



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

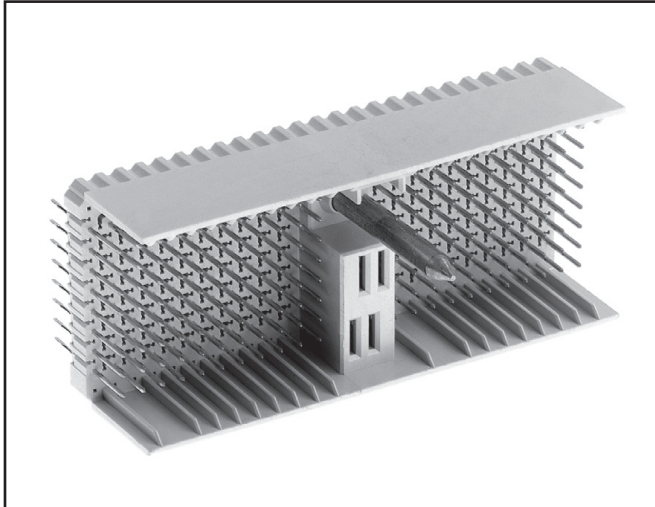
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



3M™ MetPak™ 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™ MetPak™ 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: $1 \times 10^4 \text{ M}\Omega$ @ 100 V_{DC}

Withstanding Voltage: 750 V_{rms}

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.

3M

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

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

3M™ MetPak™ HM Power Header

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

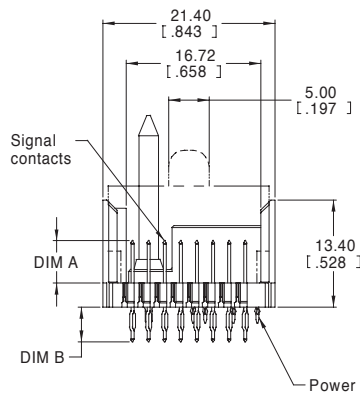
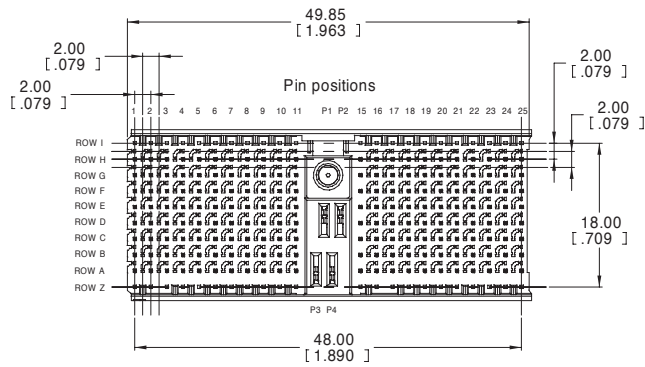
HM Series



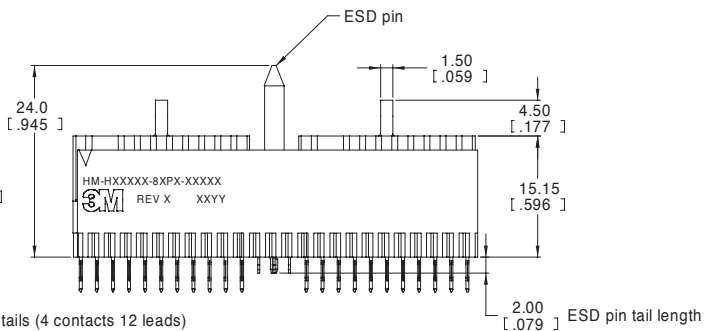
mm
(Inch)

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

[] Dimensions for Reference Only



DIM A = Pin mating length
DIM B = Tail length



Shown with protective caps*

* Caps to be removed after press-fit installation process

Ordering Information

HM-H176DPWR1 - 8CXX - XXXXX (rows I and Z not loaded)

HM-H220DPWR2 - 8BXX - XXXXX (rows I and Z loaded 8.3 mm mate length)

Tail Style:

P = Press-fit tail

S = Solder tail

Tail Length (DIM B):

1 = 4.4 mm pin, 2.0 mm power and 2.0 mm ESD

2 = 4.4 mm pin, 4.4 mm power and 2.0 mm ESD

Plating μm [μm]:

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)

Standard configuration

DIM A = 5.3 mm for rows A through H

For non-standard configurations contact sales representative

TS-2020-C
Sheet 2 of 3



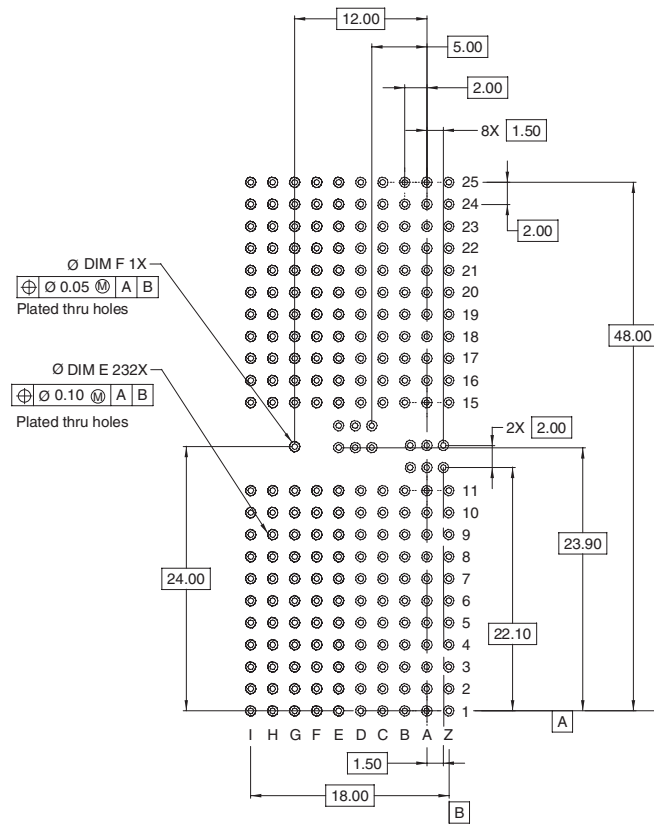
Electronic Solutions Division
Interconnect Solutions
<http://www.3M.com/interconnects/>

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

3M™ MetPak™ HM Power Header

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

HM Series



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 [.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

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

3M is a trademark of 3M Company.