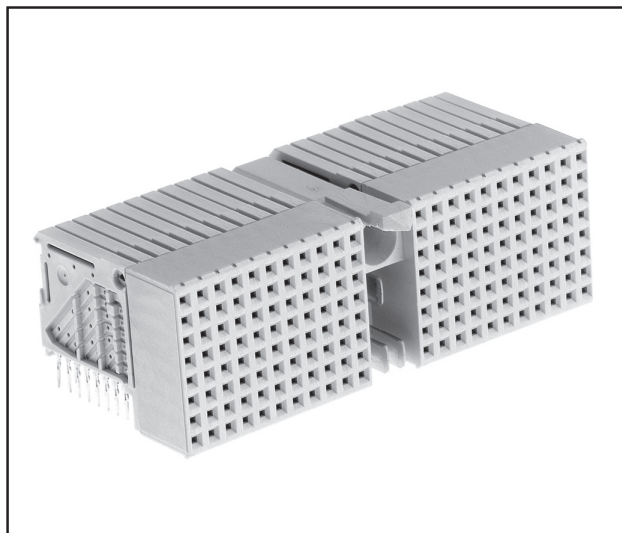


# 3M™ MetPak™ HSHM Press-Fit Power Socket

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

HM Series



- Modular/scalable format IEC 61076-4-101
- 101 mated lines per linear inch
- Dual beam contact construction for high reliability
- Four integrated 8.25 A power blades
- End-to-end stackable with 8 row 3M™ MetPak™ 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: October 11, 2010

TS-2021-B  
Sheet 1 of 3

## Physical

### Insulation:

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

### Contact:

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  
Engagement Force (Nominal): 0.32 N [33 g] Signal  
Separation Force (Nominal): 0.20 N [20 g] Signal  
Wipe (Nominal, Shortest Contact): 2.67 mm [0.105 in] Signal  
Mate/Unmate Cycles: 250  
Application: This module is not suitable for stand-alone use.

### Electrical:

Current Rating (Fully Loaded): 1 A @ 70°C Signal, 8.25 A at 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

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

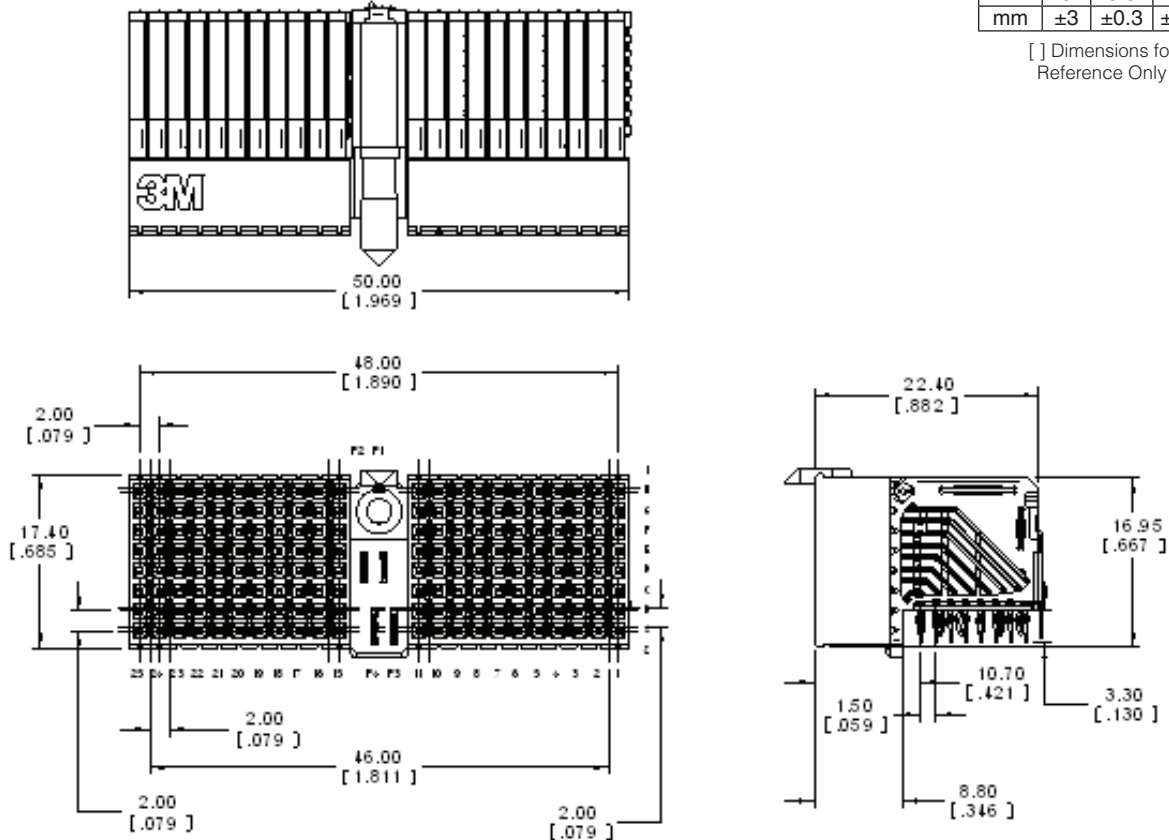
HM Series



mm  
(Inch)

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

[ ] Dimensions for Reference Only



## Ordering Information

### HM-S176DPWR1 - 8AP1-XXXX

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)

For power blade length contact sales representative  
(standard P1 and P2 = 5.00 mm, P3 and P4 = 6.50 mm)

TS-2021-B  
Sheet 2 of 3

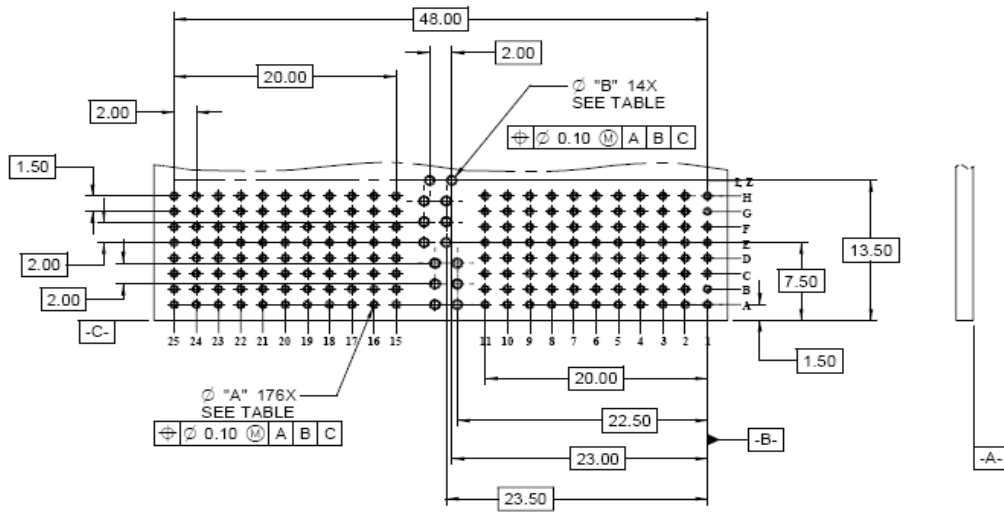
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HM Series



**Recommended PCB Hole Mounting Pattern**

Hole Plating Table mm [in.]				
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]

TS-2021-B  
Sheet 3 of 3

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