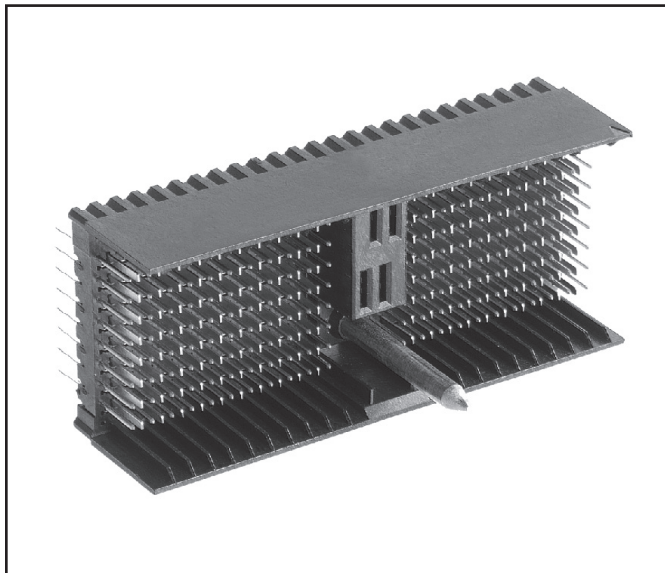


3M™ MetPak™ HSHM Press-Fit Power Header

2 mm Type D, 176 Signal/4 Power 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
- Four integrated 8.25 A power contacts
- Integrated guide pin
- End-to-end stackable with 8 row 3M™ MetPak™ HM and HSHM headers
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3mconnector.com for compliance information

Date Modified: April 29, 2011

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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 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: 10^4 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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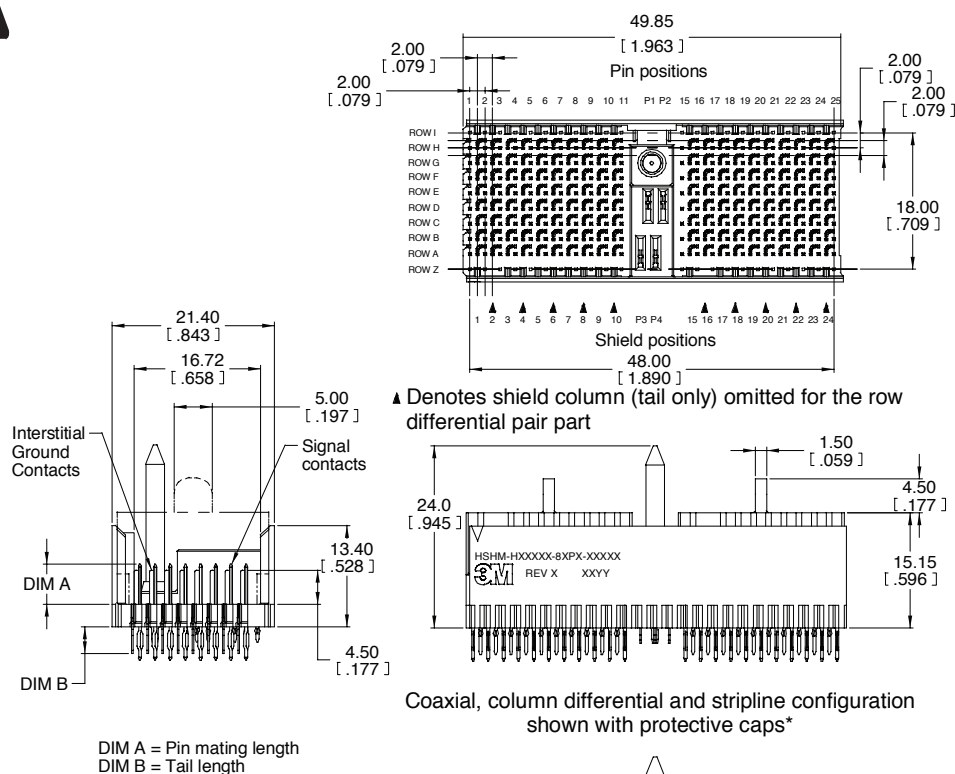
Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

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2 mm Type D, 176 Signal/4 Power Contacts, 8 Rows, Straight

HSHM Series



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

() Dimensions used for Reference Only

* Caps to be removed after press-fit installation process

Ordering Information

HSHM-H176DPWRX-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

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)

Standard Configuration

DIM A = 5.3 mm for rows A through H

For non--standard configurations contact sales representative

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HSHM Series



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