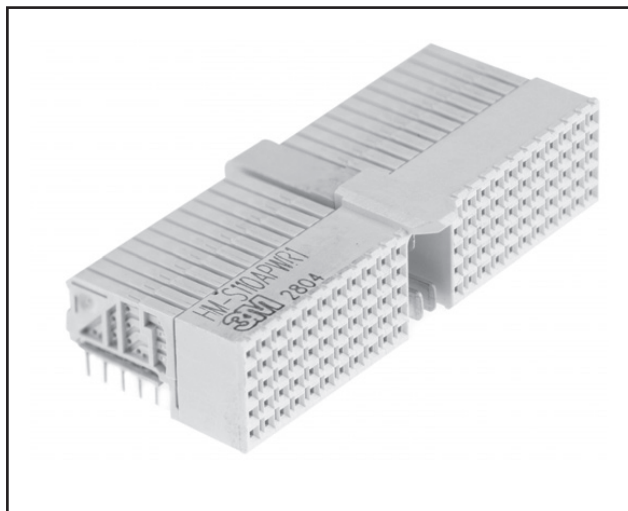


# 3M™ MetPak™ HM Press-Fit Power Socket

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](http://www.3mconnector.com) for compliance information

Date Modified: November 22, 2010

TS-2088-B  
Sheet 1 of 3

## 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<sub>DC</sub>

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

## Environmental

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

UL File No.: E68080

MetPak is a trademark of 3M Company.



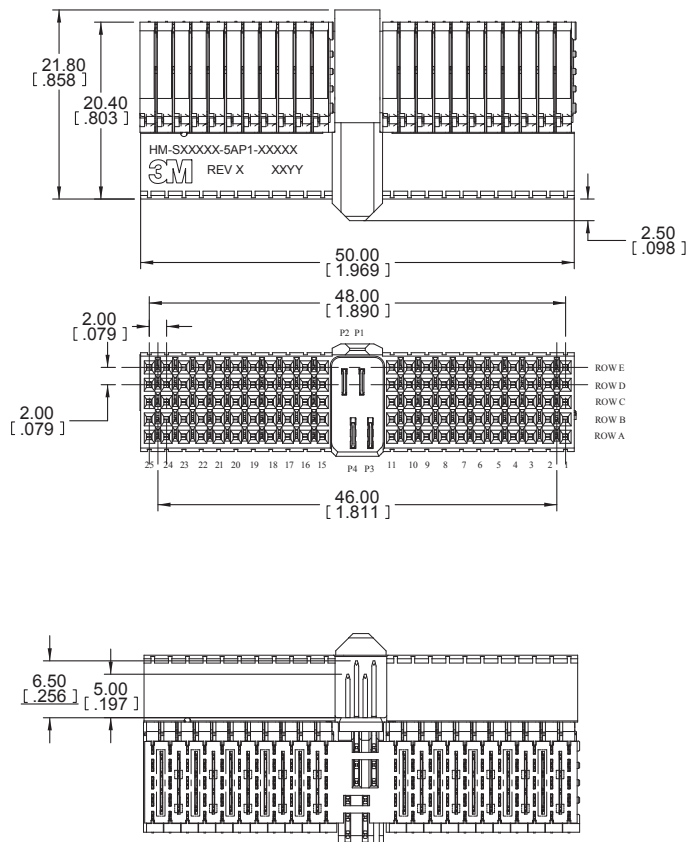
Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnector.com>

3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

# 3M™ MetPak™ HM Press-Fit Power Socket

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

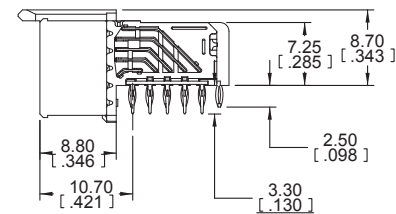
HM Series



mm  
(Inch)

Tolerance Unless Noted			
	0	0.0	0.00
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  $\mu\text{m}$  [ $\mu\text{in}$ ]:

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.

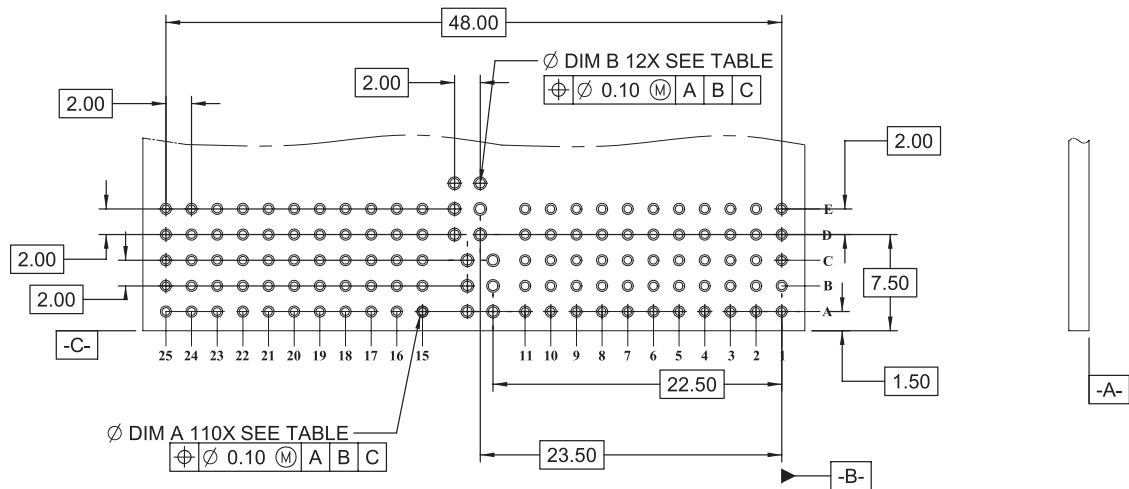
TG50 = 1.27 [50] Min. Au Contact Area, Lubricated  
2.54 [100] Min. SnPb Terminal Area (RIA C2 & E2 apply)  
1.27 [50] Min. Ni All over  
Non-Standard Option (Available with longer lead times and higher  
make order quantities, MOQ)

TS-2088-B  
Sheet 2 of 3

# 3M™ MetPak™ HM Press-Fit Power Socket

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

HM Series



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]

#### **Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

#### **Warranty; Limited Remedy; Limited Liability.**

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



#### **3M Electronics Solutions Division**

6801 River Place Blvd.  
Austin, TX 78726-9000  
U.S.A.  
1-800-225-5373  
[www.3Mconnector.com](http://www.3Mconnector.com)

Please recycle. Printed in USA.  
© 3M 2010. All rights reserved.  
RIA-2217B-E

3M is a trademark of 3M Company.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

3M:

[HM-S110APWR1-5AP1-TG30](#) [HM-S110APWR1-5AP1-TR40B](#) [HM-S110APWR1-5AP1-TG30L](#)