shield tail length
 DIM C = Pin tail length

▲ denotes shield column (tail only) omitted for the row differential pair part



Coaxial, column differential and stripline configuration shown with protective caps*



Row differential configuration shown with protective caps*

* Caps to be removed after press-fit installation process

| mm (Inch) | | |
|------------------------|----|-------|
| Tolerance Unless Noted | | |
| | 0 | 0.0 |
| mm | ±3 | ±0.3 |
| | | ±0.13 |

() Dimensions used for Reference Only

Ordering Information

HSHM-H200DEX-8CPX-XXXXX (rows I and Z not loaded)

High Speed Option:

- 4 = Coaxial, column differential and stripline (75 Ω) applications
- 5 = Row differential applications

Tail Length:

- 1 = 4.4 mm pin and 3.5 mm shield
- 2 = 2 mm pin and 2 mm shield

Standard Configuration

DIM A = 5.3 mm for rows A through H

For non-standard configurations contact sales representative

Plating μm [μ"]:

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

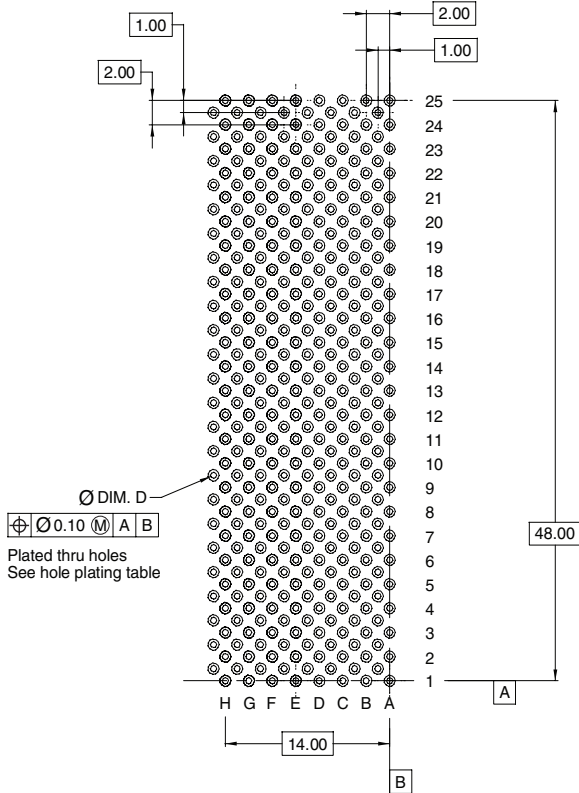
Non-Standard Option (Available with longer lead times and higher make order quantities, MOQ)

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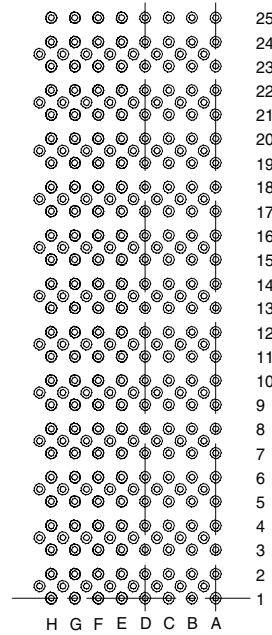
3M™ MetPak™ HSHM Press-Fit Header

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

HSHM Series



Recommended PCB hole mounting pattern for coaxial, column differential and stripline applications



Recommended PCB hole mounting pattern for row differential applications

(Same geometry as left view without the ground vias)

Hole Plating Table mm

| Finished Hole Dia. "D" | Cu. Thickness | SnPb Thickness | Drilled Hole Dia. |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 0.457 - 0.559 [.0180 - .0220] | 0.025 - 0.045 [.0010 - .0018] | 0.008 - 0.018 [.0003 - .0007] | 0.584 - 0.625 [.0230 - .0246] |

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- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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