

3M™ MetPak™ HSHM Press-Fit Socket

2 mm Type B22, 110 Signal Contacts, 5 Rows, Right Angle

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
- Press-fit headers and receptacles
- 63 mated lines per linear inch
- Dual beam contact construction for high reliability
- End-to-end stackable with 5 row 3M™ MetPak™ CP2, HM, and HSHM sockets
- Mates with 5 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 12, 2010

TS-2247-C
Sheet 1 of 3

Physical

Insulation:

Material: High Temperature Thermoplastic (LCP)

Flammability: UL 94V-0

Color:

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

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



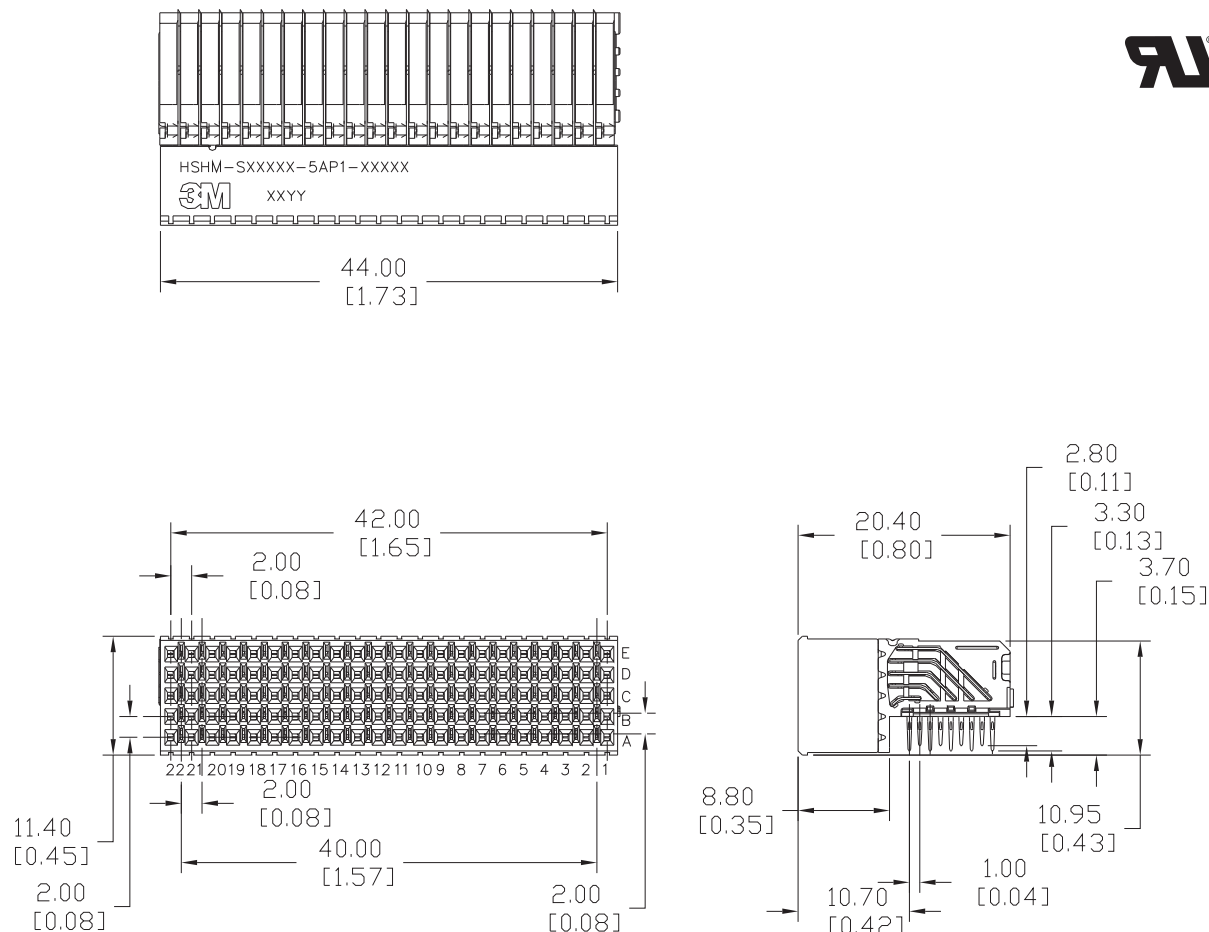
Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

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For technical, sales or ordering information call
800-225-5373

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mm (Inch)		
Tolerance Unless Noted		
	.0	.00
mm	±.1	±.10

() Dimensions used for Reference Only

Ordering Information

HSHM-S110BX-5AP1- XXXXX

High Speed Option:

- 1 = Row differential applications
- 3 = 6th Row and +2 Row Grounding Applications
- 4 = Coaxial and column differential applications

Plating μm [μin]:

- 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)

TS-2247-C
Sheet 2 of 3



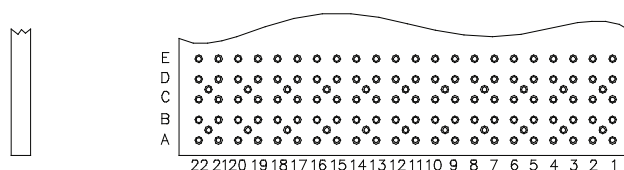
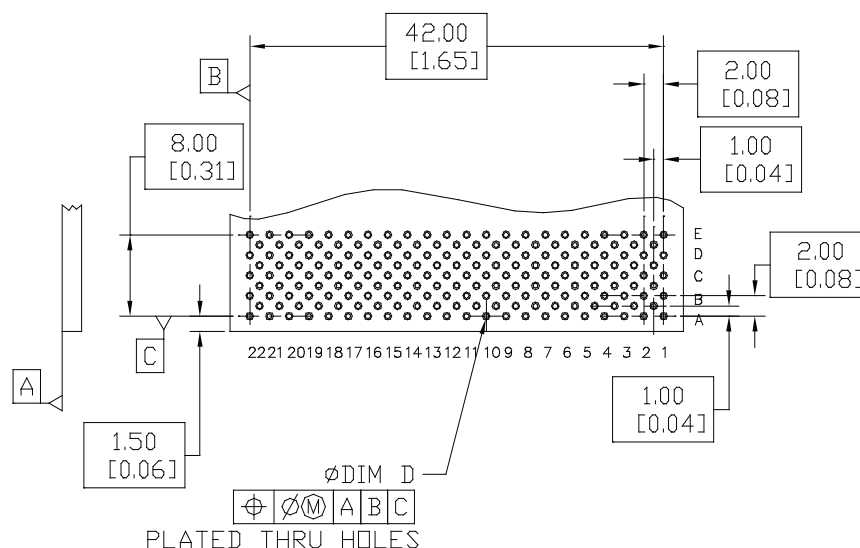
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Hole Plating Table mm [in.]

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]

TS-2247-C
Sheet 3 of 3

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