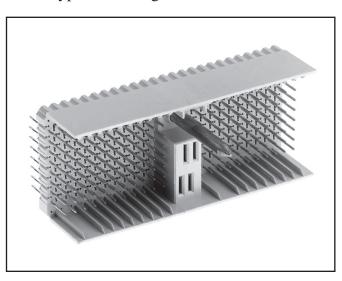
# 3M<sup>™</sup> MetPak<sup>™</sup> HM Power Header

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

**HM Series** 



- Modular/scalable format IEC 61076-4-101
- Press-fit or solder tail versions
- 101 mated lines per linear inch
- Four integrated 8.25 A power contacts and guide pin
- Ships with protective cap, which also serves as an insertion tool
- Integrated guide pin
- End-to-end stackable with 8 row 3M<sup>™</sup> MetPak<sup>™</sup> HM and HSHM products
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3mconnector.com for compliance information

Date Modified: April 29, 2011

TS-2020-C 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 N [ 0.076 in. ] Power

Mate/Unmate Cycles: 250

Application: This module is suitable for stand-alone use.

**Electrical:** 

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

Insulation Resistance:  $1 \times 10^4 \, M\Omega$  @  $100 \, V_{DC}$ 

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

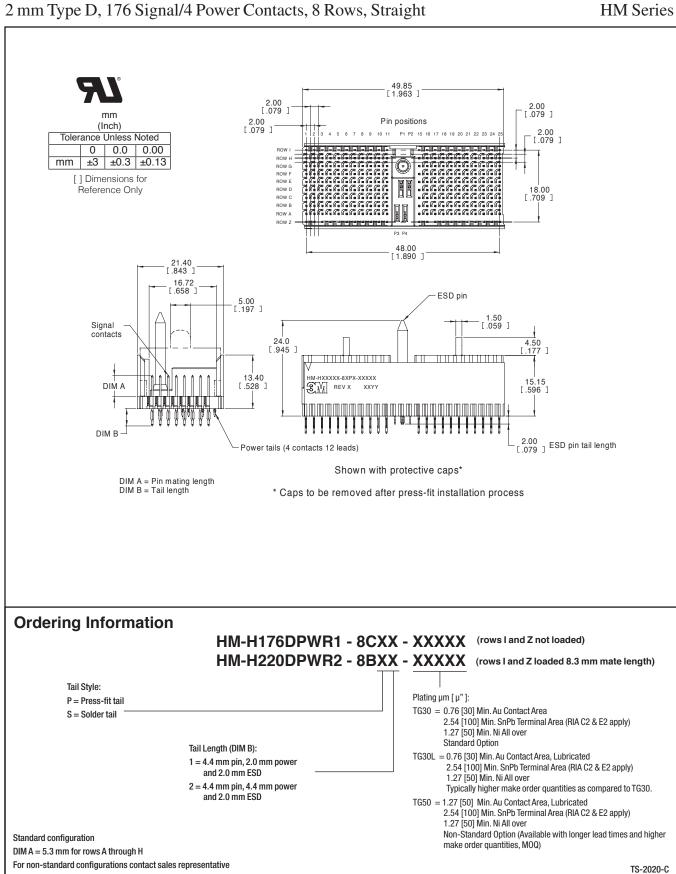
#### **Environmental**

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

**Process Rating:** Maximum 260°C (per J-STD-020C)

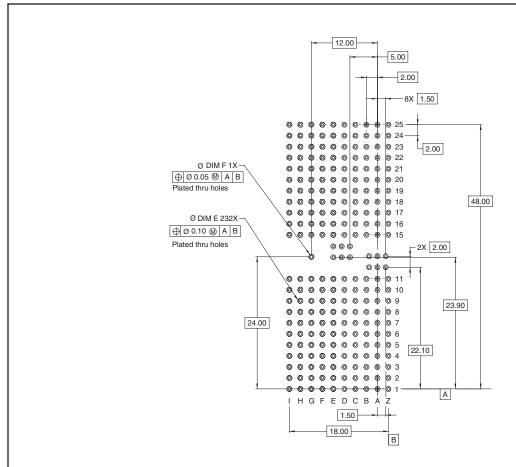
Withstanding Voltage: (per J-STD-020C)

UL File No.: E68080 MetPak is a trademark of 3M Company.



Sheet 2 of 3

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



Recommended PCB hole mounting pattern

Hole Plating Table				
DIM	Finished Hole Dia. "D"	Cu. Thickness	SnPb Thickness	Drilled Hole Dia.
"A"	0.550 - 0.650 [.02170256]	0.025 - 0.045 [.00100018]	0.008 - 0.018 [.00030007]	0.686 - 0.727 [.02700286]
"B"	0.690 - 0.790 [.02700310]	0.025 - 0.045 [.00100018]	0.008 - 0.018 [.00030007]	0.810 - 0.860 [.03200340]

TS-2020-C Sheet 3 of 3

# **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

3M is a trademark of 3M Company.

the legal theory asserted.

6801 River Place Blvd. Austin, TX 78726-9000

www.3Mconnector.com

U.S.A. 1-800-225-5373

**3M Electronics Solutions Division** 

## **Mouser Electronics**

**Authorized Distributor** 

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

## 3M:

<u>HM-H176DPWR1-8CP1-TG30</u> <u>HM-H176DPWR1-8CP2-TG30</u> <u>HM-H176DPWR1-8CP1-TG50</u> <u>HM-H176DPWR1-8CP1-TG30L</u>