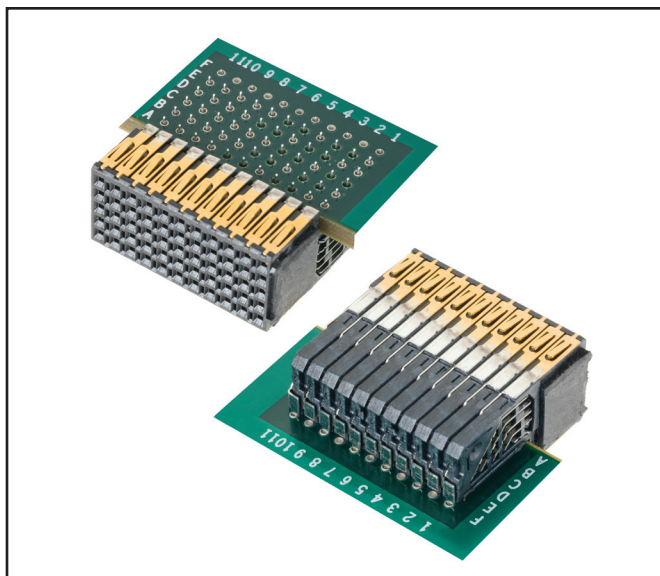


3M™ Ultra Hard Metric (UHM) Press-Fit Socket

2 mm, B Type: 55, 95, 110 & 125 Signal Contacts, 5+2 Rows, Right Angle

UHM Series



- 7+ Gbps data rates when mated to standard IEC 61076-4-101 headers.
- Low crosstalk at high frequencies
- 50/100 Ω (single-ended/differential) impedance
- Modular/scalable format IEC 61076-4-101
- Press-fit headers and receptacles
- 63 mated lines per linear inch
- Dual beam contact construction for high reliability
- End-to-end stackable with 5 row 3M™ CP2, HM, UHM and HSHM sockets
- Mates with 3M™ CP2, HM, UHM, HSHM headers, and cPCI™ type headers
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3M.com/Interconnects for compliance information (RIA E1 & C1 apply)

Date Modified: September 3, 2009

TS-2284-C
Sheet 1 of 2

Physical

Insulation:

Material: High Temperature Thermoplastic (LCP)

Flammability: UL 94V-0

Contact:

Material: Copper Alloy

Plating: TG30, KR

Performance

Mechanical:

Normal Force (Nominal): 0.57 N [58 g] Signal, (0.74 N [75 g] Shield with HSHM & UHM headers)

Engagement Force (Nominal): 0.32 N [33 g] Signal, (0.22 N [22 g] Shield with HSHM & UHM headers)

Separation Force (Nominal): 0.20 N [20 g] Signal, (0.20 N [20 g] Shield with HSHM & UHM headers)

Wipe (Nominal, Shortest Contact): 2.67 mm [0.105 in] Signal, 1.57 mm [0.062 in] Shield

Application: This module is not suitable for stand-alone use, additional guide features recommended per IEC 61076-4-101

Electrical:

Data Rate: 7+ Gbps data rates (when mated to standard IEC 61076-4-101 headers)

Characteristic Impedance: 50 Ω Single-ended, 100 Ω Differential

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

Insulation Resistance: 10⁴ M Ω @ 100 V_{DC}

Withstanding Voltage: 750 V_{RMS}

Environmental

Temperature Rating: -55° C to 125° C



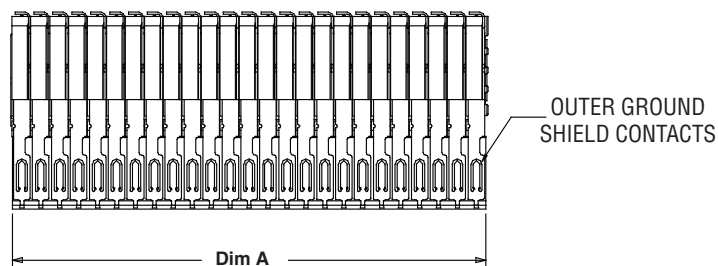
Electronic Solutions Division
Interconnect Solutions
<http://www.3M.com/interconnects/>

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

3M™ Ultra Hard Metric (UHM) Press-Fit Socket

2 mm, B Type: 55, 95, 110 & 125 Signal Contacts, 5+2 Rows, Right Angle

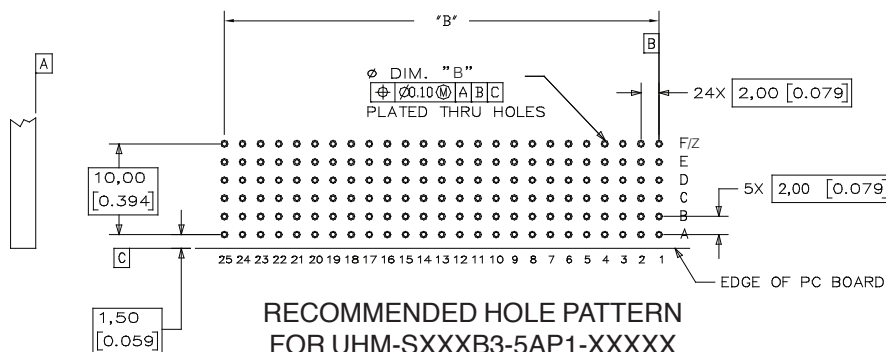
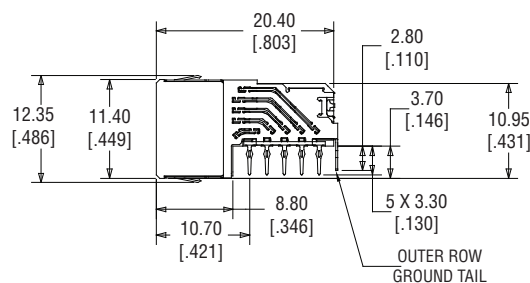
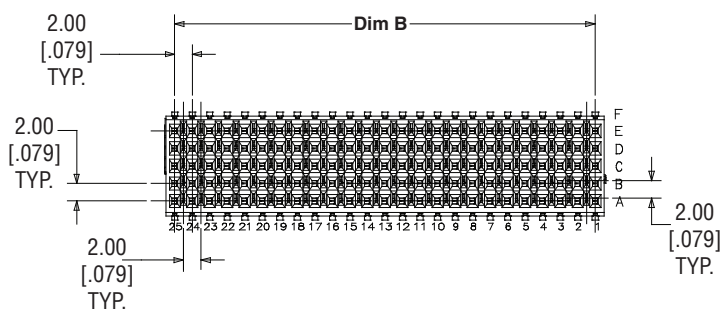
UHM Series



Signal Contact Quantity	Dimension A	Dimension B
55	22.00	20.00
95	38.00	36.00
110	44.00	42.00
125	50.00	48.00

mm [Inch]			
Tolerance Unless Noted			
	0.	.0	.00
mm	1	0.3	0.13

[] Dimensions used for Reference Only



RECOMMENDED HOLE PATTERN FOR UHM-SXXXB3-5AP1-XXXXX

Recommended hole pattern for UHM-SXXXB0-5AP1-XXXXX contains no vias in even positions on Row F/Z."

Hole Plating Table mm [in.]			
Finished Hole Dia. (D)	Cu. Thickness	SnPb Thickness	Drilled Hole Dia.
0.550 - 0.650 [.0217 - .0256]	0.025 - 0.045 [.0010 - .0018]	0.008 - 0.018 [.0003 - .0007]	0.686 - 0.727 [.0270 - .0286]

Ordering Information

UHM-SXXXBX-5AP1- XXXXX

Number of Signal Contacts:
055, 095, 110, 125

High Speed Option:

0 = 50Ω Coaxial single-ended and 100Ω Differential pair applications for connection to 5 *2 row headers
Outer Row Ground Tails in odd positions of Row F/Z
3 = 50Ω Coaxial single-ended and 100Ω Differential pair applications for connection to 5 *2 row headers
Outer Row Ground Tails in all positions of Row F/Z

Plating Options μm [μ"]:

TG30 = 0.76 [30] Min. Au Contact Area
2.54 [100] Min. SnPb Terminal Area
1.27 [50] Min. Ni All over
(RIA E2 & C2 apply)
KR = 0.76 [30] Min. Au Contact Area
5.08 [200] Min. Sn Terminal Area
1.27 [50] Min. Ni All over
(RIA E1 & C1 apply)

TS-2284-C
Sheet 2 of 2



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

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.3m.com/interconnects

Please recycle. Printed in USA.
© 3M 2008. 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:

[UHM-S055B3-5AP1-TG30](#)