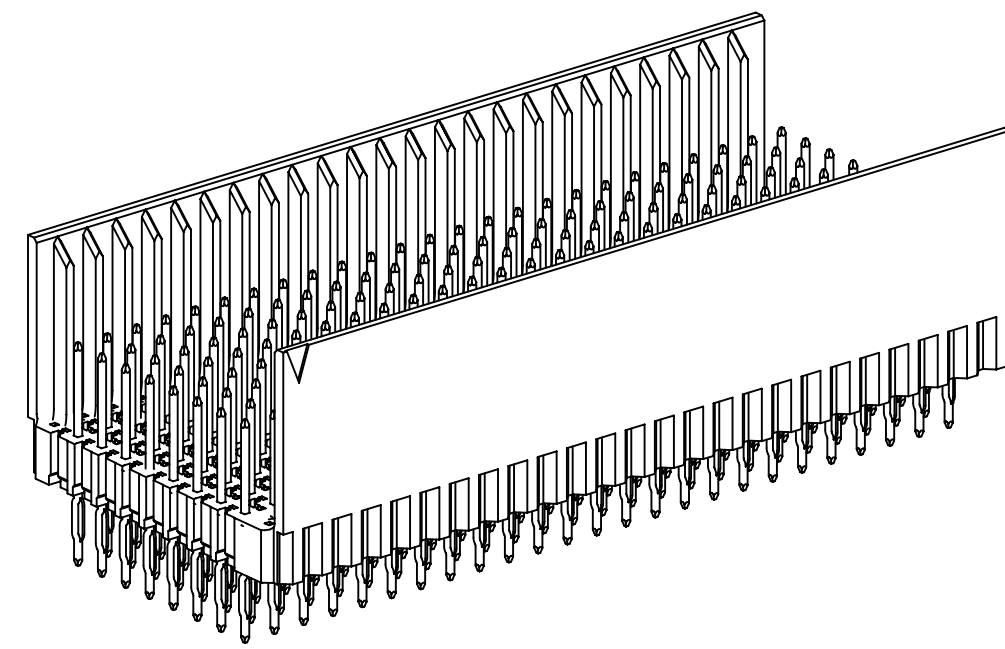
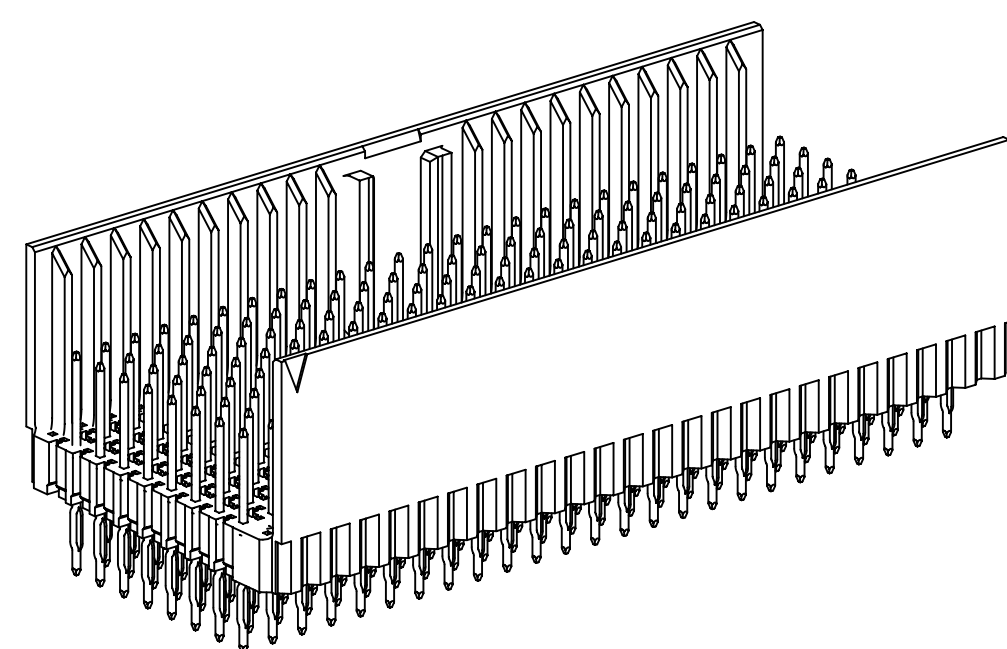


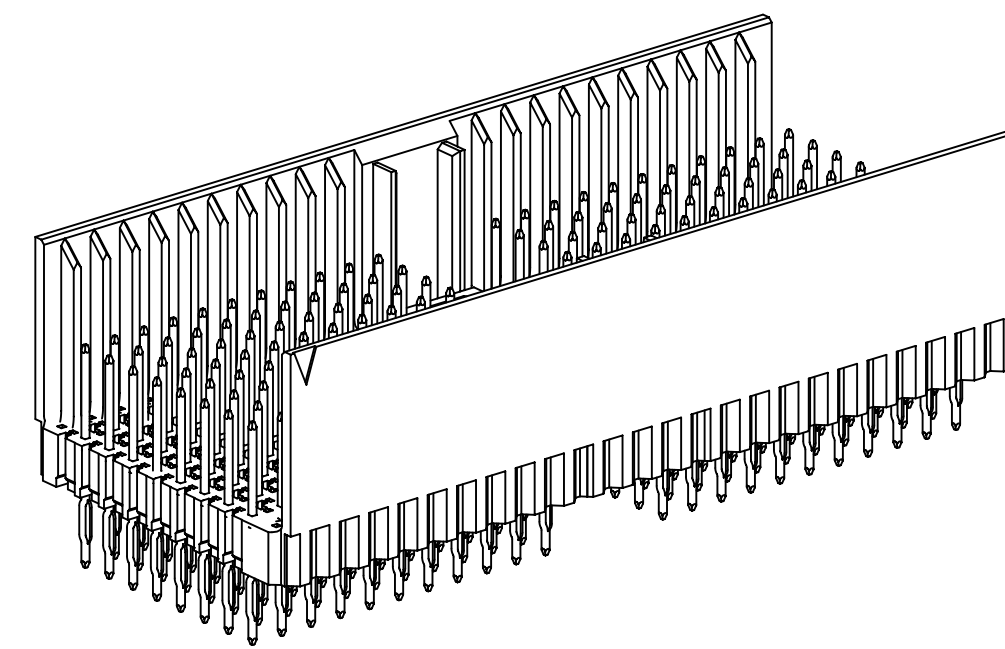
3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES  
FOR HARD METRIC APPLICATIONS



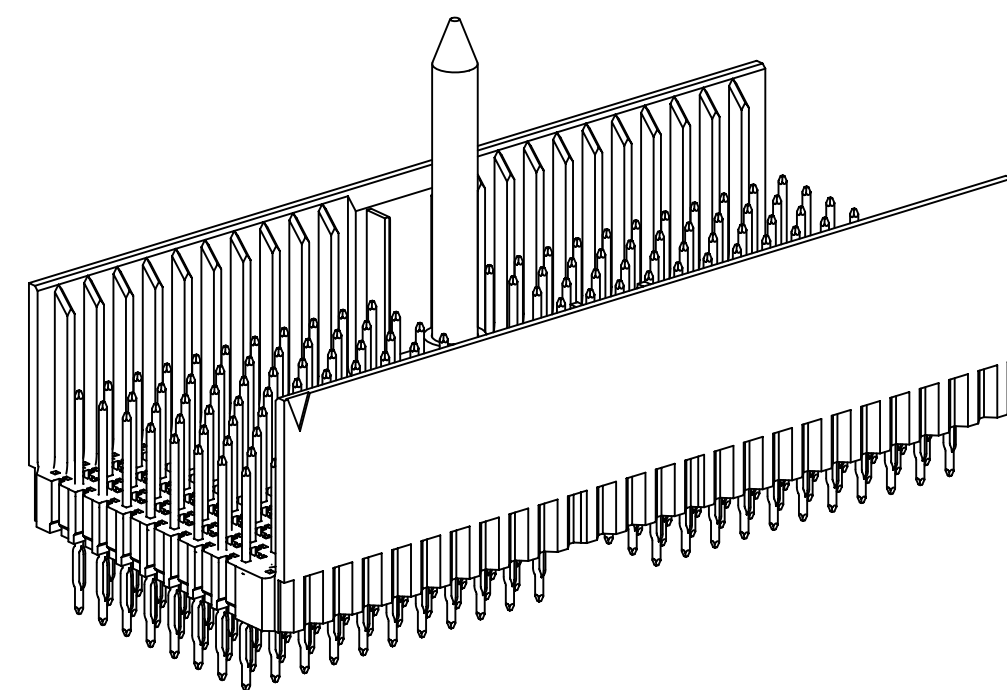
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HM-H244E2-8BX1



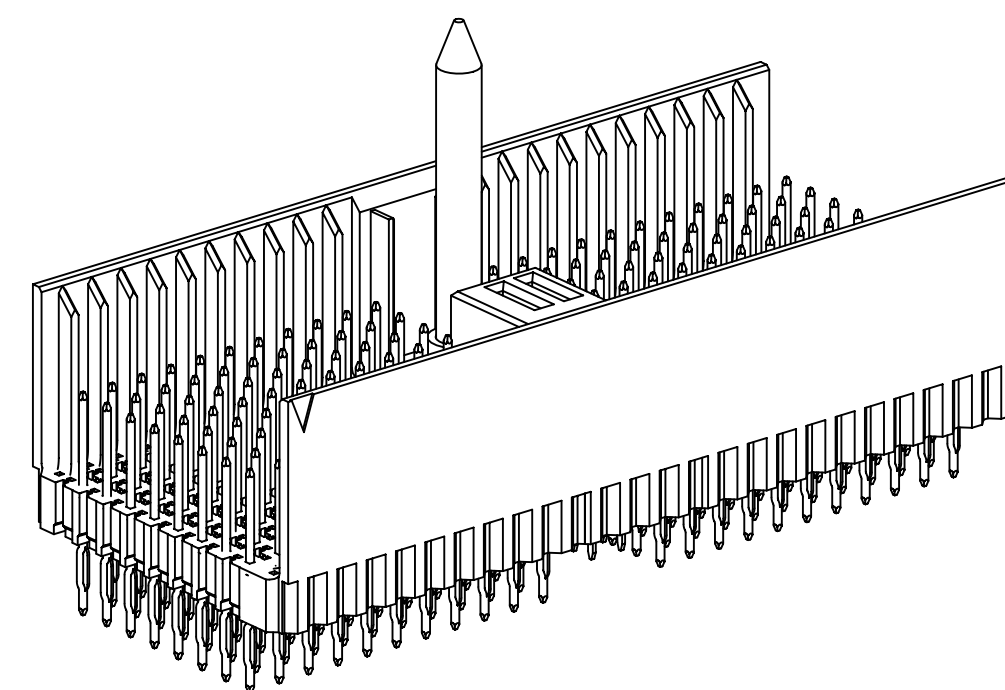
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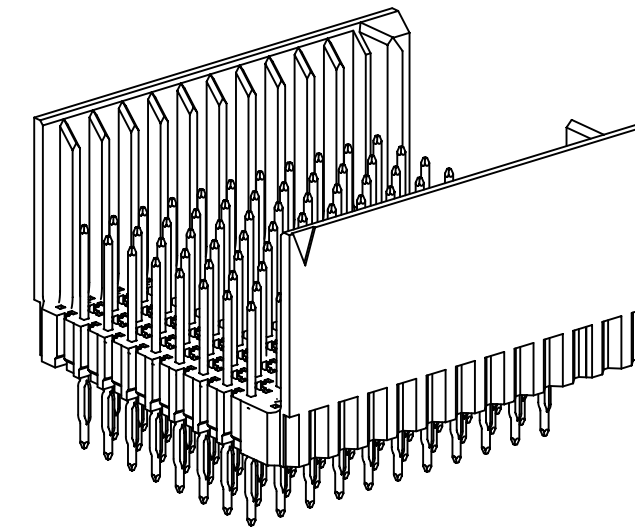
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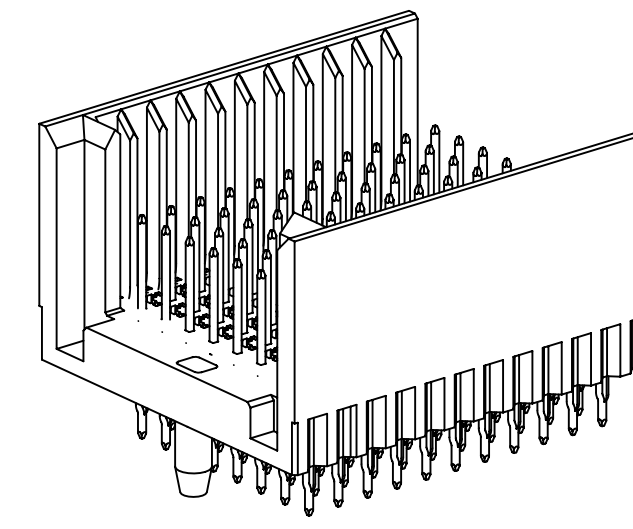
HM-H176DG1-8CX1  
HM-H220DG2-8BX1



HM-H176DPWR1-8CX1  
HM-H220DPWR2-8BX1



HM-H088FL1-8CX1  
HM-H110FL2-8BX1



HM-H088FR1-8CX1  
HM-H110FR2-8BX1

(UNLESS OTHERWISE SHOWN)  
ORDERING INFORMATION  
(ROWS I AND Z NOT LOADED)

HM-HXXXXX1-8CX1-XXXXX

HEADER POSITION AND TYPE | TAIL STYLE: P = PRESS-FIT TAIL, S = SOLDER TAIL | PLATING

(UNLESS OTHERWISE SHOWN)  
ORDERING INFORMATION  
(ROWS I AND Z LOADED, 8.3MM MATE LENGTH)

HM-HXXXXX2-8BX1-XXXXX

HEADER POSITION AND TYPE | TAIL STYLE: P = PRESS-FIT TAIL, S = SOLDER TAIL | PLATING

PLATING SPECIFICATIONS:

- TG30L = .76µM [30µIN] MIN. GOLD ON CONTACT AREA, LUBRICATED  
2.54µM [100µIN] MIN. TIN/LEAD ON TERMINAL AREA (RIA C2 & E2 APPLY)  
1.27µM [50µIN] MIN. NICKEL ALL OVER.  
TYPICALLY HIGHER MAKE ORDER QUANTITIES AS COMPARED TO TG30.
- 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.
- TG50 = 1.27µM [50µIN] MIN. GOLD ON CONTACT AREA, LUBRICATED  
2.54µM [100µIN] MIN. TIN/LEAD ON TERMINAL AREA (RIA C2 & E2 APPLY)  
1.27µM [50µIN] MIN. NICKEL ALL OVER.  
NON-STANDARD OPTION (AVAILABLE WITH LONGER LEAD TIMES AND HIGHER MAKE ORDER QUANTITIES, MOQ)
- KR = .76µM [30µIN] MIN. GOLD ON CONTACT AREA  
2.54µM [100µIN] MIN. MATTE TIN ON TERMINAL AREA (RIA C2 & E2 APPLY)  
1.27µM [50µIN] MIN. NICKEL ALL OVER.

- \* MODULAR/SCALABLE FORMAT IEC 61076-4-101
- \* PRESS-FIT OF SOLDER TAIL VERSION
- \* 101 MATED LINES PER INCH
- \* SHIPS WITH PROTECTIVE CAP, WHICH ALSO SERVES AS AN INSERTION TOOL
- \* END-TO-END STACKABLE WITH 8 ROW 3M™ HM AND HSHM PRODUCTS
- \* INTEGRATED GUIDE AND GUIDE PIN
- \* MULTI-PURPOSE CENTER (MPC) KEYING AND GUIDANCE
- \* FOUR INTEGRATED 8.25 A POWER CONTACTS AND GUIDE PIN

- NOTES
- MATERIAL:  
PLASTIC: HIGH TEMP LCP, UL94V-0  
PINS: COPPER ALLOY.
  - REGULATORY INFORMATION:  
ROHS COMPLIANT. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "ROHS COMPLIANCE" SECTION OF WWW.3MCONNECTORS.COM FOR COMPLIANCE INFORMATION (RIA E1 & C1 APPLY)
  - IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.

MECHANICAL:

NORMAL FORCE (NOMINAL): .57N [58g] SIGNAL  
ENGAGEMENT FORCE (NOMINAL): .32N [33g] SIGNAL  
SEPARATION FORCE (NOMINAL): .20N [20g] SIGNAL  
WIPE (NOMINAL, SHORTEST CONTACT): 2.67 [.105] SIGNAL  
MATE/UNMATE CYCLES: 250  
APPLICATION: THIS MODULE IS NOT SUITABLE FOR STAND-ALONE USE. (REFER TO IEC-61076-4-101)

ELECTRICAL:

CURRENT RATING (FULLY LOADED): 1A @ 70°C SIGNAL  
INSULATION RESISTANCE: 1 X 10<sup>4</sup> MΩ @ 100 V<sub>DC</sub>  
WITHSTANDING VOLTAGE: 750V<sub>RMS</sub>

ENVIRONMENTAL:

TEMPERATURE RATING: -55°C TO 125°C  
PROCESS RATING: MAX. 260°C (PER J-STD-020C)  
WITHSTANDING VOLTAGE: 1 (PER J-STD-020C)

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

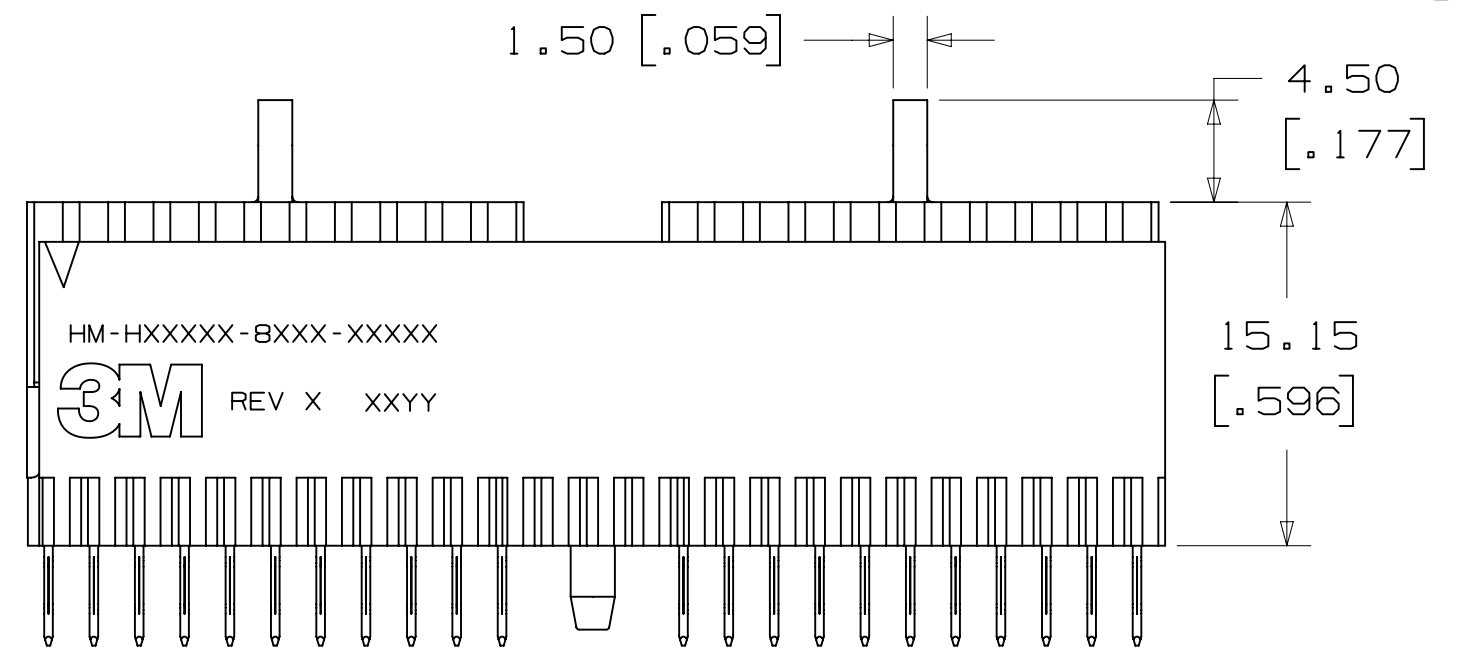
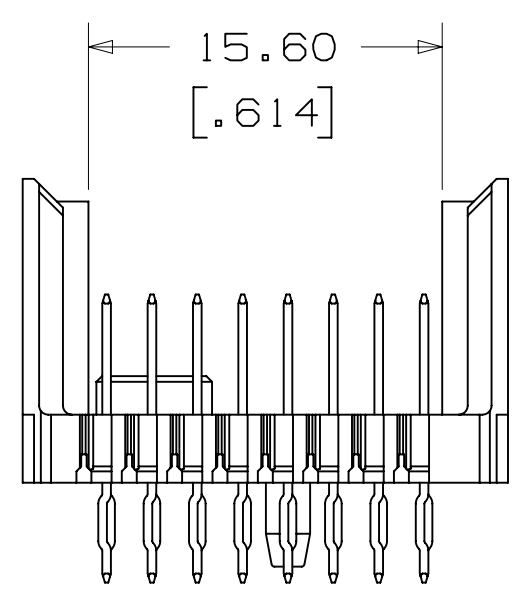
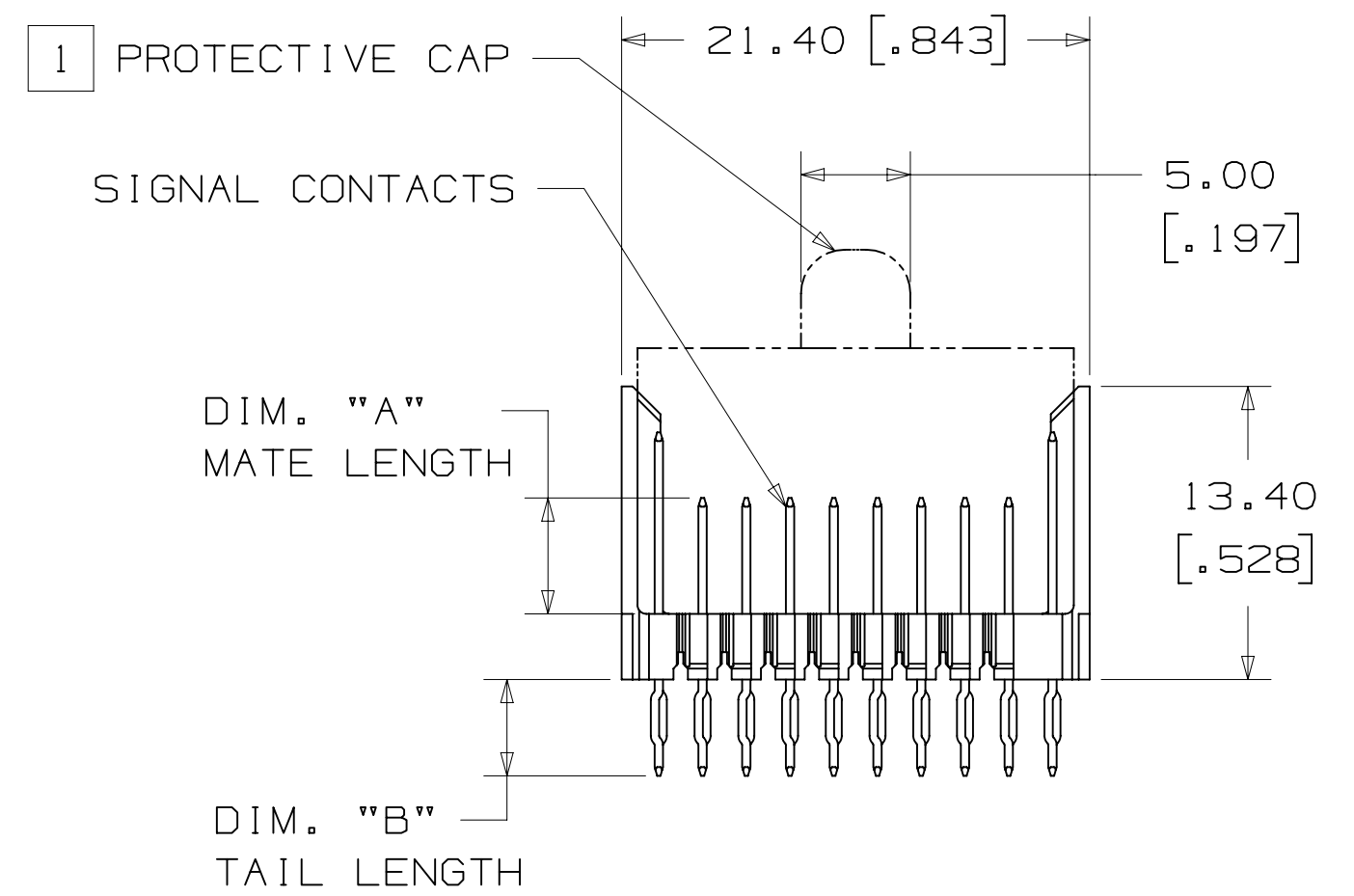
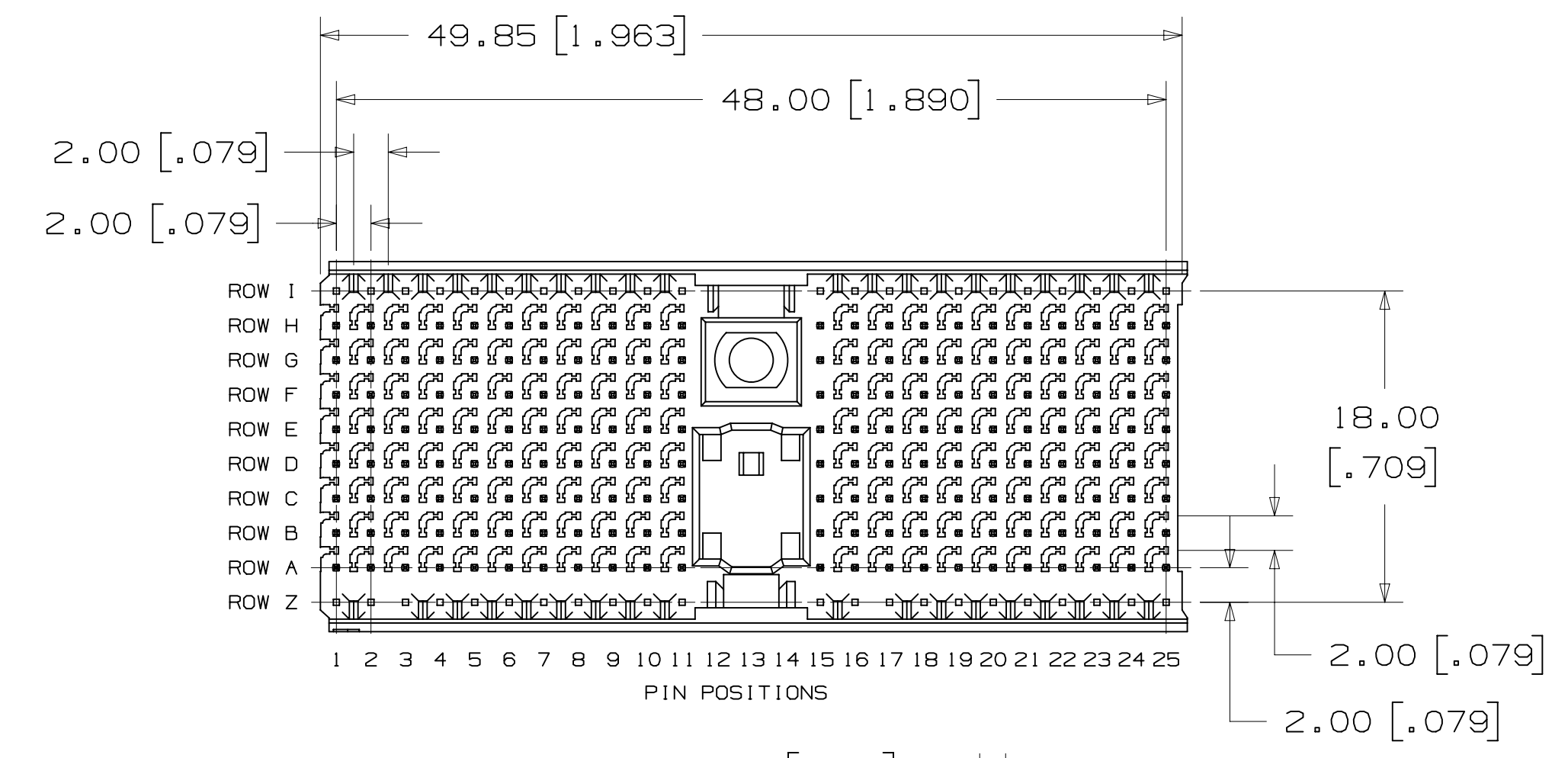
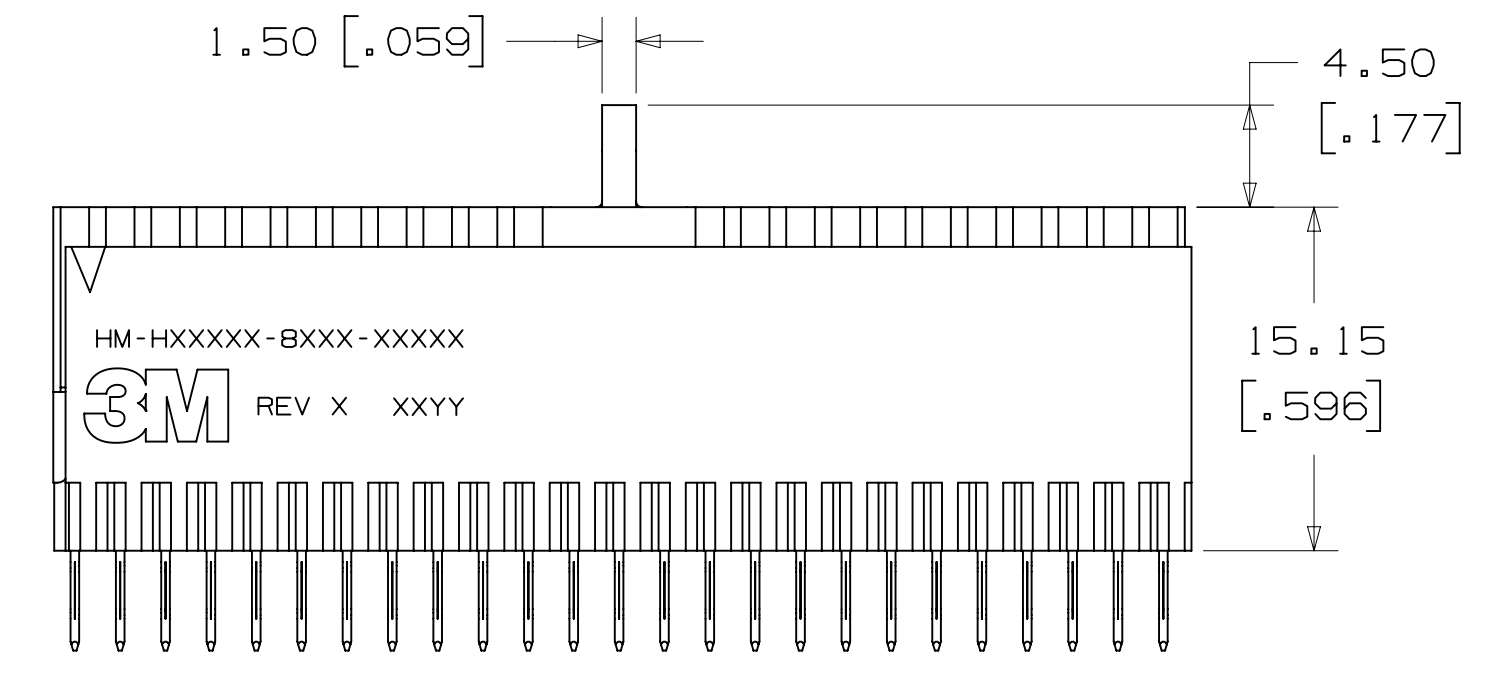
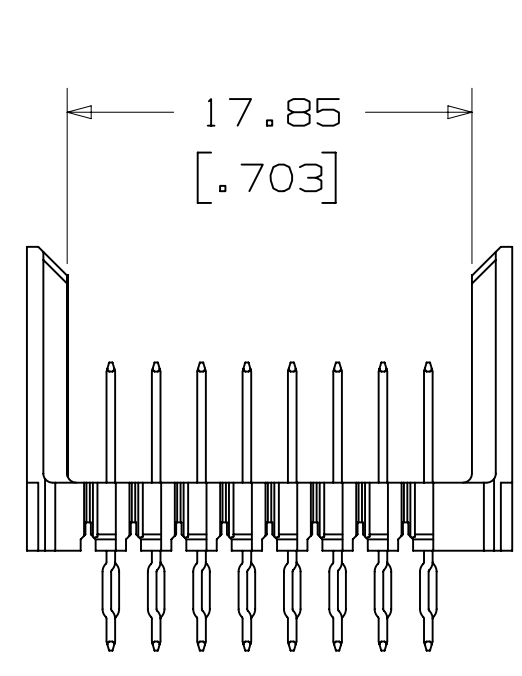
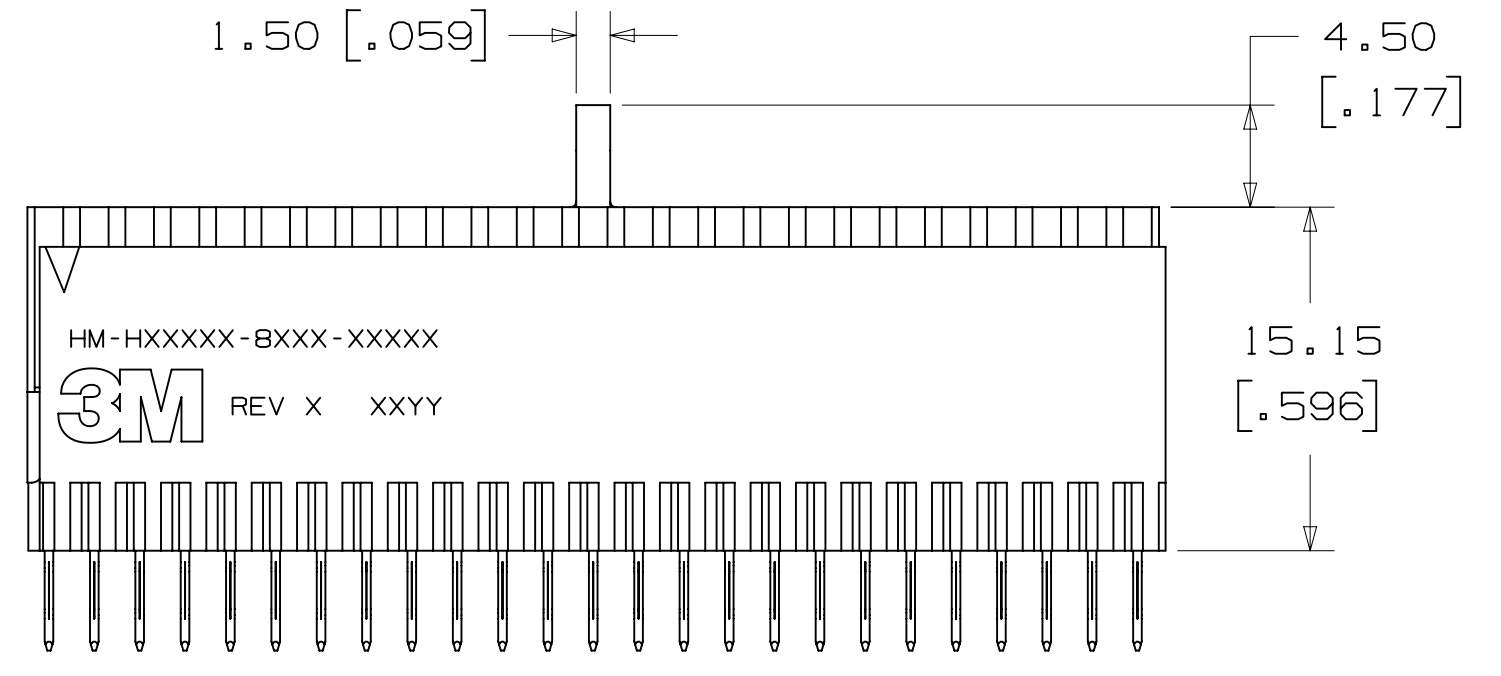
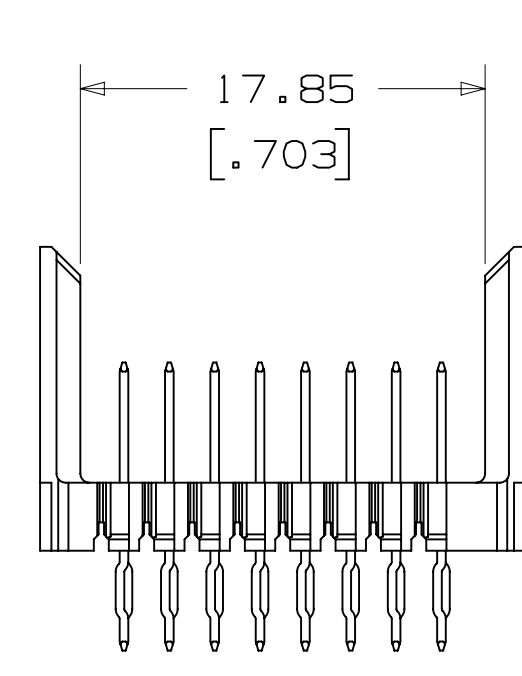
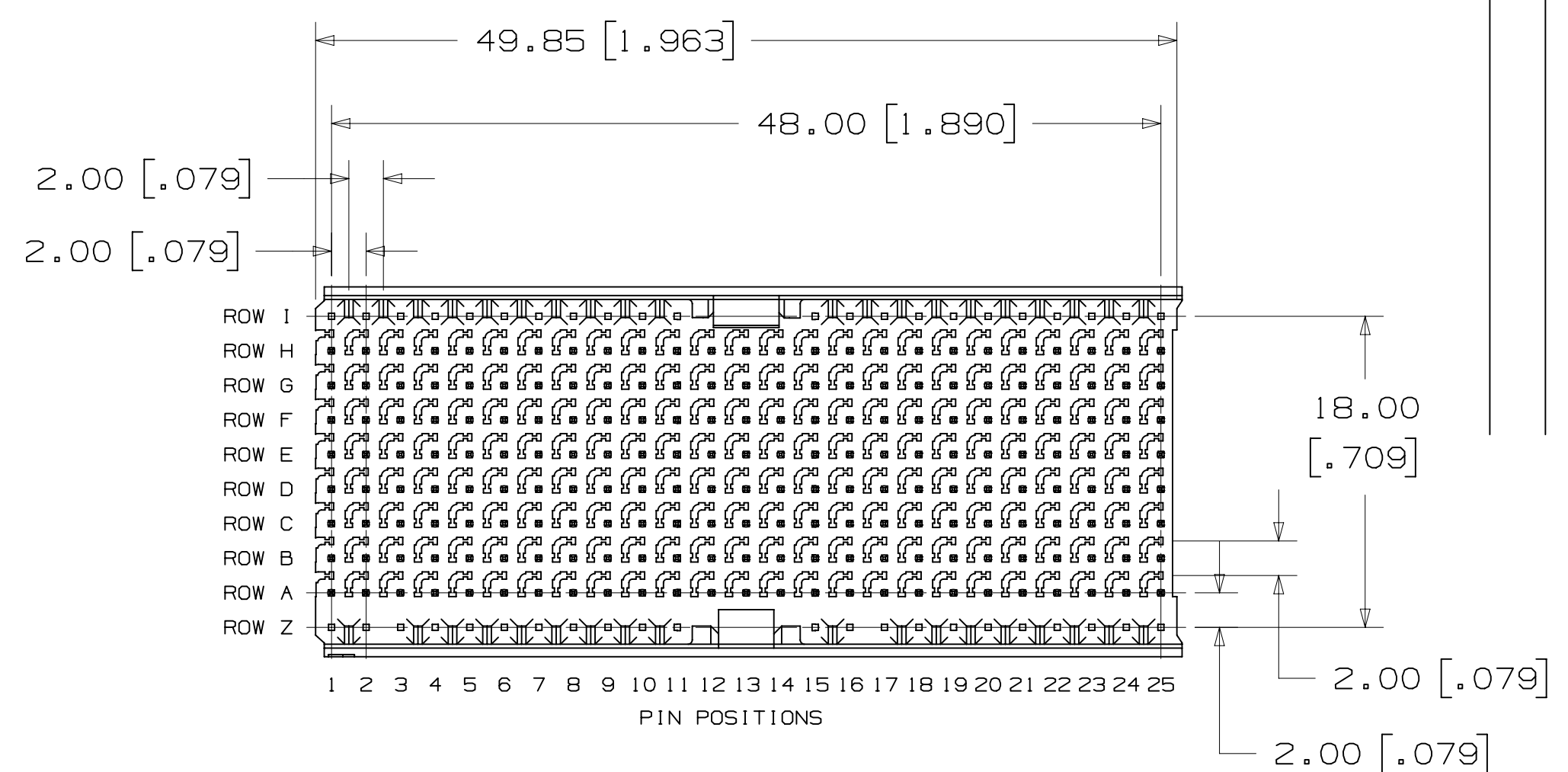
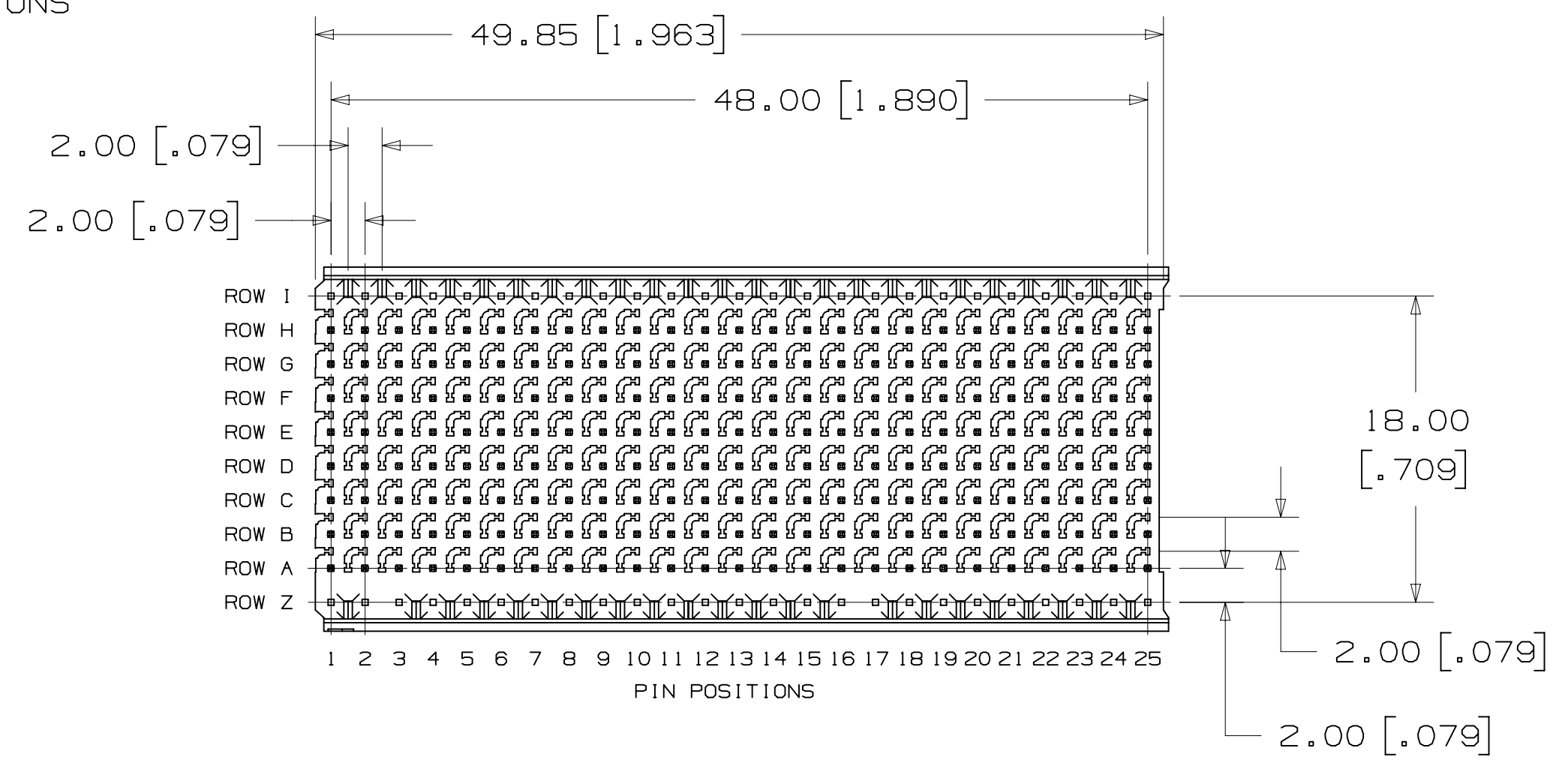
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**CAUS**  
UL FILE NO: E68080

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
A 39815		MAR 28, 2012				PRODUCTION RELEASE		
CAGI CODES		DATE		MFG DATE		DATE		
CASTIGLIONE		MAR 28, 2012		T. SUNIGA		MAR 28, 2012		
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2012				
Interconnect Solutions		ISD		This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.				
DO NOT SCALE DRAWING		SCALE 5/2		TOLERANCES EXCEPT AS NOTED		3M		
THIRD ANGLE PROJECTION		INCHES		MILLIMETERS		HM PRESS-FIT HEADER, 8-ROW, HM SERIES		
INTERPRET PER ASME Y14.5 - 1994		.01 ± .01		.000 ± .005		CAGE NUMBER D78-5100-2517-0		
MAX SURFACE ROUGHNESS		.000 ±		.0 ± .3		DRAWING NO. D78-5100-2517-0		
SURFACES		.000 ±		.000 ±		REV. A		
MARKED ONLY		ANGLES		MODEL		SHT 1 OF 4		

3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES  
FOR HARD METRIC APPLICATIONS

NOTES  
1 CAPS TO BE REMOVED AFTER PRESS-FIT INSTALLATION PROCESS.

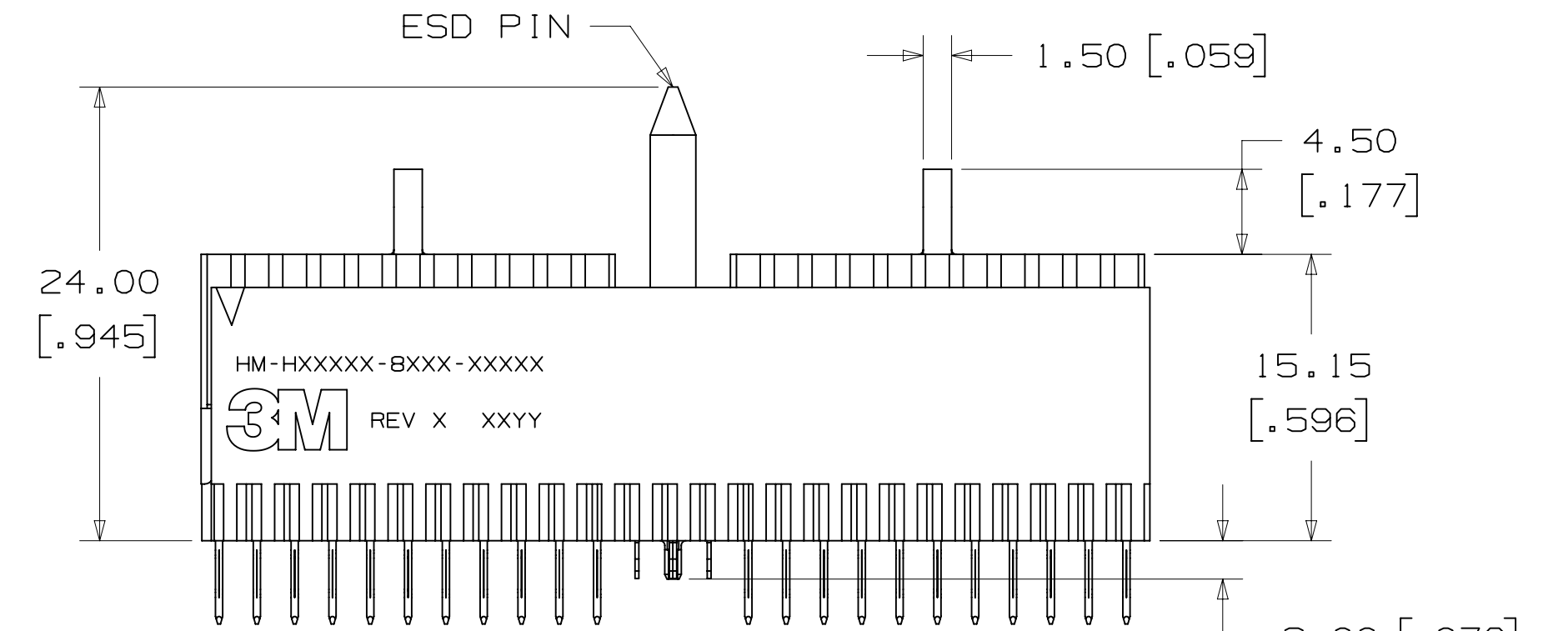
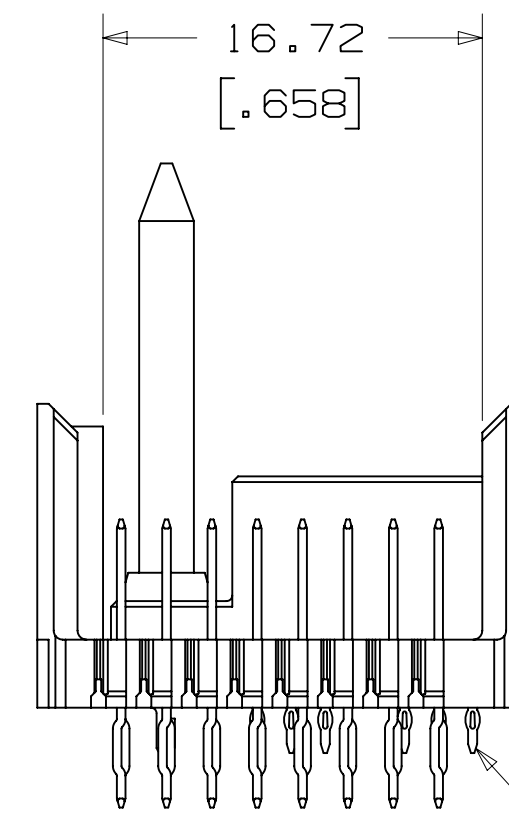
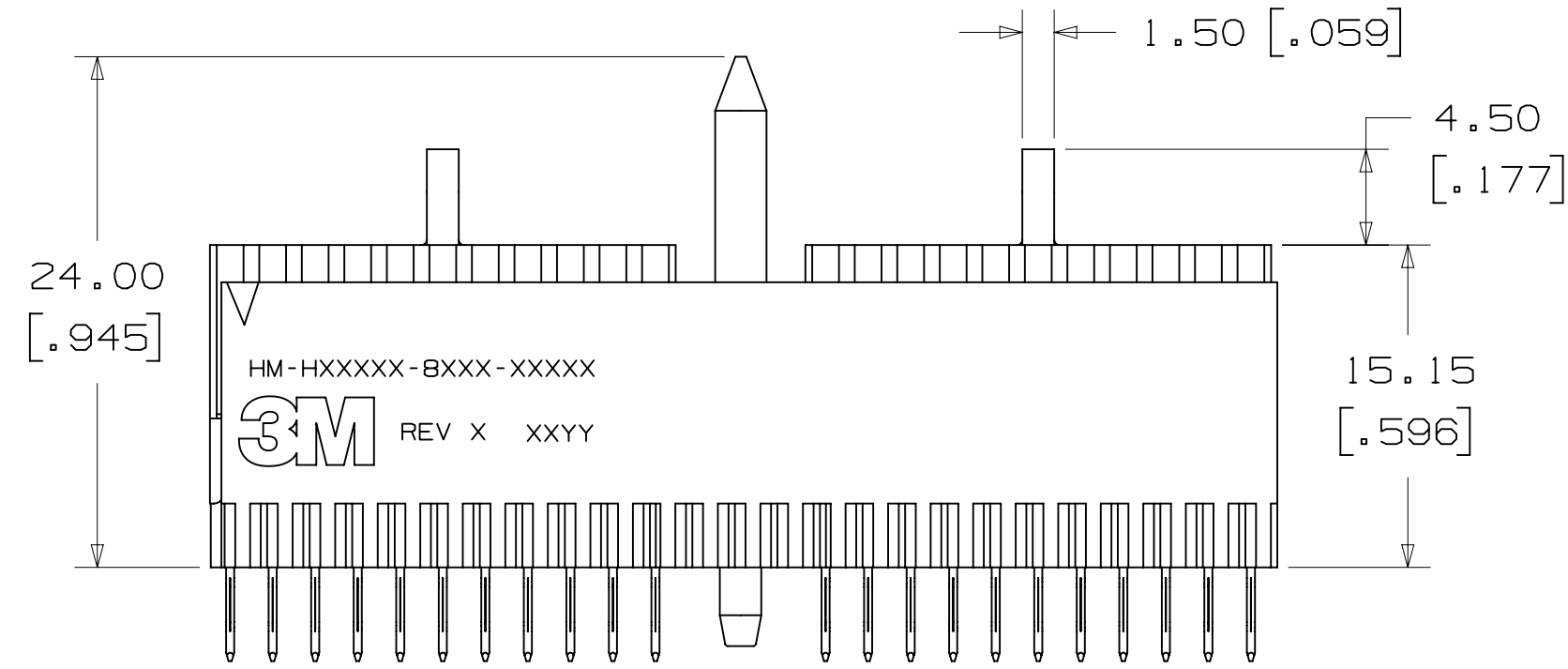
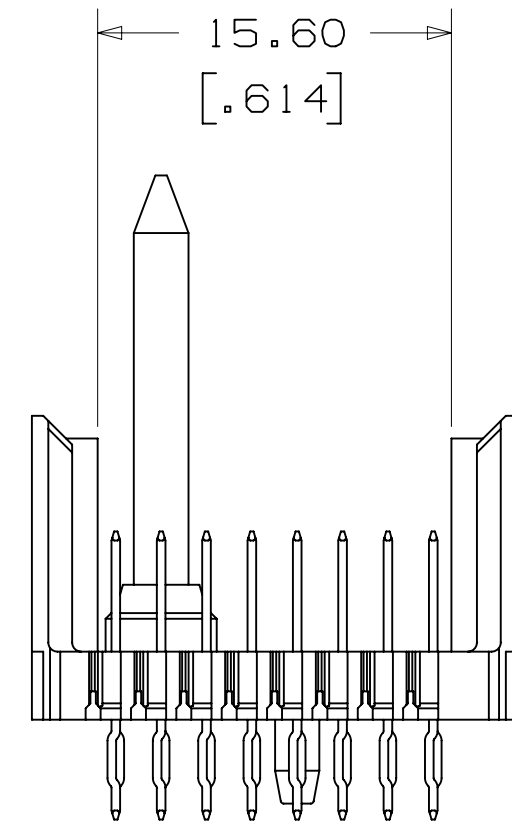
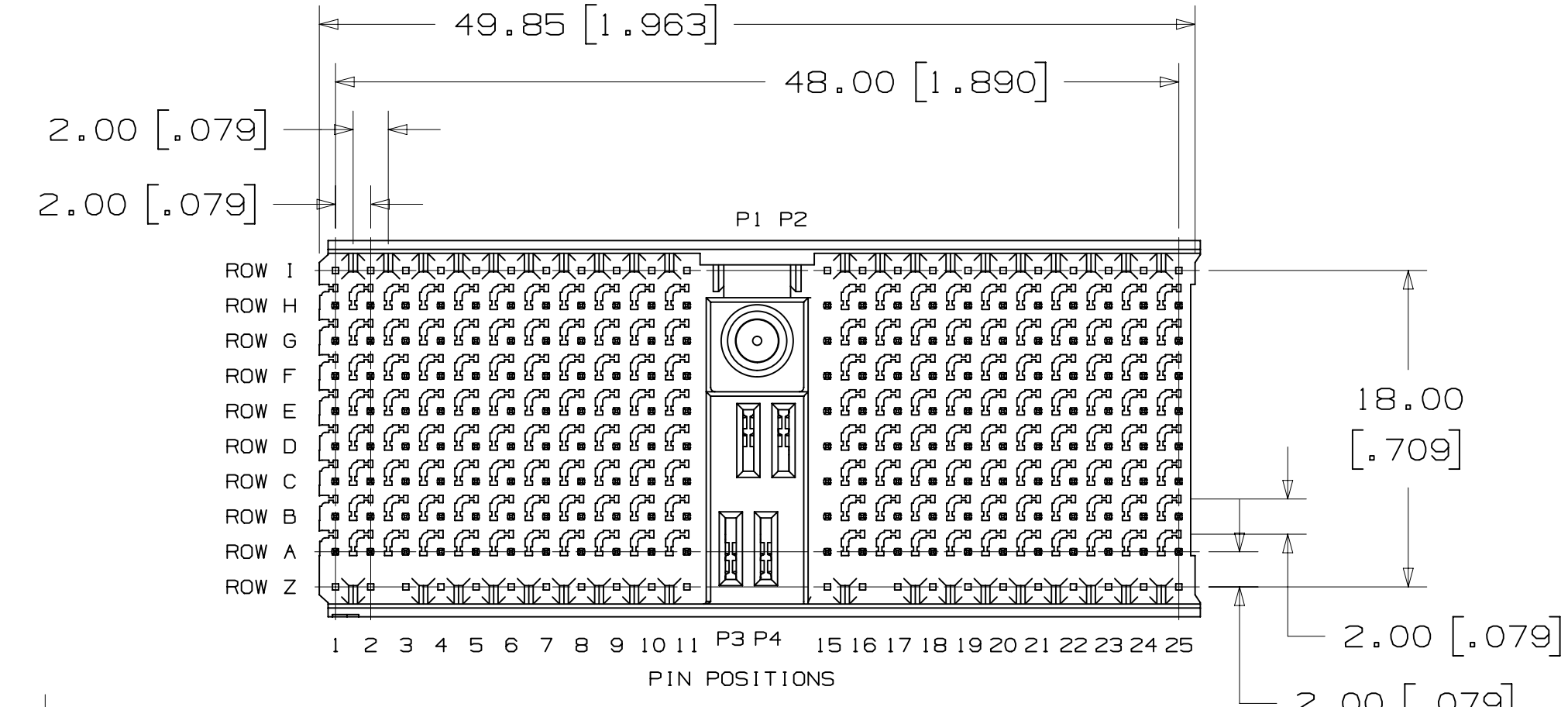
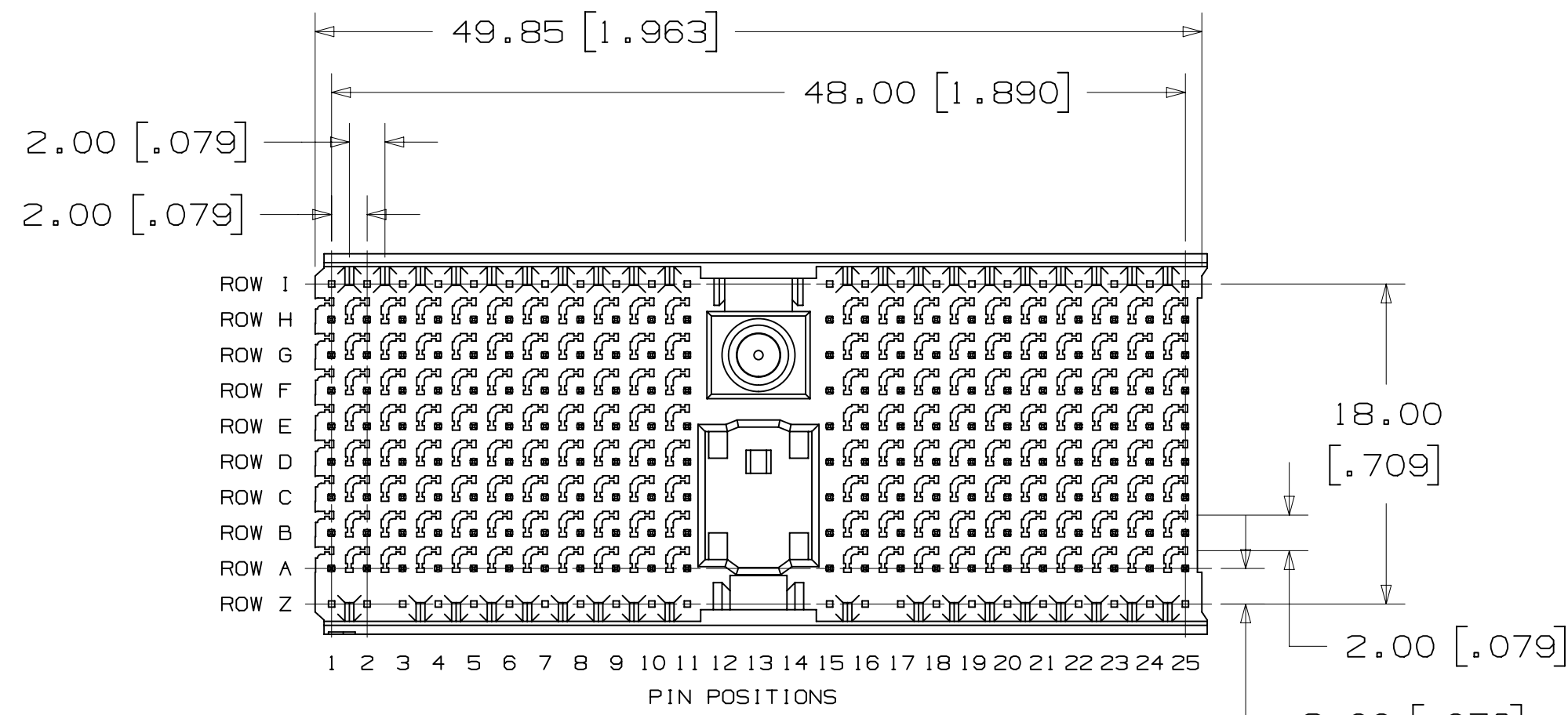


STANDARD CONFIGURATION  
DIM. "A" 5.3 [.21] FOR ROWS A THRU H  
DIM. "B" 4.4 [.17] EXCEPT AS NOTED  
FOR NON-STANDARD CONFIGURATIONS CONTACT A 3M SALES REPRESENTATIVE

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
				MAR 28, 2012		
DIVISION	DIVISION CODE	DATE	DATE	DATE	DATE	DATE
Interconnect Solutions	ISD	MAR 28, 2012	MAR 28, 2012	MAR 28, 2012	MAR 28, 2012	MAR 28, 2012
DO NOT SCALE DRAWING	SCALE 3/1	TOLERANCES EXCEPT AS NOTED	INCHES .00 ± .01 .000 ± .005 .0000 ±			
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 1994	MILLIMETERS	0 ± .0 ± .3 .00 ± .13 .000 ±			
MAX SURFACE ROUGHNESS	SURFACES	MARKED ONLY	ANGLE ±			
TITLE		CAGE NUMBER	SIZE	DRAWING NO.	REV.	
HM PRESS-FIT HEADER, 8-ROW, HM SERIES		D		78-5100-2517-0	A	
MODEL		SHT 2 OF 4				

78-5100-2517-0  
DRAWING NUMBER

3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES  
FOR HARD METRIC APPLICATIONS



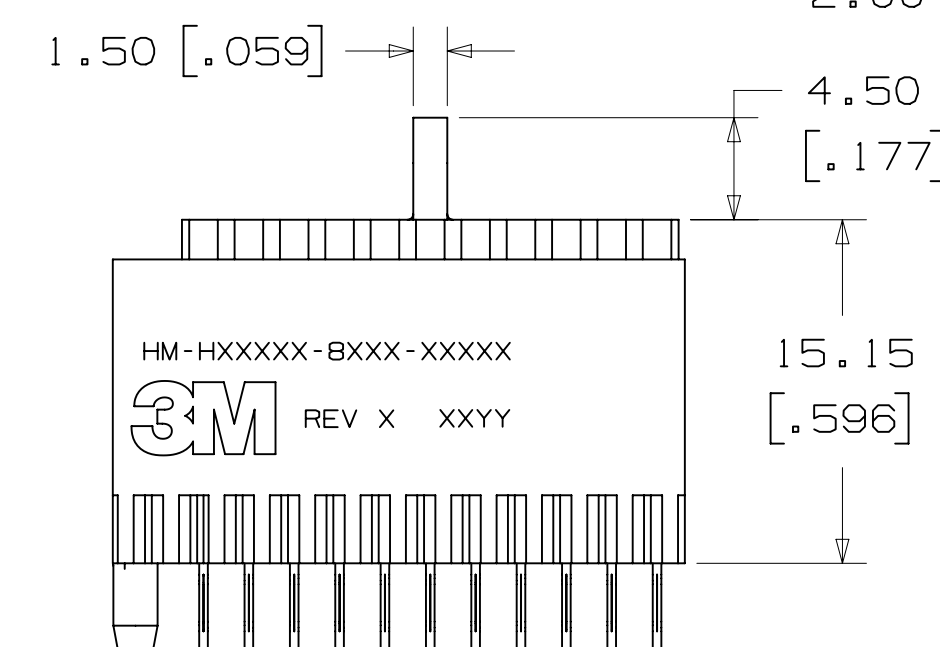
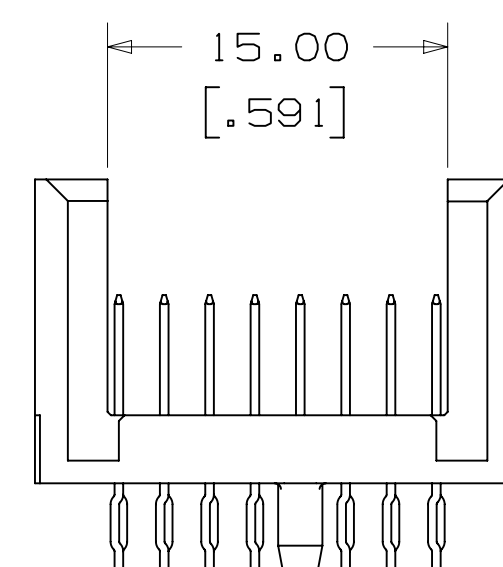
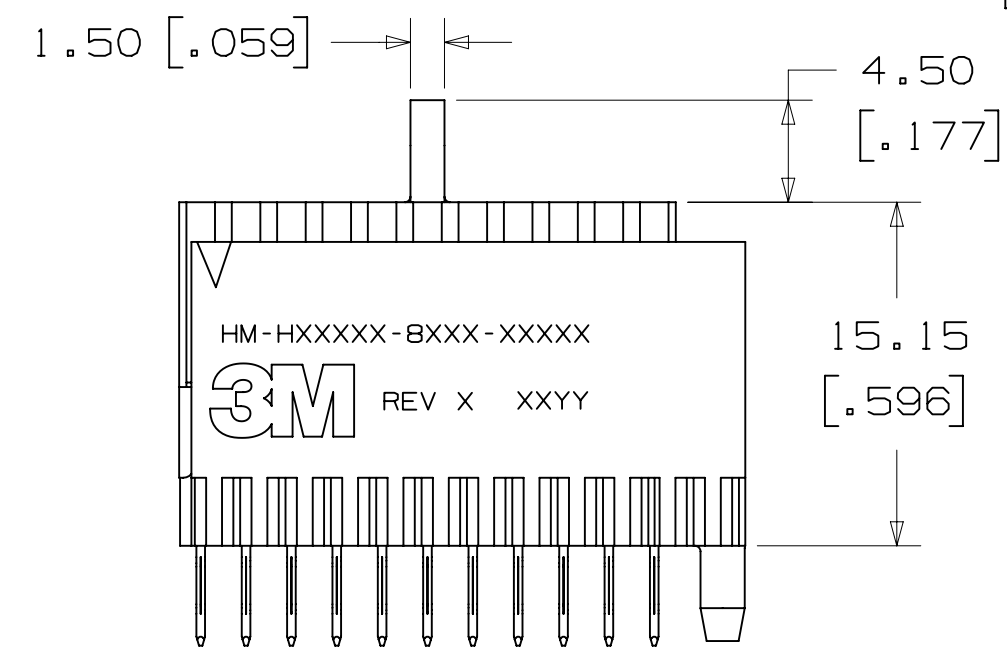
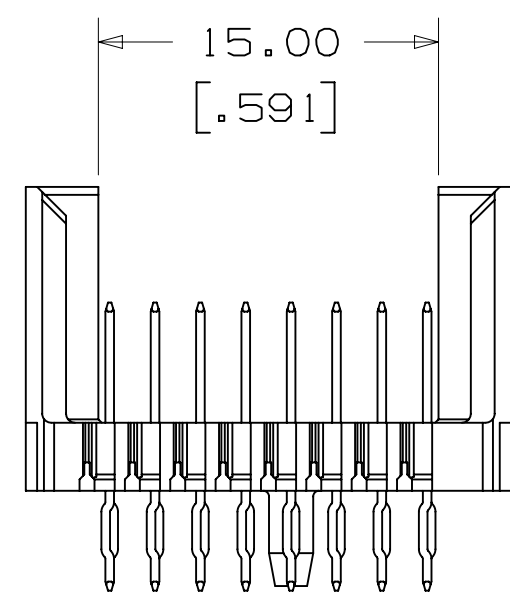
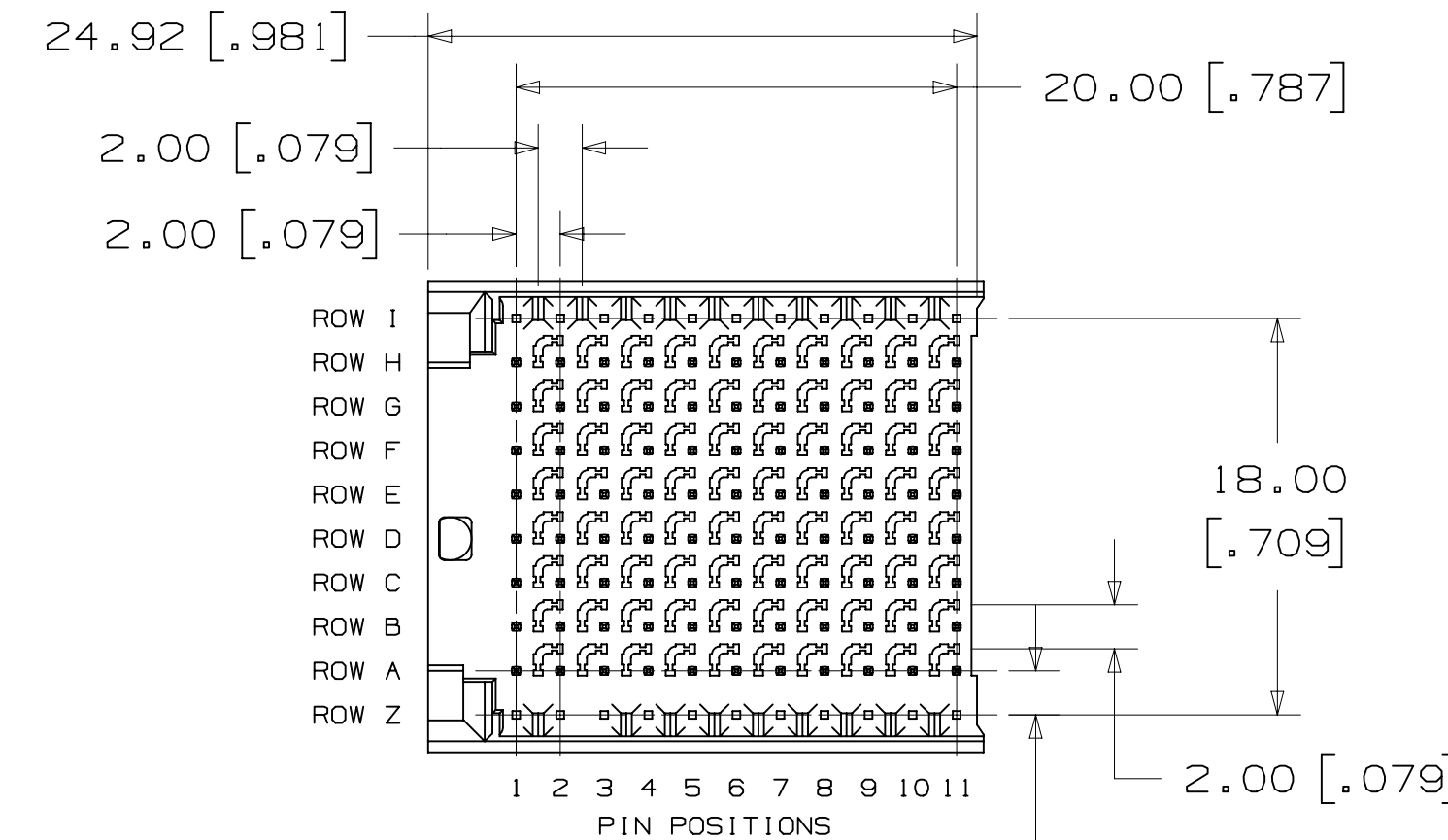
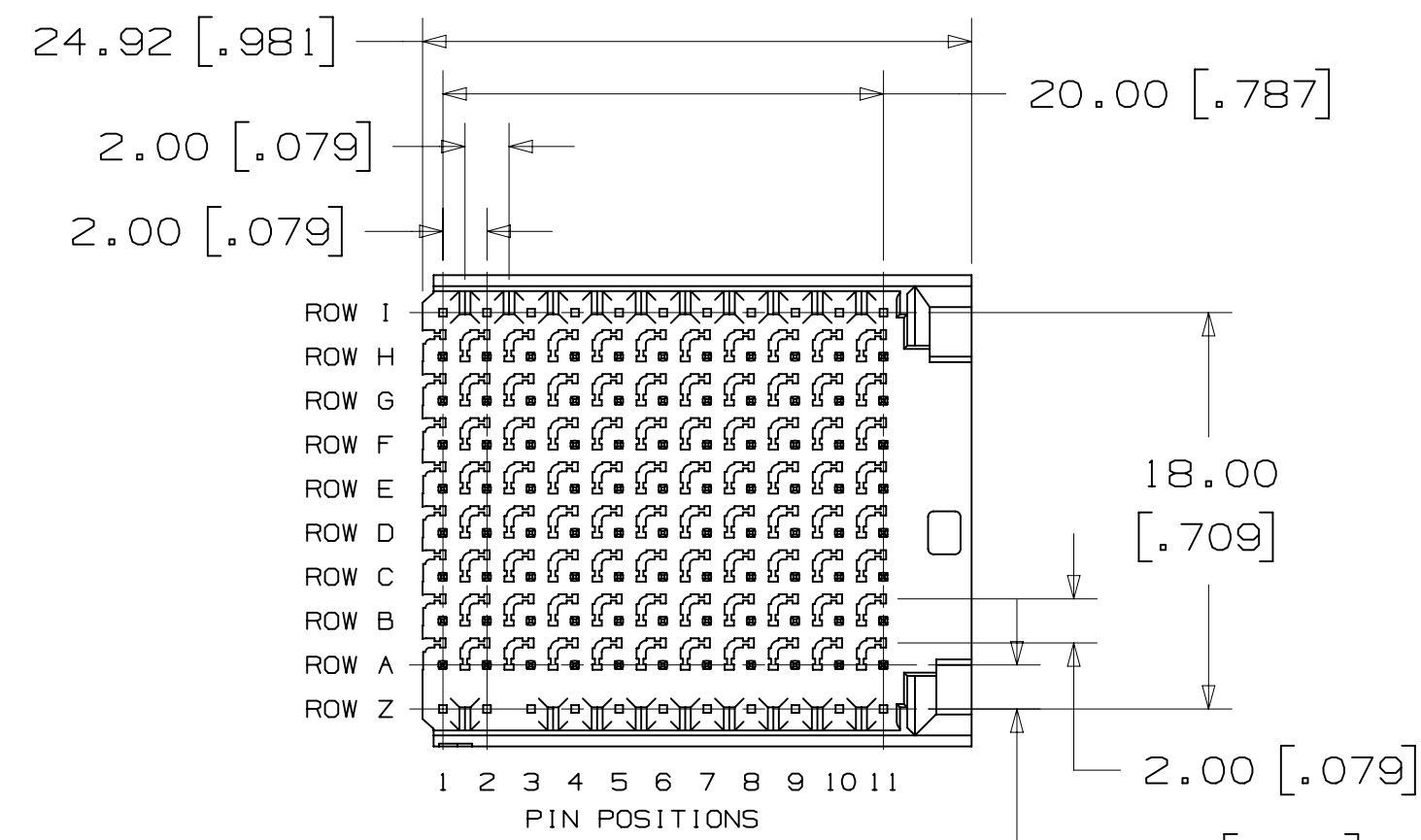
HM-H176DG1-8CX1  
HM-H220DG2-8BX1

HM-H176DPWR1-8CXX  
HM-H220DPWR2-8BXX

POWER TAILS  
(4 CONTACTS,  
12 LEADS)

ESD PIN TAIL  
LENGTH

DIM. "B" TAIL LENGTH  
1 = 4.4 [.17] PIN, 2.0 [.08] POWER  
AND 2.0 [.08] ESD  
2 = 4.4 [.17] PIN, 4.4 [.17] POWER  
AND 2.0 [.08] ESD



HM-H088FL1-8CX1  
HM-H110FL2-8BX1

HM-H088FR1-8CX1  
HM-H110FR2-8BXX

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DIVISION		DIVISION CODE		DATE		
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DO NOT SCALE DRAWING	SCALE 3/1	TOLERANCES EXCEPT AS NOTED		DATE		
THIRD ANGLE PROJECTION		INCHES		DATE		
INTERPRET PER ASME Y14.5 - 1994		MILLIMETERS		DATE		
MAX SURFACE ROUGHNESS		SURFACES		DATE		
MARKED ONLY		ANGLES		DATE		
CAGE NUMBER		SIZE	DRAWING NO.	REV.		
D78-5100-2517-0				A		
MODEL		SHT		3 OF 4		

A	39815	MAR 28, 2012	JNC	TS
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		MAR 28, 2012		
DRW	CASTIGLIONE	DATE	DATE	DATE
CHKD		DATE	DATE	DATE
		DATE	DATE	DATE

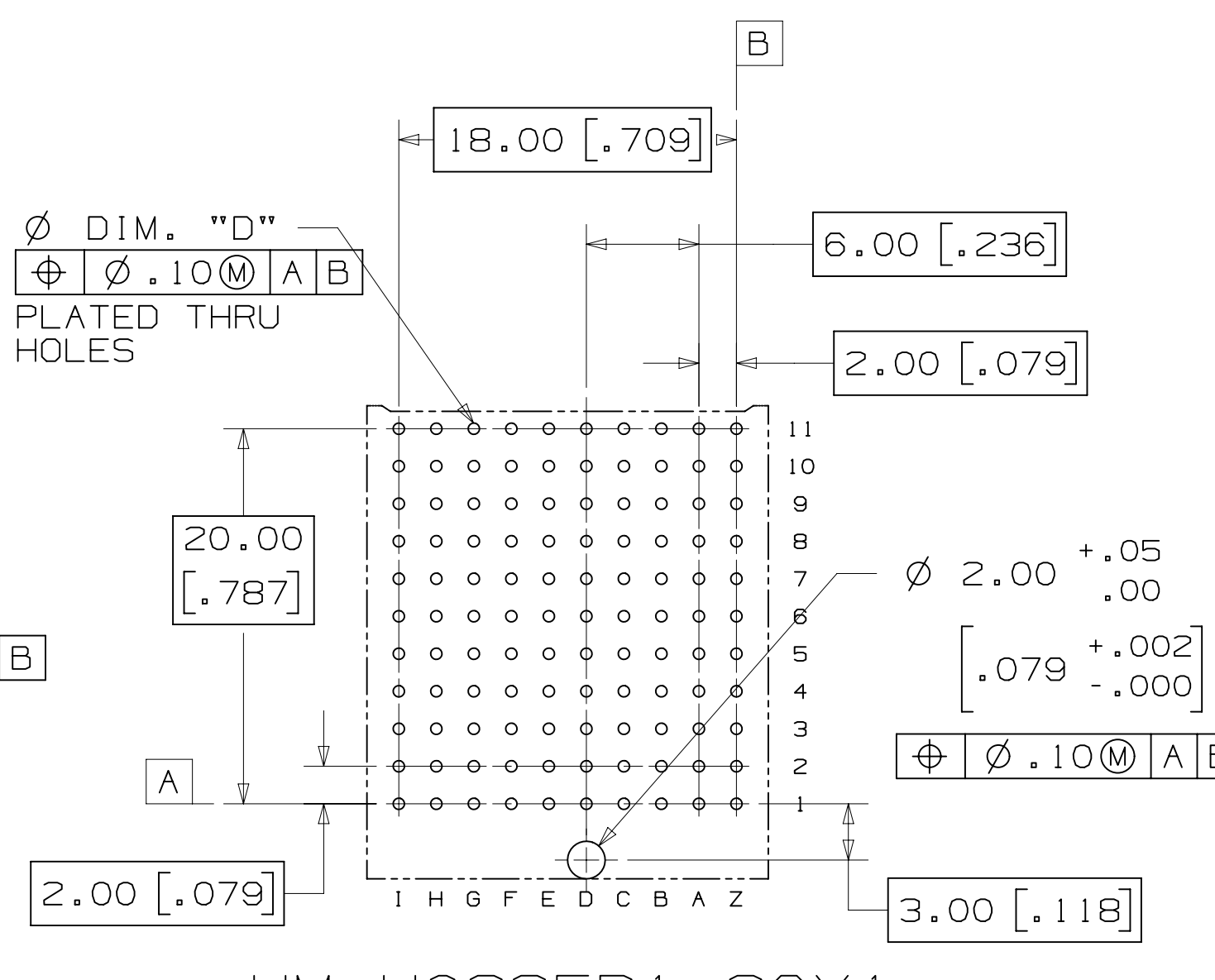
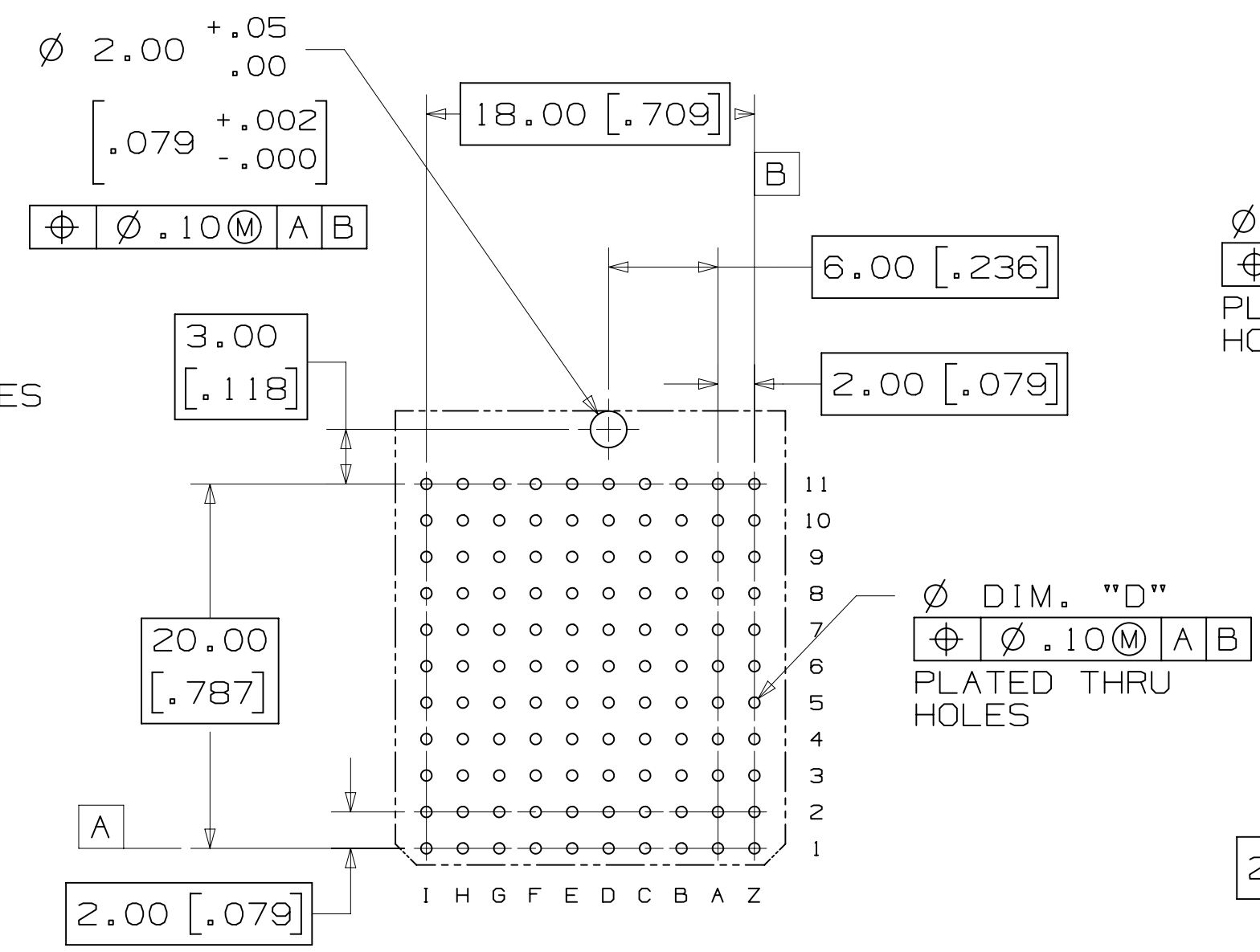
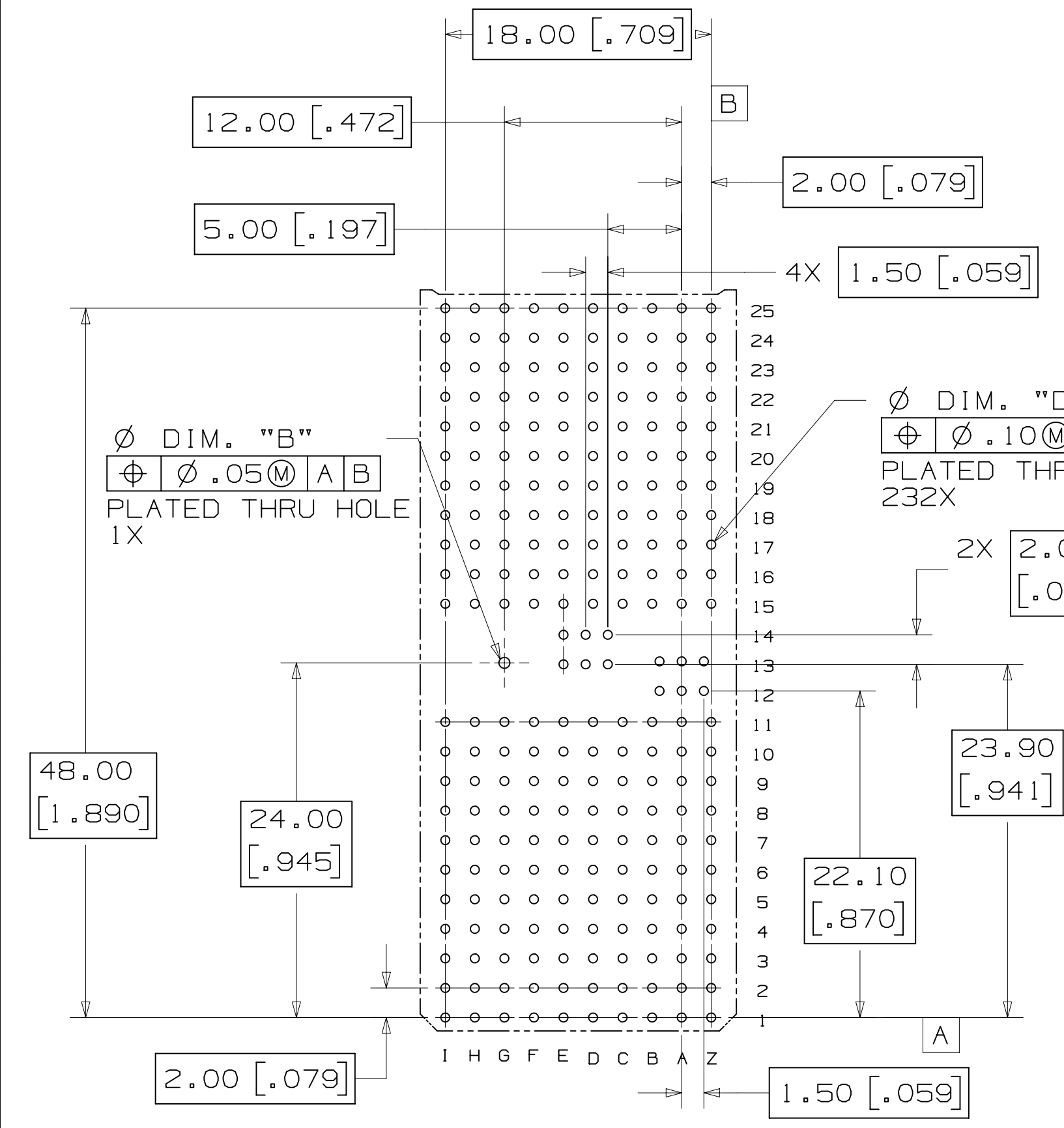
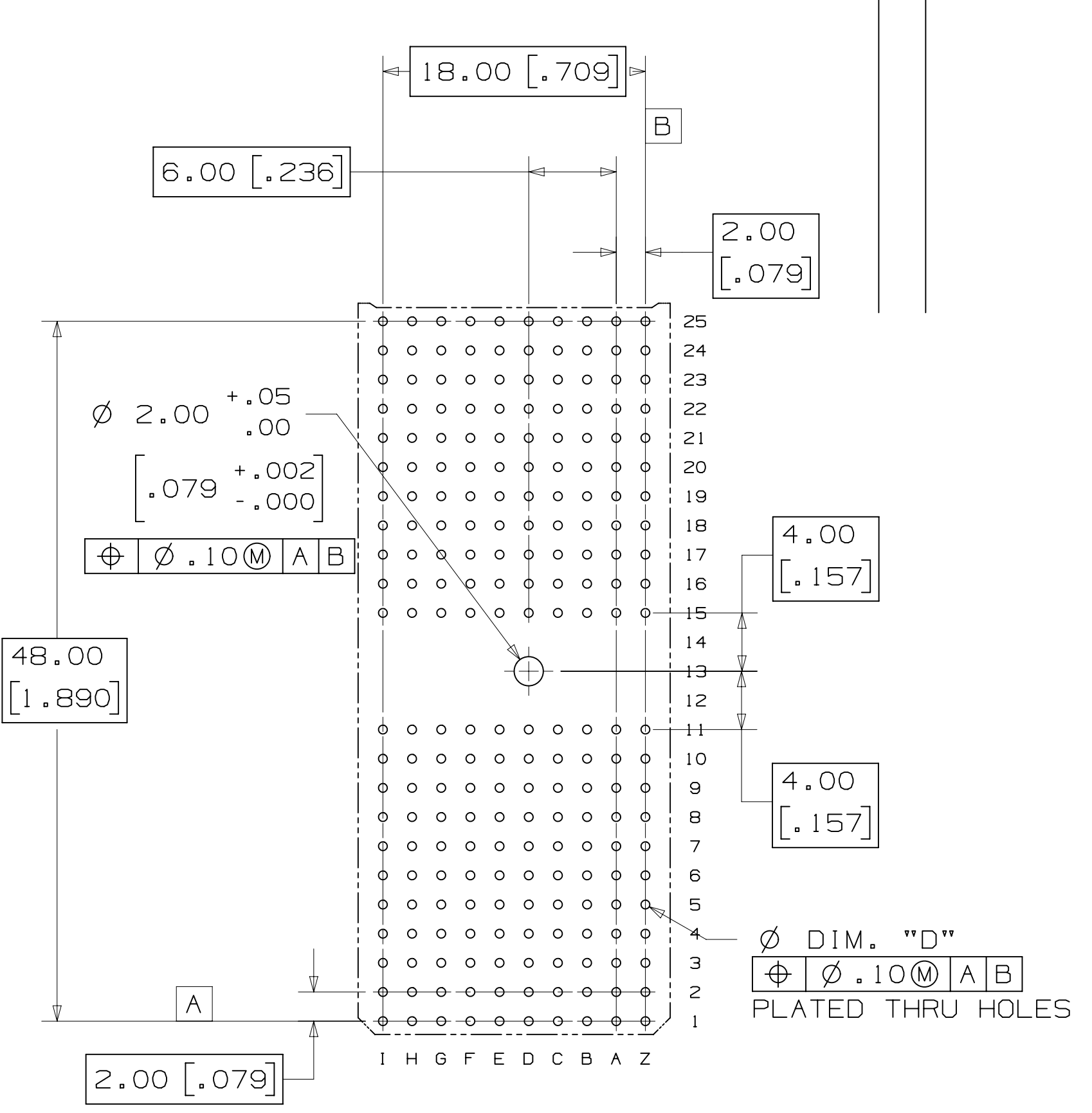
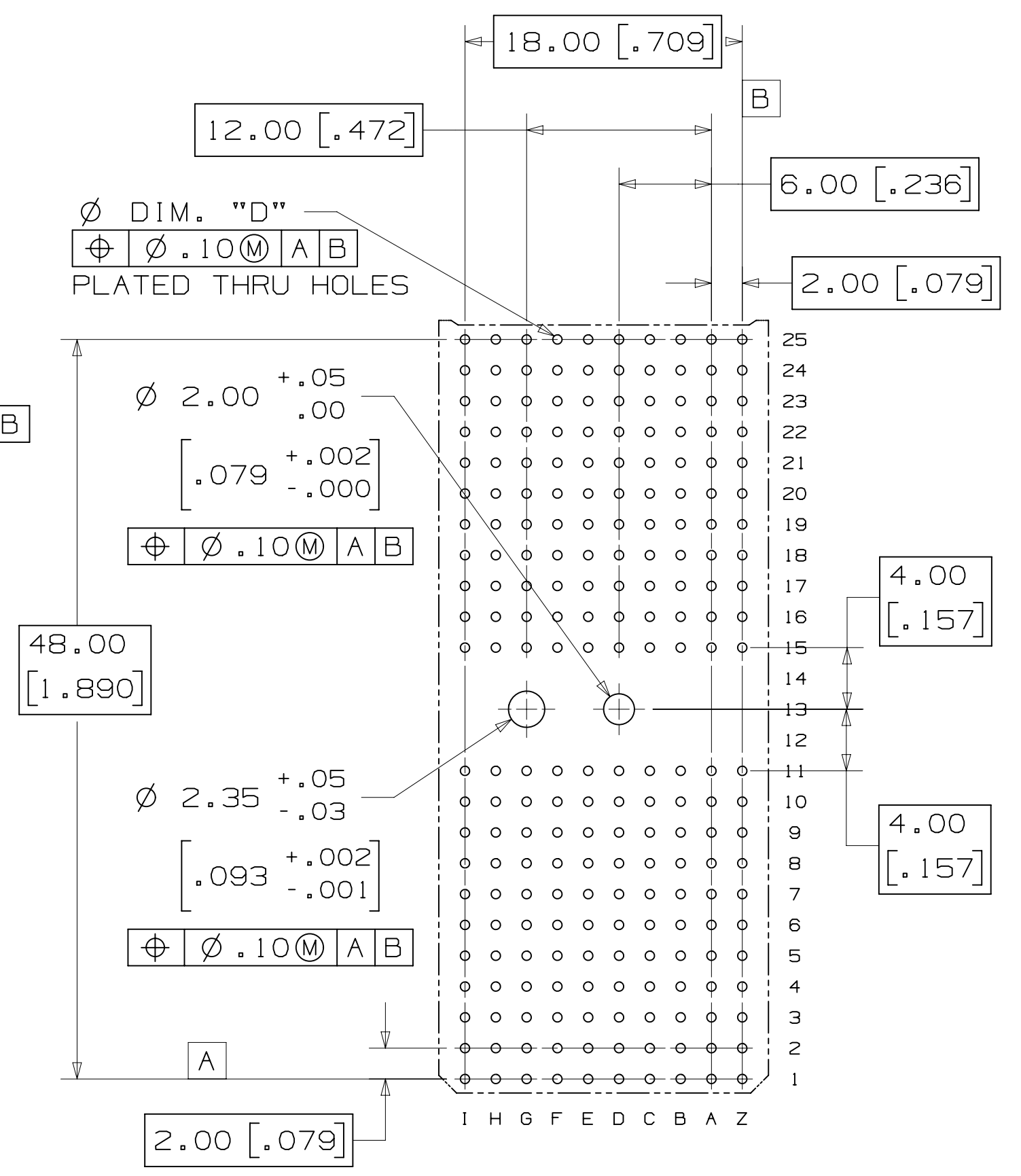
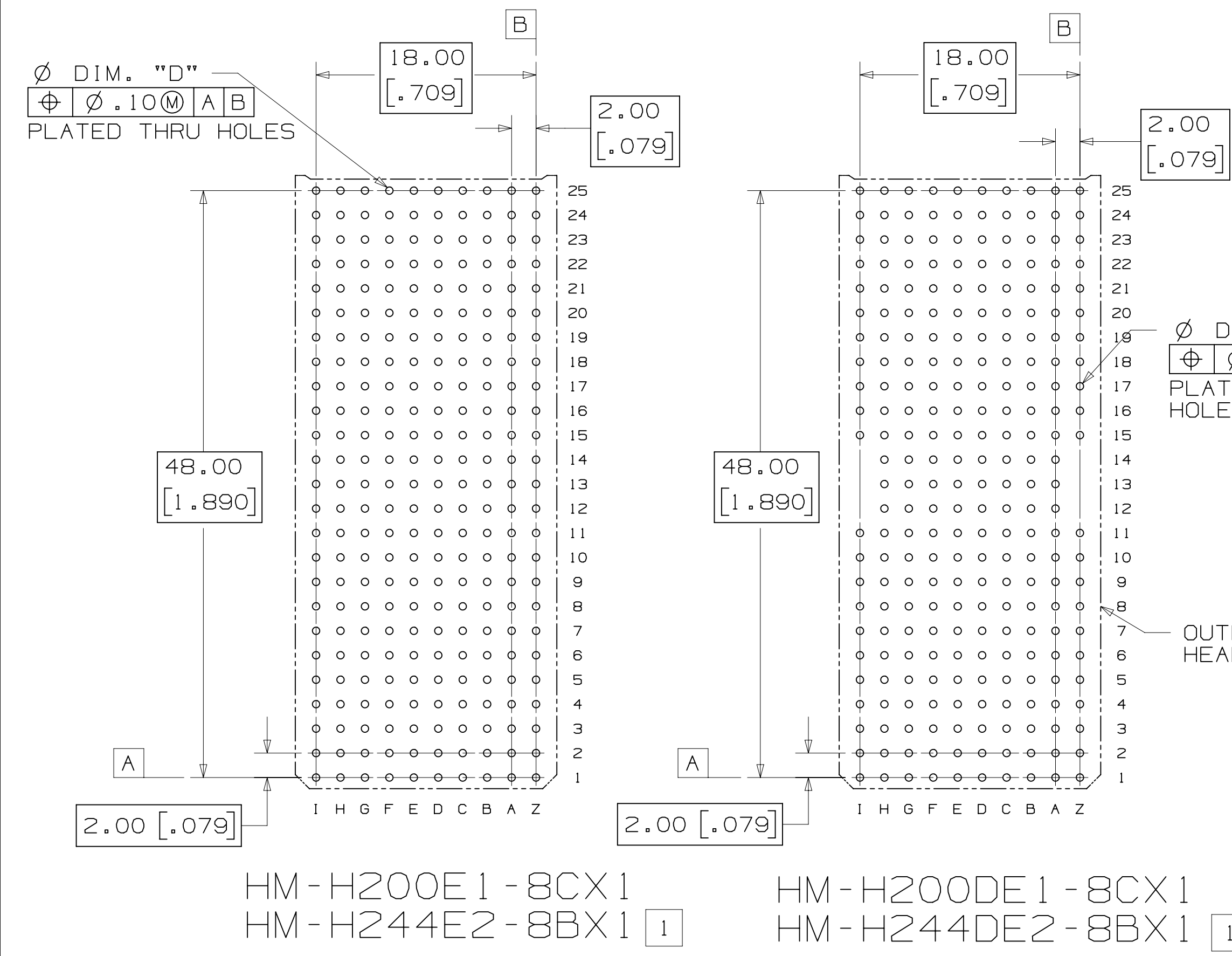
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TITLE  
HM PRESS-FIT HEADER,  
8-ROW, HM SERIES

3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES  
FOR HARD METRIC APPLICATIONS

HOLE	HOLE PLATING TABLE			
	(FINISHED HOLE)	Cu THICKNESS	SnPb THICKNESS	DRILLED HOLE DIA.
DIM. "B"	.690-.790 [.0270-.0310]	.025-.045 [.0010-.0018]	.008-.018 [.0003-.0007]	.810-.860 [.0320-.0340]
DIM. "D"	.550-.650 [.0217-.0256]	.025-.045 [.0010-.0018]	.008-.018 [.0003-.0007]	.686-.727 [.0270-.0286]

1] ROW 1 AND Z HOLES ARE ONLY USED FOR HM-HXXXX2-8BX1 STYLE HEADER.



RECOMMENDED PCB MOUNTING HOLE PATTERN  
(VIEWED FROM COMPONENT SIDE)

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		A	39815	MAR 28, 2012	JNC	TS
DIVISION				DIVISION CODE		
Interconnect Solutions				ISD		
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MAX SURFACE ROUGHNESS		SURFACES		TITLE		
MARKED ONLY		ANGLES		HM PRESS-FIT HEADER, 8-ROW, HM SERIES		
CAGE NUMBER		DRAWING NO.		REV.		
D78-5100-2517-0		A		SHT 4 OF 4		

78-5100-2517-0