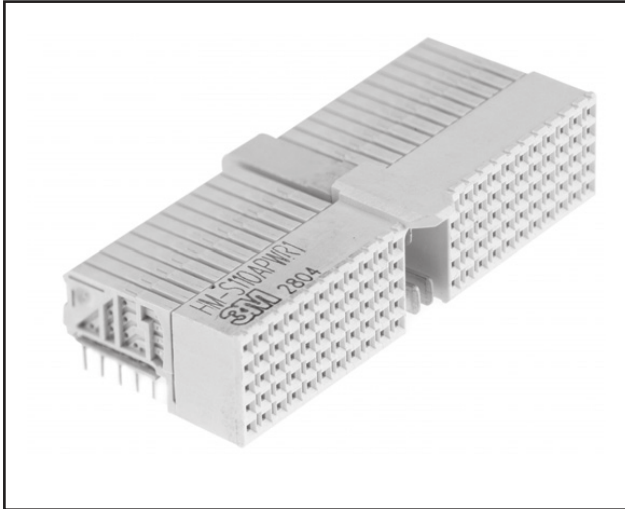


3M™ MetPak™ HM Press-Fit Power Socket

2 mm Type A, 110/4 Signal/Power Contacts, 5 Rows, Right Angle

HM Series



- Modular/scalable format IEC 61076-4-101
- 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 Products
- Mates with 3M™ MetPak™ HSHM headers
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3mconnector.com for compliance information

Date Modified: November 22, 2010

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Physical

Insulation:

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

Color:

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, 0.98 N [100 g] Power
Engagement Force (Nominal): 0.32 N [33 g] Signal, 1.42 N [145 g] Power
Separation Force (Nominal): 0.20 N [20 g] Signal, 0.89 N [91 g] Power
Wipe (Nominal, Shortest Contact): 2.67 mm [0.105 in] Signal, 1.93 mm [.076 in] Power
Mate/Unmate Cycles: 250
Application: This module is suitable for stand-alone use.
Limited capture of 0.75 mm in longitudinal and 1.00 mm transverse directions.

Electrical:

Current Rating (Fully Loaded): 1 A @ 70° C Signal, 8.25 A @ 70°C Power
Insulation Resistance: $1 \times 10^4 \text{ M}\Omega$ @ 100 V_{DC}
Withstanding Voltage: 750 V_{rms}

Environmental

Temperature Rating: -55° C to 125° C

UL File No.: E68080

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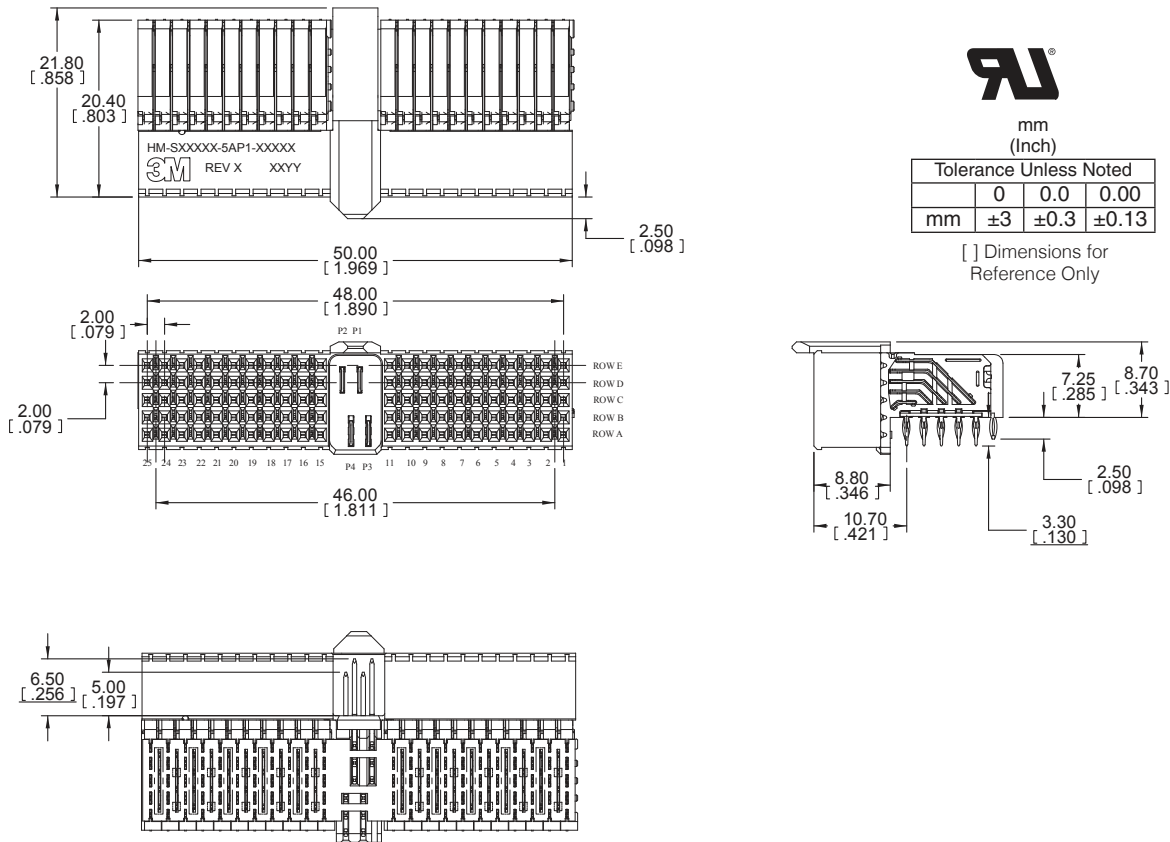
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Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

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HM Series



mm
(Inch)

Tolerance Unless Noted		
	0	0.0
mm	±3	±0.3
		±0.13

[] Dimensions for Reference Only

Boxed leads are omitted on row differential pair connectors

Ordering Information

HM-S110APWR1 - 5AP1 - XXXXX

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.

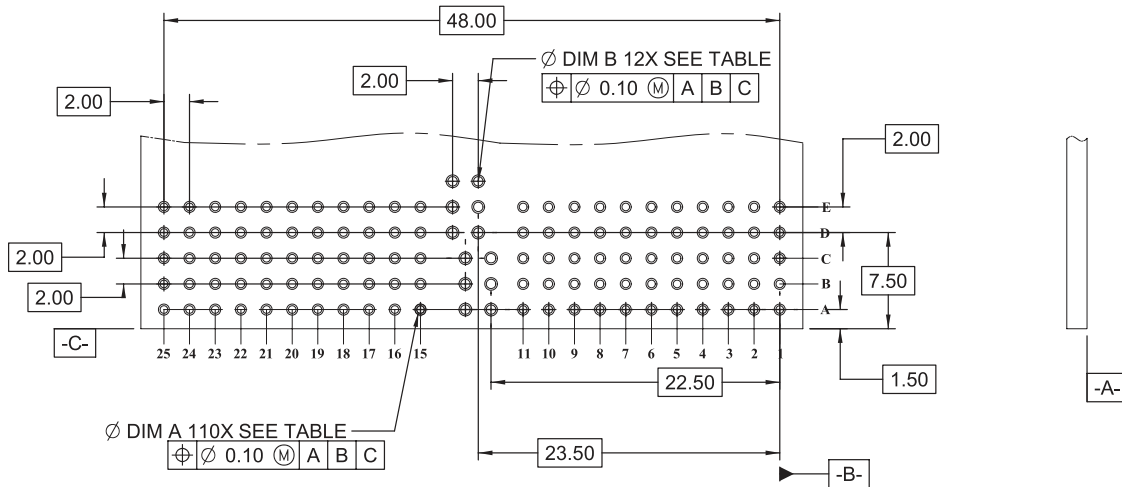
TG50 = 1.27 [50] Min. Au Contact Area, Lubricated
2.54 [100] Min. SnPb Terminal Area (RIA C2 & E2 apply)
1.27 [50] Min. Ni All over
Non-Standard Option (Available with longer lead times and higher make order quantities, MOQ)

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3M™ MetPak™ HM Press-Fit Power Socket

2 mm Type A, 110/4 Signal/Power Contacts, 5 Rows, Right Angle

HM Series



Recommended PCB hole mounting pattern

Hole Plating Table

Hole	Finished Hole Dia. "D"	Cu. Thickness	SnPb Thickness	Drilled Hole Dia.
A	0.550-0.650 [.0217-.0256]	0.025-0.045 [.0010-.0018]	0.008-0.018 [.0003-.0007]	0.686-0.727 [.0270-.0286]
B	0.690 - 0.790 [.0270 - .0310]	0.025 - 0.045 [.0010 - .0018]	0.008 - 0.018 [.0003 - .0007]	0.810 - 0.860 [.0320 - .0340]

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