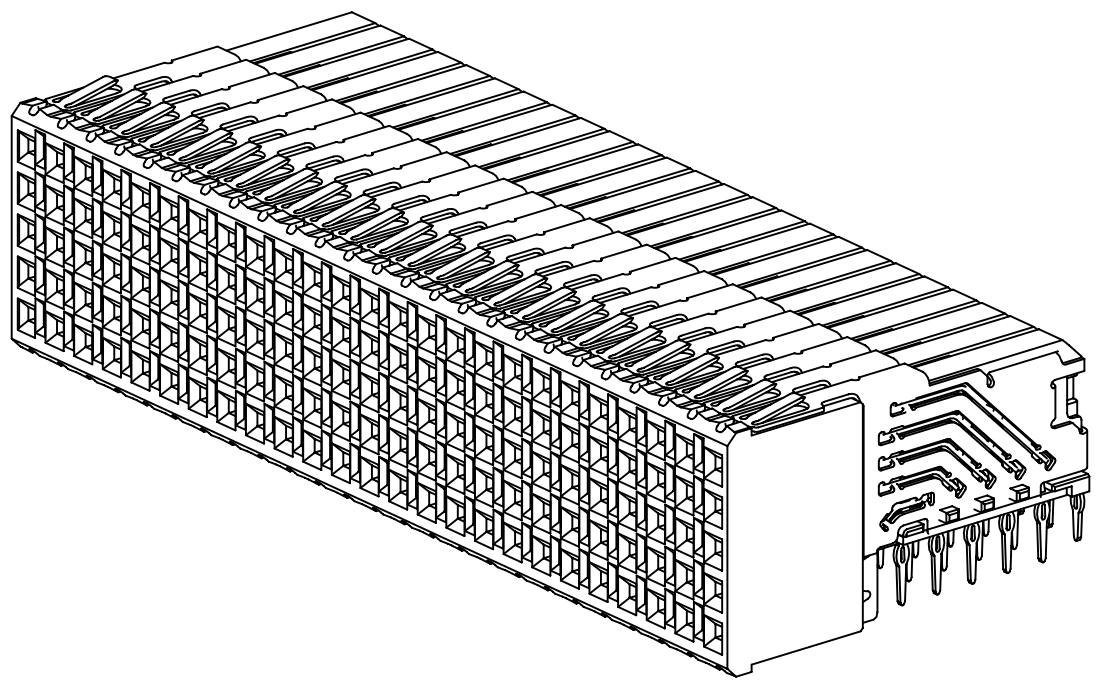
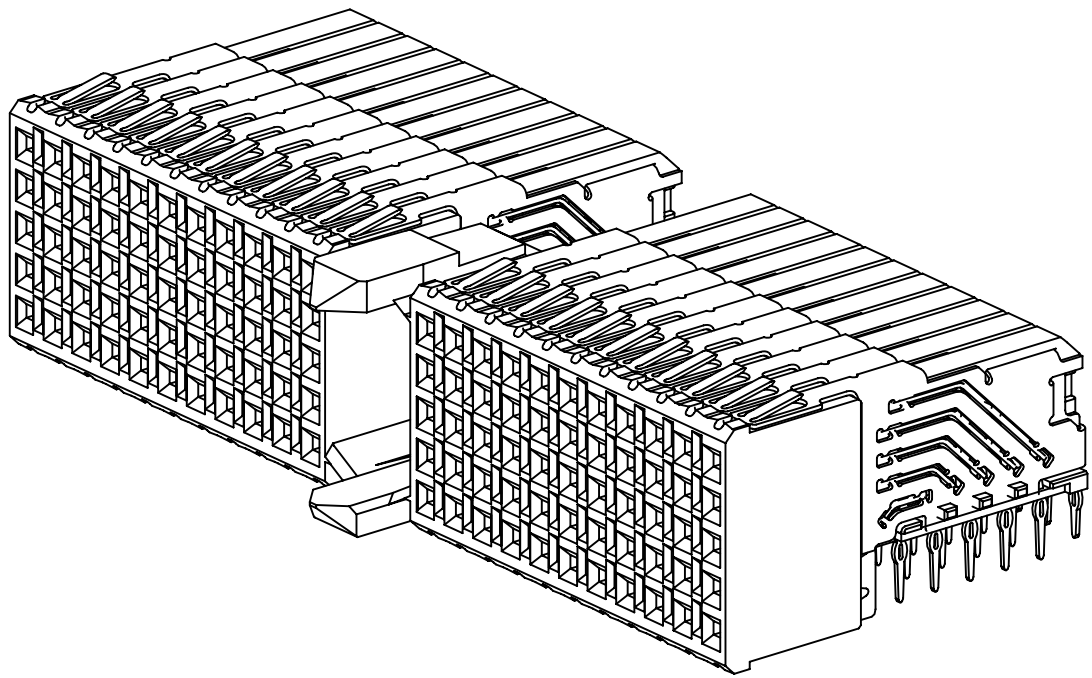


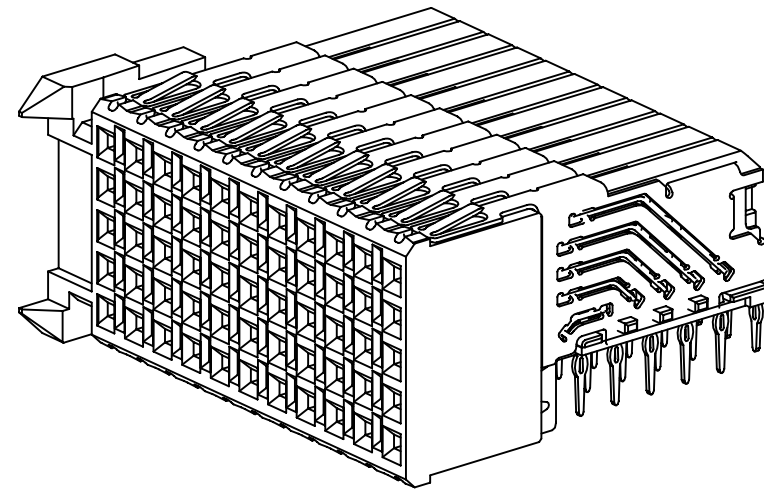
3M™ ULTRA HARD METRIC (UHM) PRESS-FIT SOCKET CONNECTORS, 5-ROW  
FOR 2MM HARD METRIC APPLICATIONS



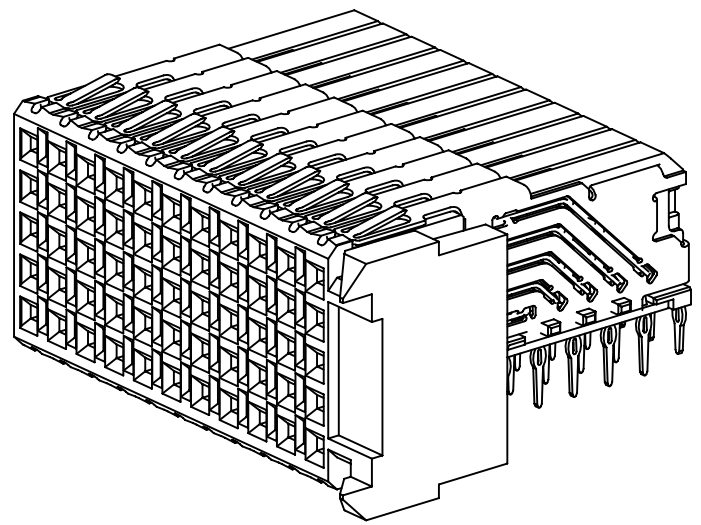
UHM-S055BX-5AP1-XXXXX  
UHM-S095BX-5AP1-XXXXX  
UHM-S110BX-5AP1-XXXXX  
UHM-S125BX-5AP1-XXXXX



UHM-S110AX-5AP1-XXXXX



UHM-S055CLX-5AP1-XXXXX



UHM-S055CRX-5AP1-XXXXX

ORDERING INFORMATION  
UHM-SXXXXYZ-5AP1-XXXXX

SOCKET POSITION  
AND TYPE

PLATING:

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

TG30 = .76μm [30μIN] MIN. GOLD ON CONTACT AREA  
2.54μm [100μIN] MIN. TIN/LEAD ON TERMINAL AREA (RIA C2 & E2 APPLY)  
1.27μm [50μIN] MIN. NICKEL ALL OVER.  
STANDARD OPTION.  
KR = .76μm [30μIN] MIN. GOLD ON CONTACT AREA  
2.54μm [100μIN] MIN. MATTE TIN ON TERMINAL AREA (RIA C1 & E1 APPLY)  
1.27μm [50μIN] MIN. NICKEL ALL OVER.

- \* 7+ Gbps DATA RATES WHEN MATED TO STANDARD IEC 61076-4-101 HEADERS.
- \* LOW CROSSTALK AT HIGH FREQUENCIES.
- \* 50/100Ω (SINGLE-ENDED/DIFFERENTIAL) IMPEDANCE.
- \* PRESS-FIT HEADERS AND RECEPTACLES.
- \* MODULAR/SCALABLE FORMAT: IEC 61076-4-101.
- \* 63 MATED LINES PER LINEAR INCH.
- \* DUAL BEAM CONTACT CONSTRUCTION FOR HIGH RELIABILITY.
- \* MULTI-PURPOSE CENTER (MPC) FOR KEYING AND GUIDANCE.
- \* END-TO-END STACKABLE WITH 5 ROW 3M, CP2, HM, UHM AND HSHM SOCKETS.
- \* INTEGRATED GUIDE FINGERS.
- \* MATES WITH 5 ROW 3M, CP2, HM, UHM, HSHM HEADERS AND cPCI™ TYPE HEADERS.

- NOTES
1. MATERIAL:  
PLASTIC: HIGH TEMP LCP, UL94V-0  
CONTACTS: COPPER ALLOY.
  2. REGULATORY INFORMATION:  
ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION.
  3. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.

3 MECHANICAL :

NORMAL FORCE (NOMINAL): .57N [58g] SIGNAL,  
(.74N [75g] SHIELD WITH HSHM AND UHM HEADERS)  
ENGAGEMENT FORCE (NOMINAL): .32N [33g] SIGNAL,  
(.22N [22g] SHIELD WITH HSHM AND UHM HEADERS)  
SEPARATION FORCE (NOMINAL): .20N [20g] SIGNAL,  
(.20N [20g] SHIELD WITH HSHM AND UHM HEADERS)  
WIPE (NOMINAL, SHORTEST CONTACT): 2.67 [ .105 ] SIGNAL, 1.57 [ .062 ] SHIELD  
MATE/UNMATE CYCLES: 250  
APPLICATION: THIS MODULE IS NOT SUITABLE FOR  
STAND-ALONE USE. ADDITIONAL GUIDE  
FEATURES RECOMMENDED PER IEC 61076-4-101

3 ELECTRICAL :

DATA RATE: 7+ Gbps DATA RATES  
(WHEN MATED TO STANDARD  
IEC 61076-4-101 HEADERS)  
CHARACTERISTIC IMPEDANCE: 50Ω SINGLE-ENDED, 100Ω DIFFERENTIAL  
CURRENT RATING (FULLY LOADED): 1A @ 70°C SIGNAL  
INSULATION RESISTANCE: 10<sup>4</sup> MΩ @ 100 V<sub>DC</sub>  
WITHSTANDING VOLTAGE: 750V<sub>RMS</sub>

3 ENVIRONMENTAL :

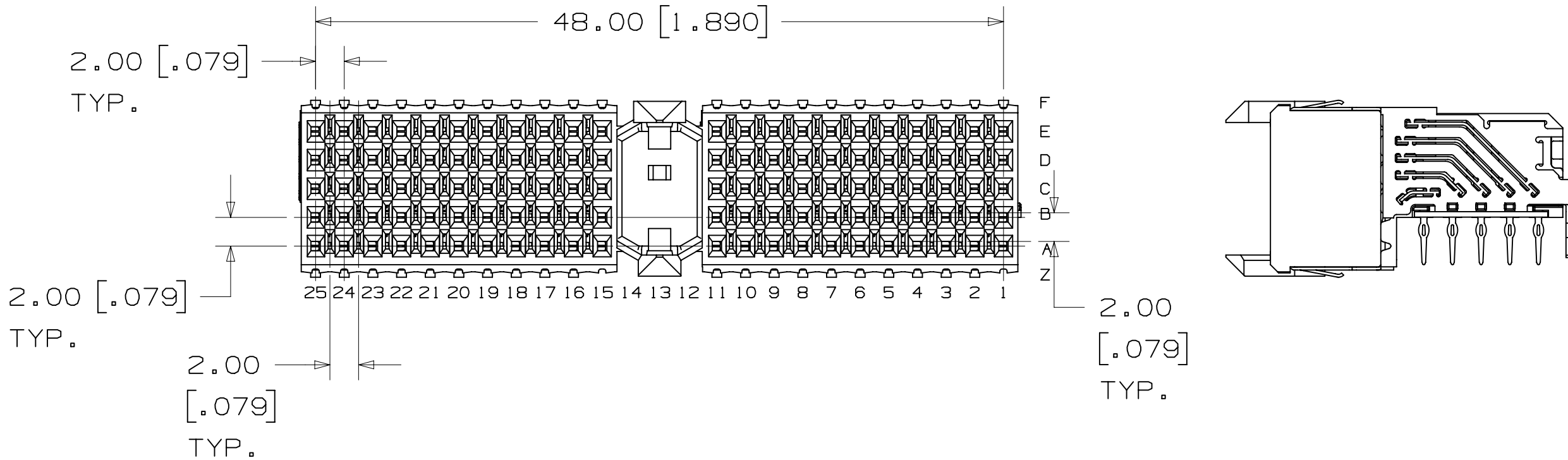
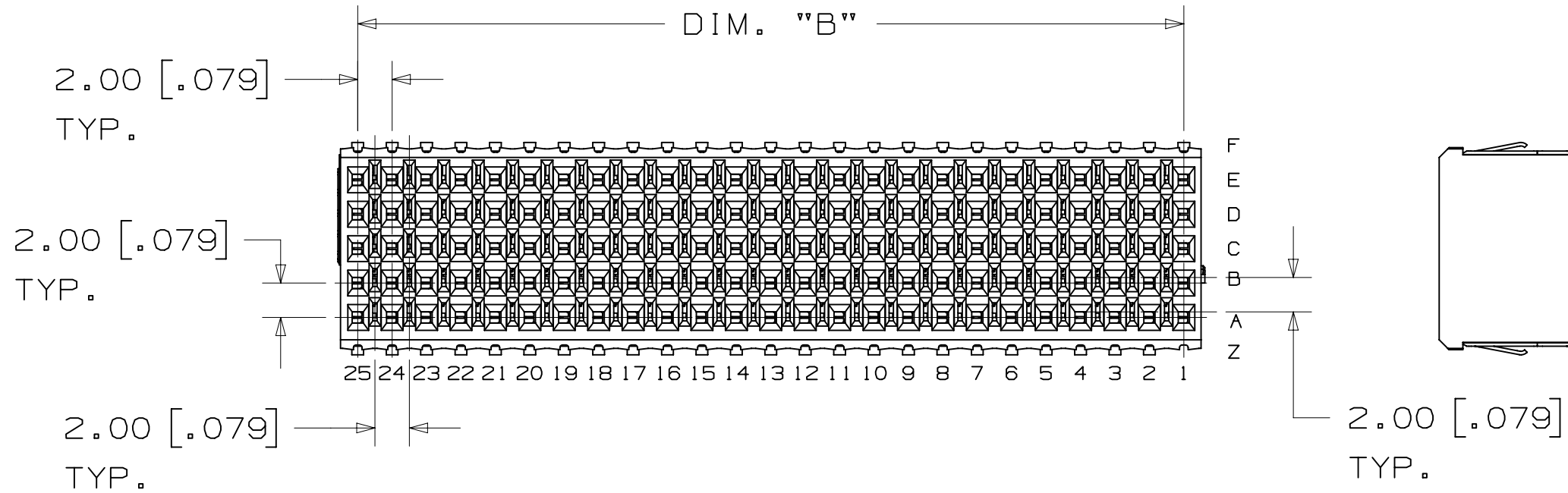
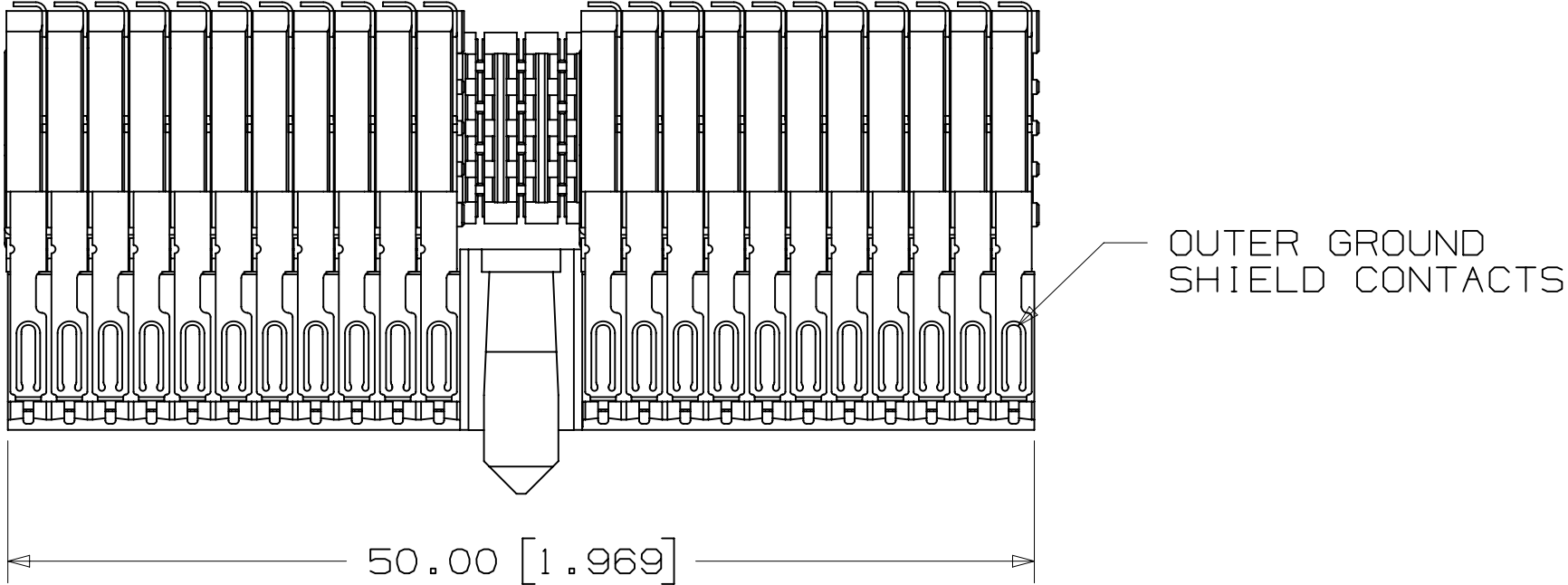
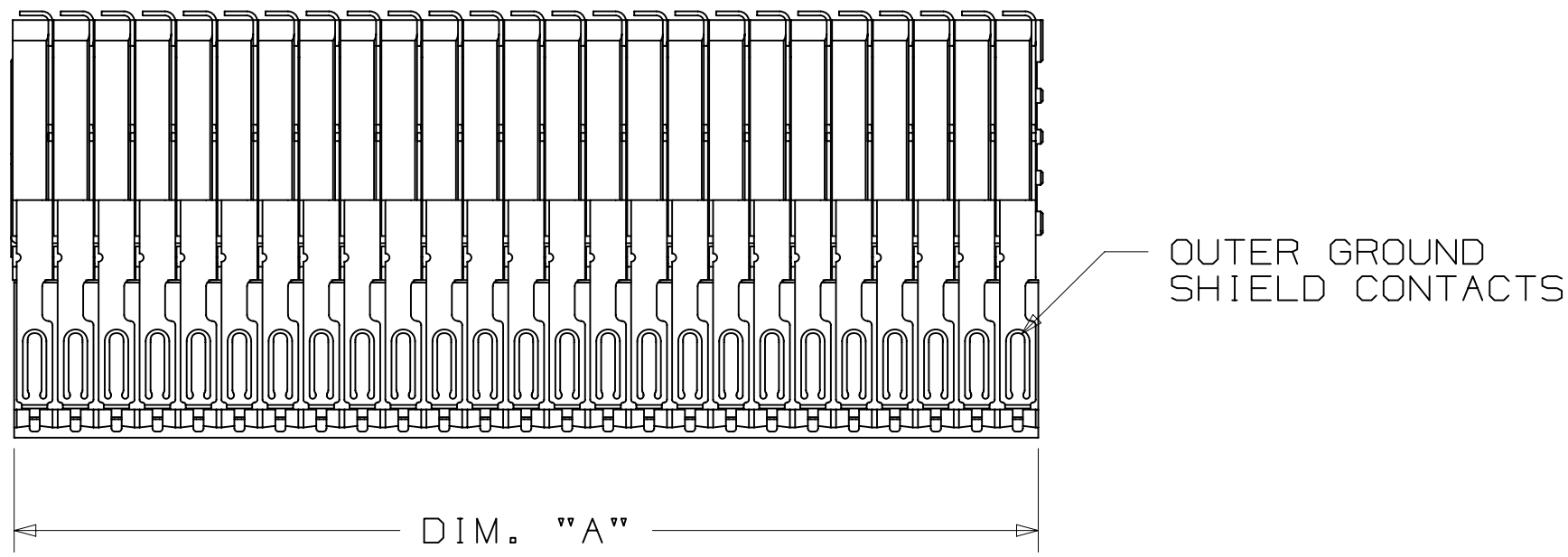
TEMPERATURE RATING: -55°C TO 125°C

3M ELECTRONIC SOLUTIONS DIVISION  
INTERCONNECT SOLUTIONS  
<http://www.3mconnectors.com>

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INFORMATION CALL 800-225-5373

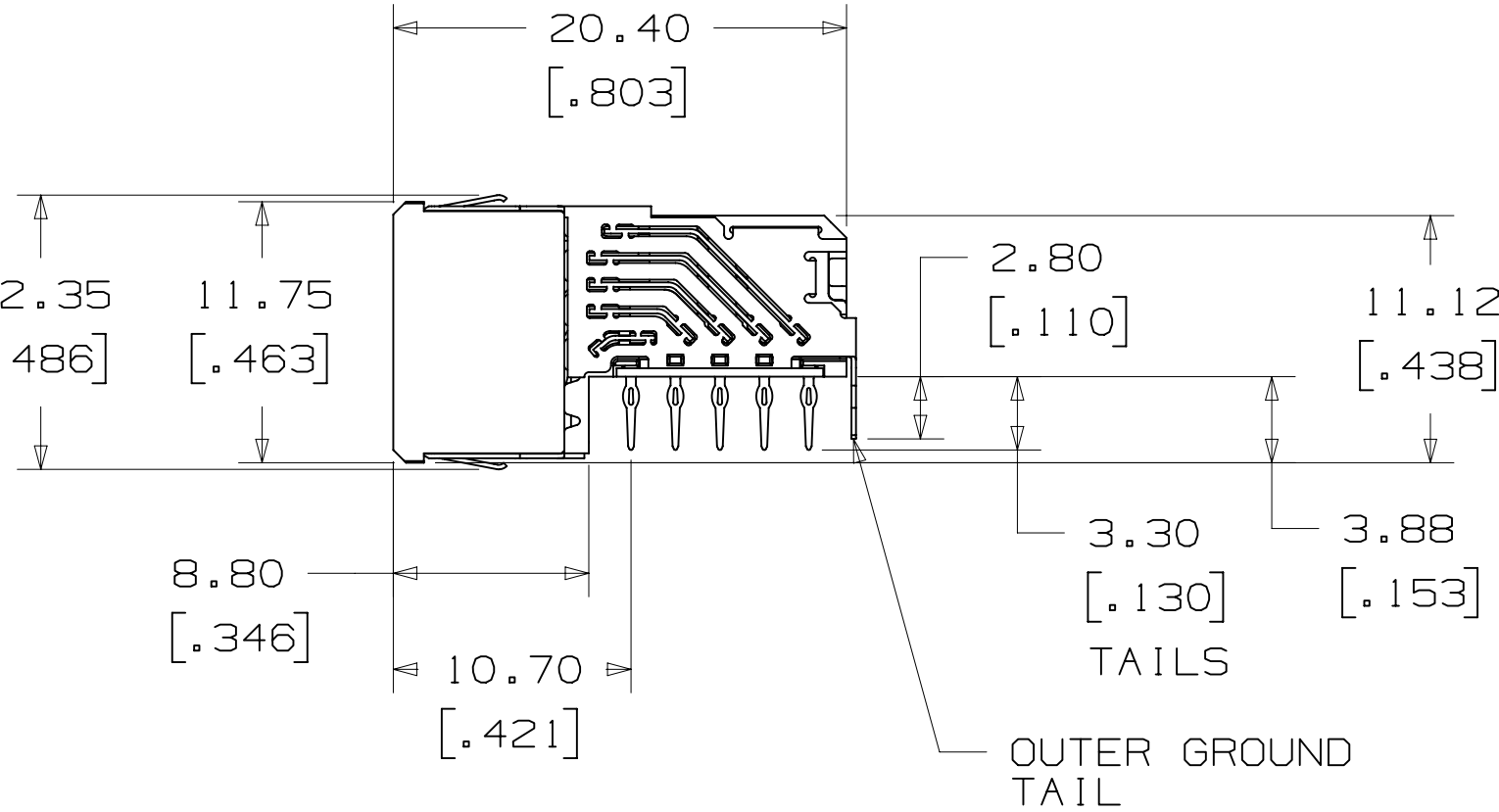
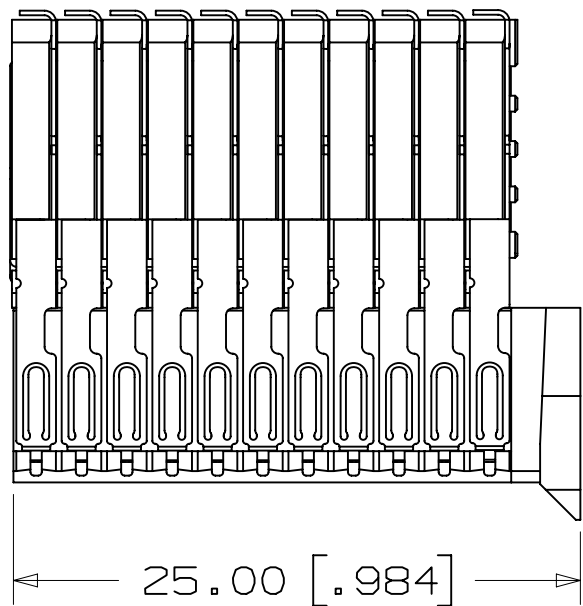
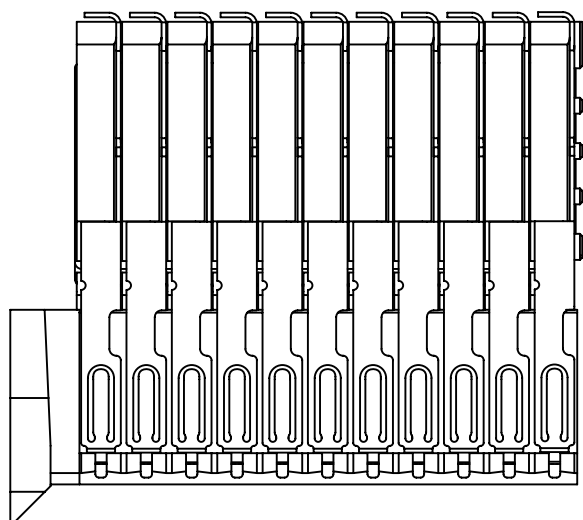
|                                 |  |                                    |  |  |             |  |      |           |              |
|---------------------------------|--|------------------------------------|--|--|-------------|--|------|-----------|--------------|
| DESIGN REFERENCE                |  | NEXT ASSEMBLY                      |  | REV  | ECO         | ISSUE DATE AND DESCRIPTION                 |      | DRFT      | CHKD         |
| DISTRIBUTION CODES              |  |                                    |  | DRP  | CASTIGLIONE |  | DATE | MFG       | DATE         |
|                                 |  |                                    |  | CHKD   |             |  | DATE | APPRV     | DATE         |
|                                 |  |                                    |  |  |             |  |      | T. SUNIGA | MAY 23, 2012 |
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| DO NOT SCALE DRAWING            |  | SCALE 3 1                          |  | TOLERANCES EXCEPT AS NOTED   |             | 3M Center St. Paul, MN 55144               |      |           |              |
| THIRD ANGLE PROJECTION          |  | INCHES                             |  | MILLIMETERS  |             | TITLE                                      |      |           |              |
| INTERPRET PER ASME Y14.5 - 1994 |  | .0 ± .01<br>.000 ± .005<br>.0000 ± |  | .0 ± .3<br>.00 ± .13<br>.000 ±   |             | UHM PRESS-FIT SOCKET,<br>5-ROW, CONNECTORS |      |           |              |
| MAX SURFACE ROUGHNESS           |  | SURFACES                           |  | MODEL  |             | CAGE NUMBER                                |      | SIZE      | DRAWING NO.  |
| ✓ MARKED ONLY                   |  | ANGLES                             |  | D  |             | 78-5100-2533-7                             |      | REV.      | A            |
|                                 |  |                                    |  |  |             |  |      | DET       | SHT 1 OF 3   |
|                                 |  |                                    |  |  |             |  |      | LISTS     | YES          |
|                                 |  |                                    |  |  |             |  |      | NO        |              |

3M™ ULTRA HARD METRIC (UHM) PRESS-FIT SOCKET CONNECTORS, 5-ROW  
FOR 2MM HARD METRIC APPLICATIONS

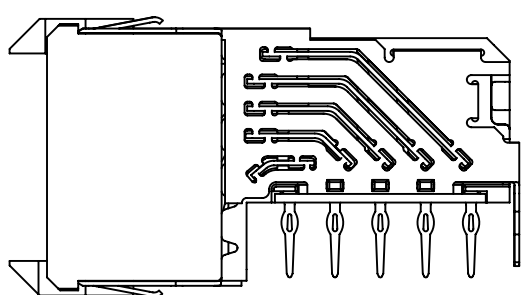
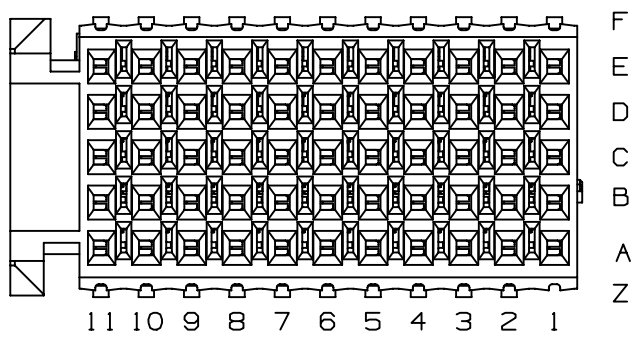


| SIGNAL CONTACT QTY. | DIM. "A"        | DIM. "B"        |
|---------------------|-----------------|-----------------|
| 055                 | 22.00 [ .866 ]  | 20.00 [ .787 ]  |
| 095                 | 38.00 [ 1.496 ] | 36.00 [ 1.417 ] |
| 110                 | 44.00 [ 1.732 ] | 42.00 [ 1.654 ] |
| 125                 | 50.00 [ 1.969 ] | 48.00 [ 1.890 ] |

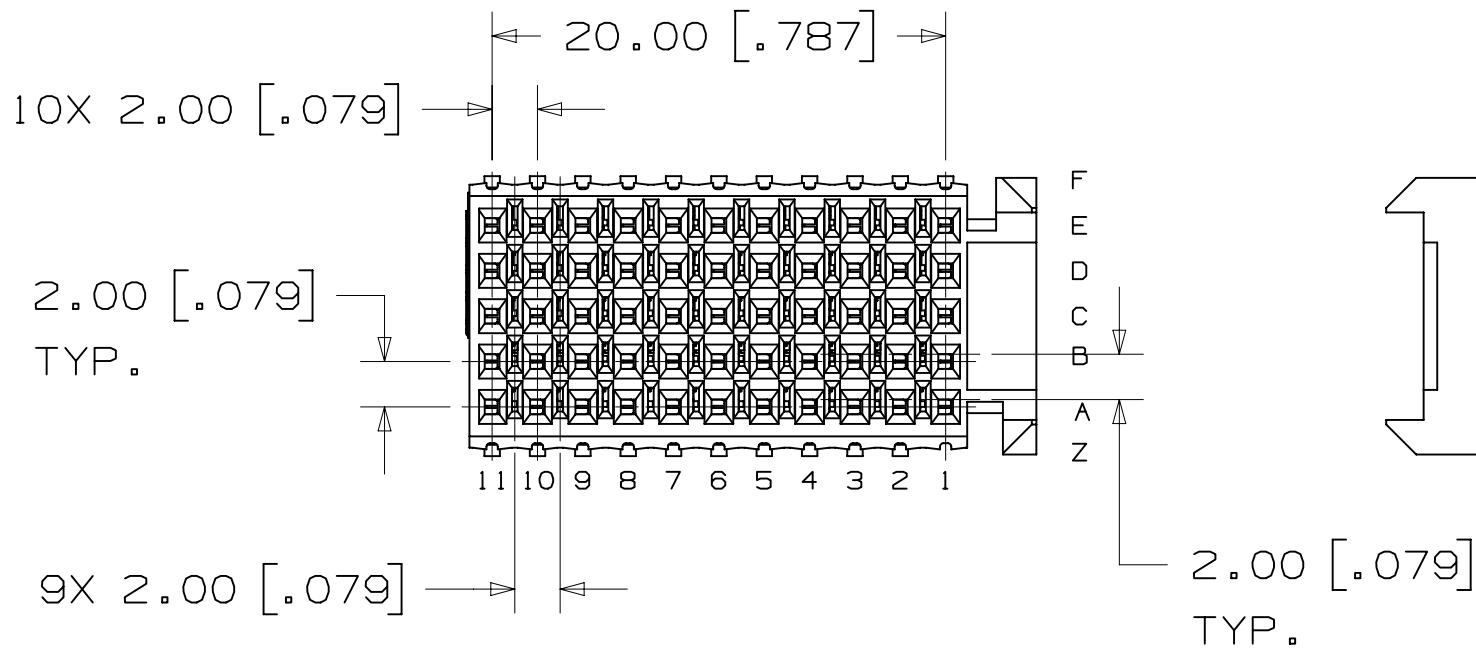
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UHM-S095BX-5AP1-XXXXX  
UHM-S110BX-5AP1-XXXXX  
UHM-S125BX-5AP1-XXXXX



TYPICAL SIDE VIEW  
DIMENSIONS FOR THE  
SOCKETS ON THIS DRAWING



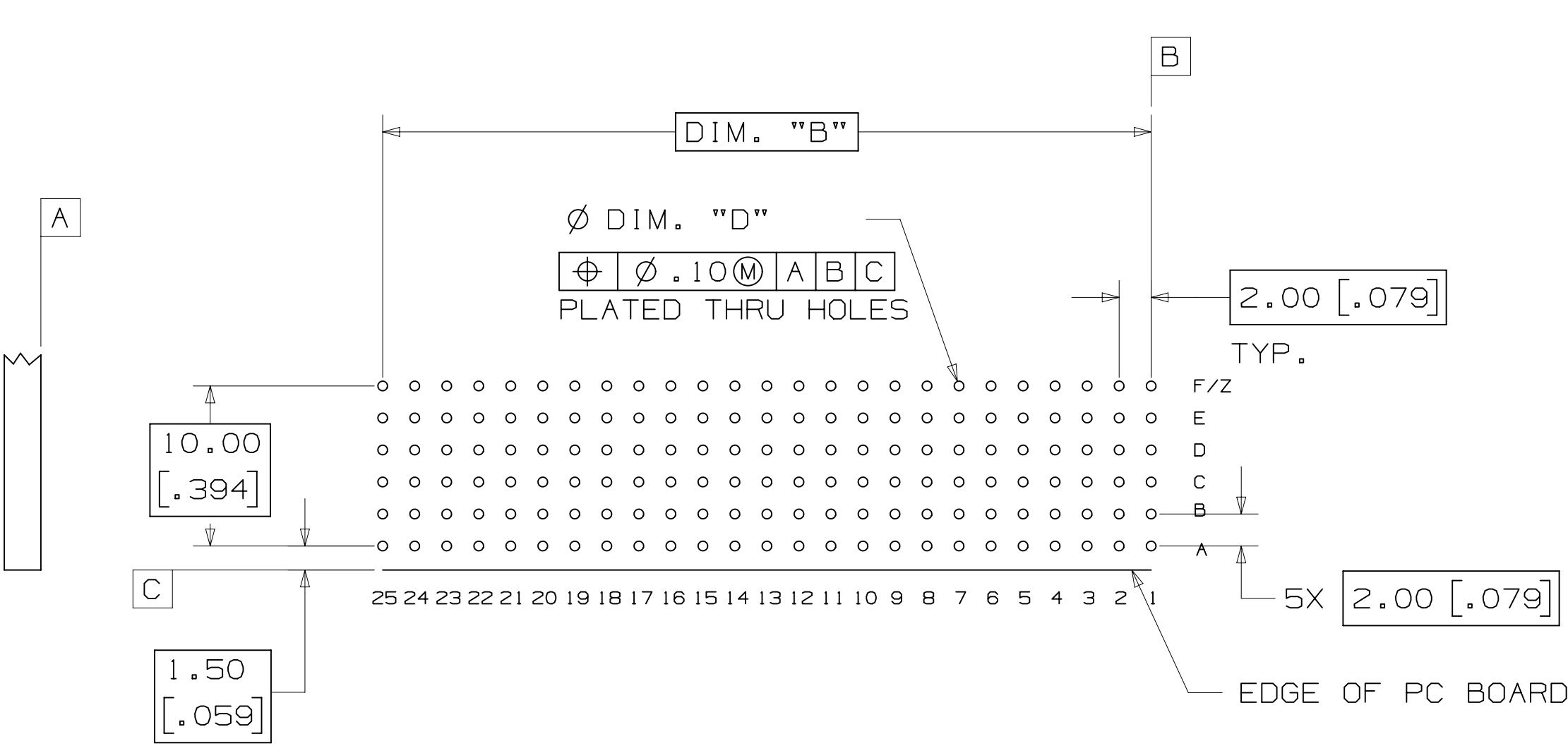
UHM-S055CLX-5AP1-XXXXX



UHM-S055CRX-5AP1-XXXXX

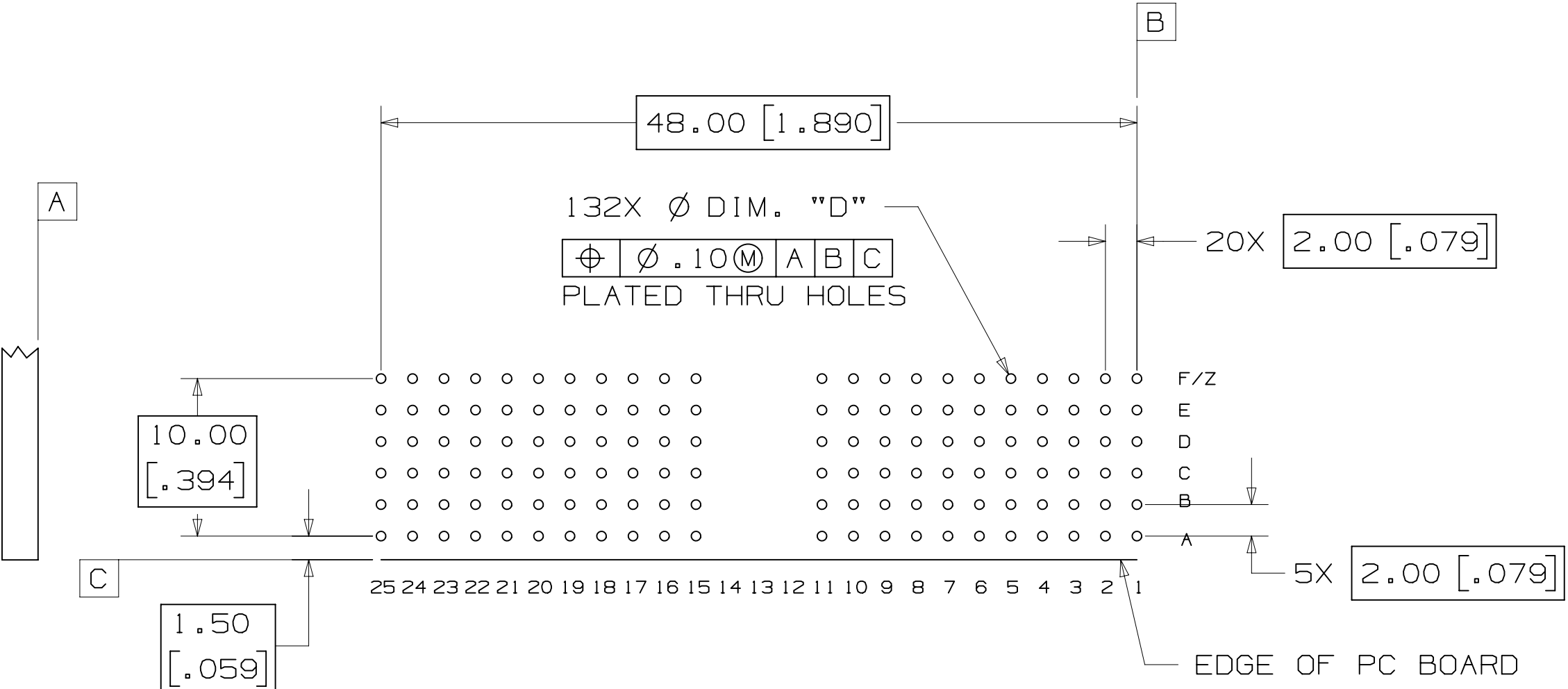
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|------------------------|--|---------------------------------|--|----------------------------|--|--------------|--|---------------------|--|
| DESIGN REFERENCE       |  | NEXT ASSEMBLY                   |  | A 41080                    |  | MAY 24, 2012 |  | JNC TS              |  |
| REV                    |  | ECO                             |  | ISSUE DATE AND DESCRIPTION |  | DRFT         |  | CHKD                |  |
| DIP                    |  | CASTIGLIONE                     |  | DATE                       |  | MAY 23, 2012 |  | DATE                |  |
| CHKD                   |  | DATE                            |  | APPR                       |  | T. SUNIGA    |  | DATE                |  |
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| THIRD ANGLE PROJECTION |  | INTERPRET PER ASME Y14.5 - 1994 |  | MAX SURFACE ROUGHNESS      |  | SURFACES     |  | MARKED ONLY         |  |
| CAGE NUMBER            |  | SIZE                            |  | DRAWING NO.                |  | REV.         |  | A                   |  |
| MODEL                  |  | DET                             |  | LISTS                      |  | YES          |  | NO                  |  |
| SHT                    |  | 2                               |  | OF                         |  | 3            |  |                     |  |

3M™ ULTRA HARD METRIC (UHM) PRESS-FIT SOCKET CONNECTORS, 5-ROW  
FOR 2MM HARD METRIC APPLICATIONS



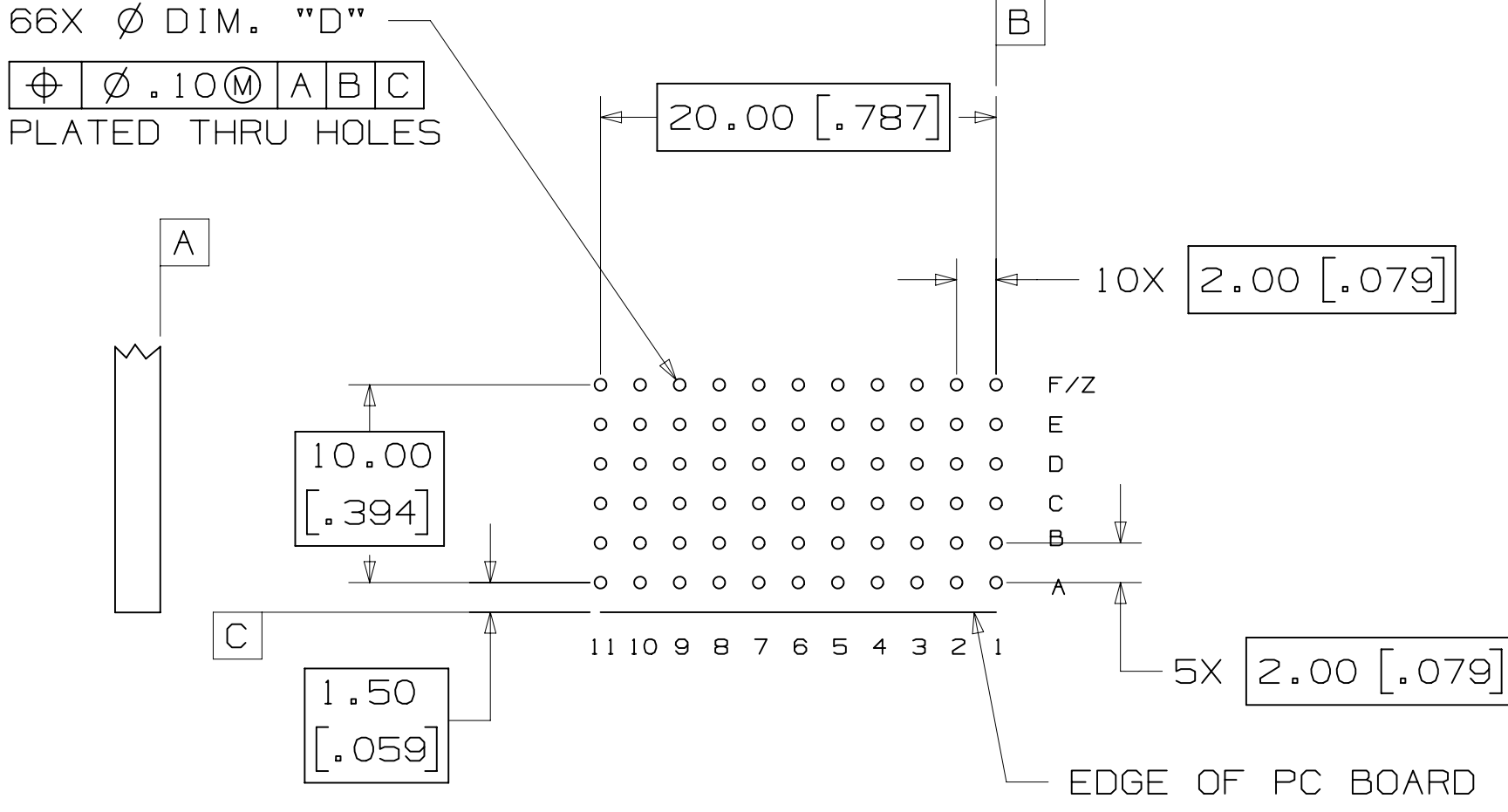
RECOMMENDED HOLE PATTERN FOR UHM-SXXXB0-5AP1  
CONTAINS NO VIAS IN EVEN POSITIONS ON ROW F/Z

UHM-S055BX-5AP1-XXXXX  
UHM-S095BX-5AP1-XXXXX  
UHM-S110BX-5AP1-XXXXX  
UHM-S125BX-5AP1-XXXXX



RECOMMENDED HOLE PATTERN FOR UHM-S110A-5AP1  
CONTAINS NO VIAS IN EVEN POSITIONS ON ROW F/Z

UHM-S110AX-5AP1-XXXXX



RECOMMENDED HOLE PATTERN FOR UHM-S055CX-5AP1  
CONTAINS NO VIAS IN EVEN POSITIONS ON ROW F/Z

UHM-S055CLX-5AP1-XXXXX  
UHM-S055CRX-5AP1-XXXXX

RECOMMENDED PCB MOUNTING HOLE PATTERN  
(VIEWED FROM COMPONENT SIDE)

| HOLE PLATING TABLE |                         |                         |                         |                         |
|--------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| HOLE               | (FINISHED HOLE)         | Cu THICKNESS            | SnPb THICKNESS          | DRILLED HOLE DIA.       |
| DIM. "D"           | .550-.650 [.0217-.0256] | .025-.045 [.0010-.0018] | .008-.018 [.0003-.0007] | .686-.727 [.0270-.0286] |

|                        |  |                                 |  |                              |  |                     |  |  |  |
|------------------------|--|---------------------------------|--|------------------------------|--|---------------------|--|--|--|
| DESIGN REFERENCE       |  | NEXT ASSEMBLY                   |  | A 41080                      |  | MAY 24, 2012        |  | JNC TS   |  |
| REV                    |  | ECO                             |  | ISSUE DATE AND DESCRIPTION   |  | DRFT                |  | CHKD   |  |
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| THIRD ANGLE PROJECTION |  | INTERPRET PER ASME Y14.5 - 1994 |  | MAX SURFACE ROUGHNESS        |  | DET SURFACES        |  | MARKED ONLY  |  |
| CAGE NUMBER            |  | SIZE                            |  | DRAWING NO.                  |  | REV.                |  | SHT 3 OF 3   |  |
| D 78-5100-2533-7       |  | A                               |  | A                            |  | A                   |  | A  |  |