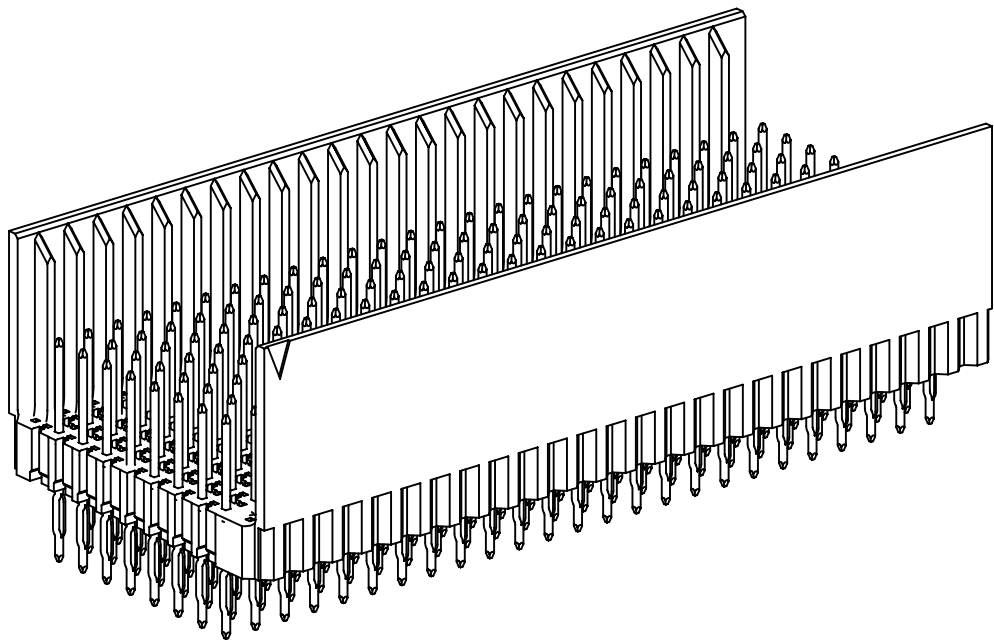
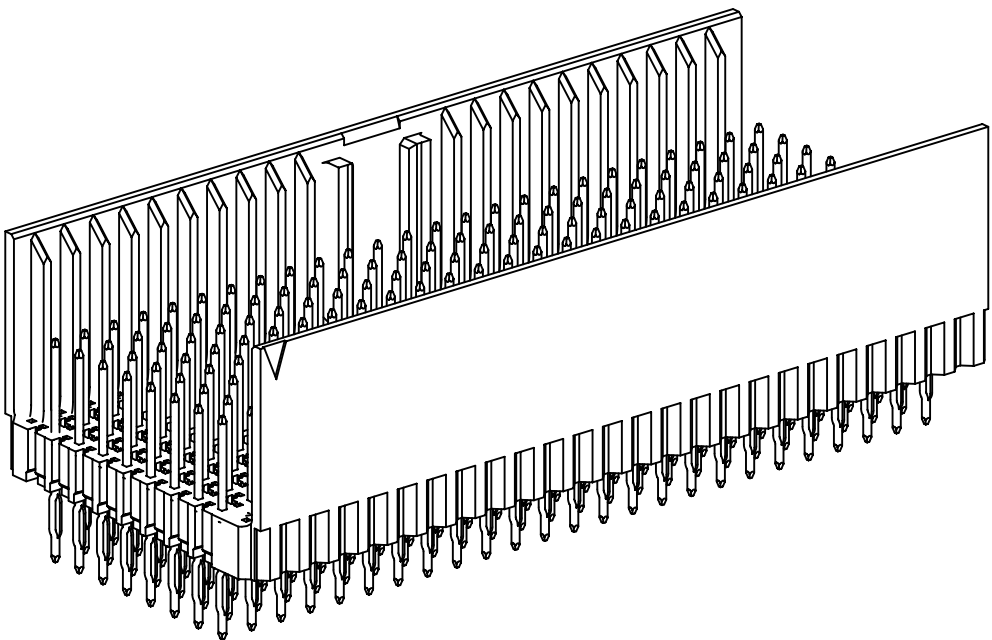


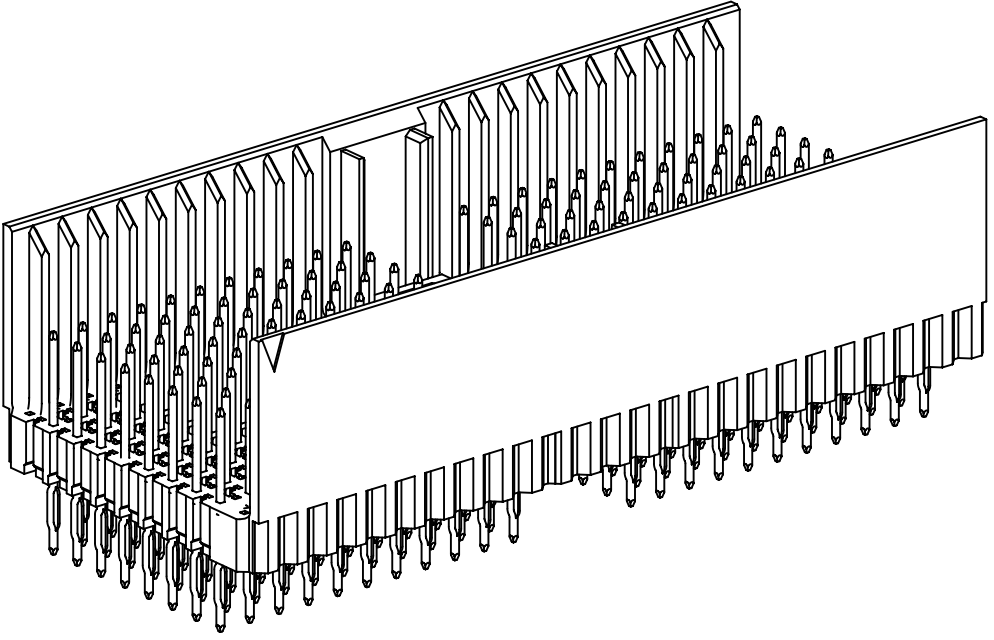
3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES
FOR HARD METRIC APPLICATIONS



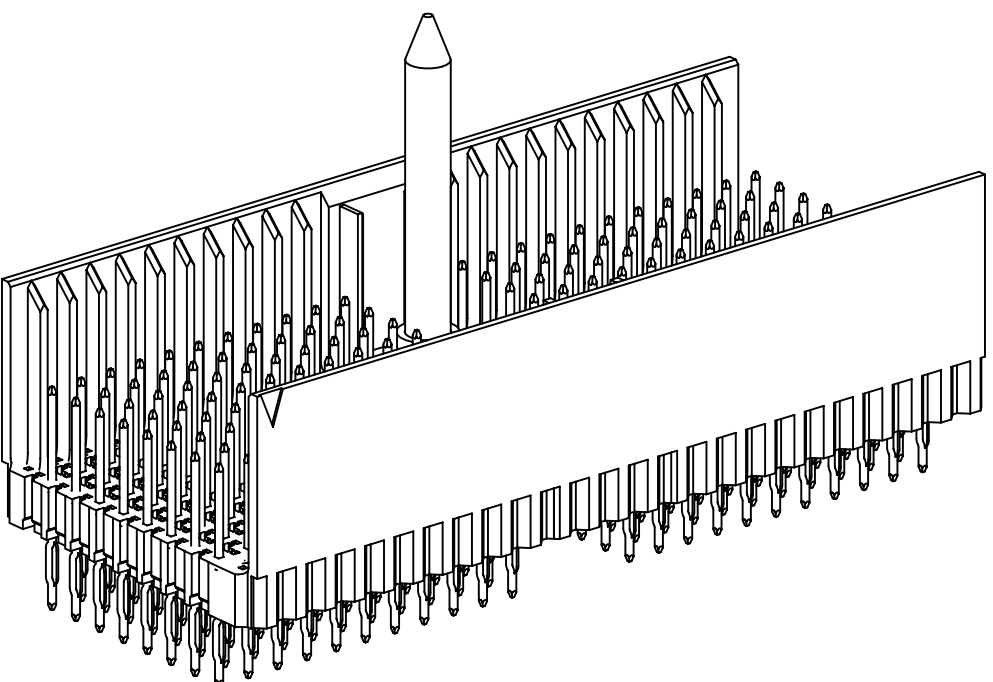
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HM-H244E2-8BX1



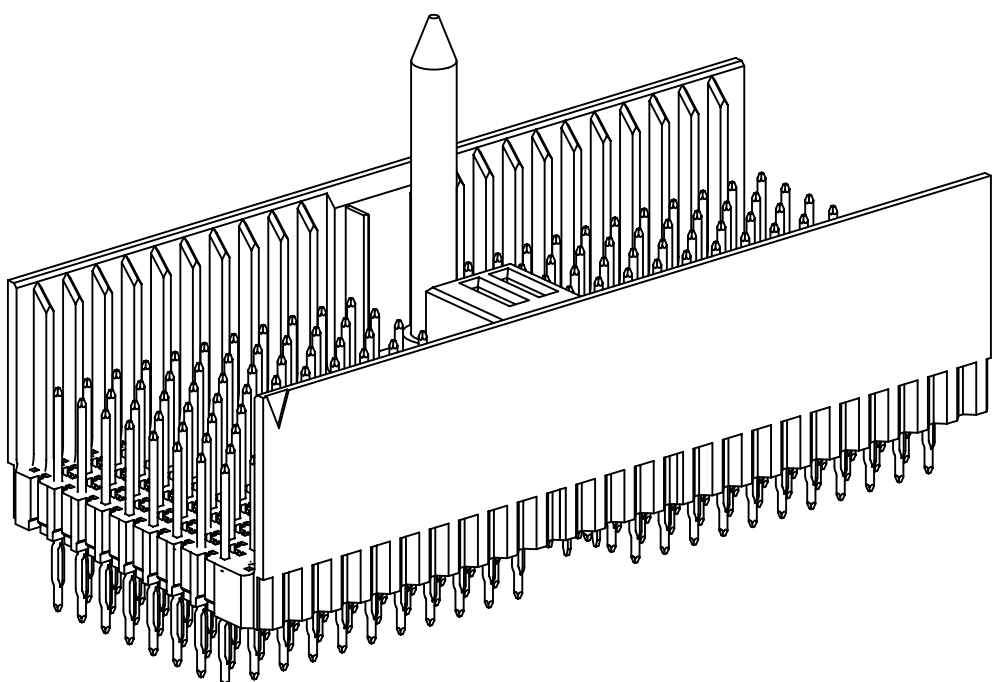
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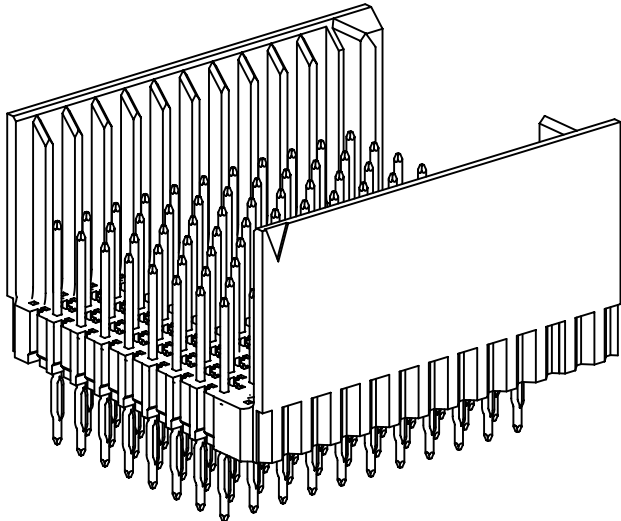
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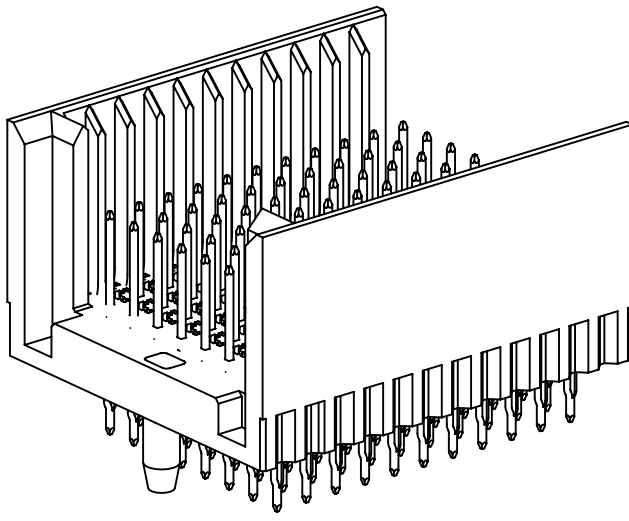
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HM-H220DG2-8BX1



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



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



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

(UNLESS OTHERWISE SHOWN)
ORDERING INFORMATION
(ROWS 1 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 1 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
1. MATERIAL:
PLASTIC: HIGH TEMP LCP, UL94V-0
PINS: 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 (RIA E1 & C1 APPLY)
 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
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)

3 ELECTRICAL:

CURRENT RATING (FULLY LOADED): 1A @ 70°C SIGNAL
INSULATION RESISTANCE: $1 \times 10^4 \text{ M}\Omega$ @ 100 V_{DC}
WITHSTANDING VOLTAGE: 750V_{RMS}

3 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>

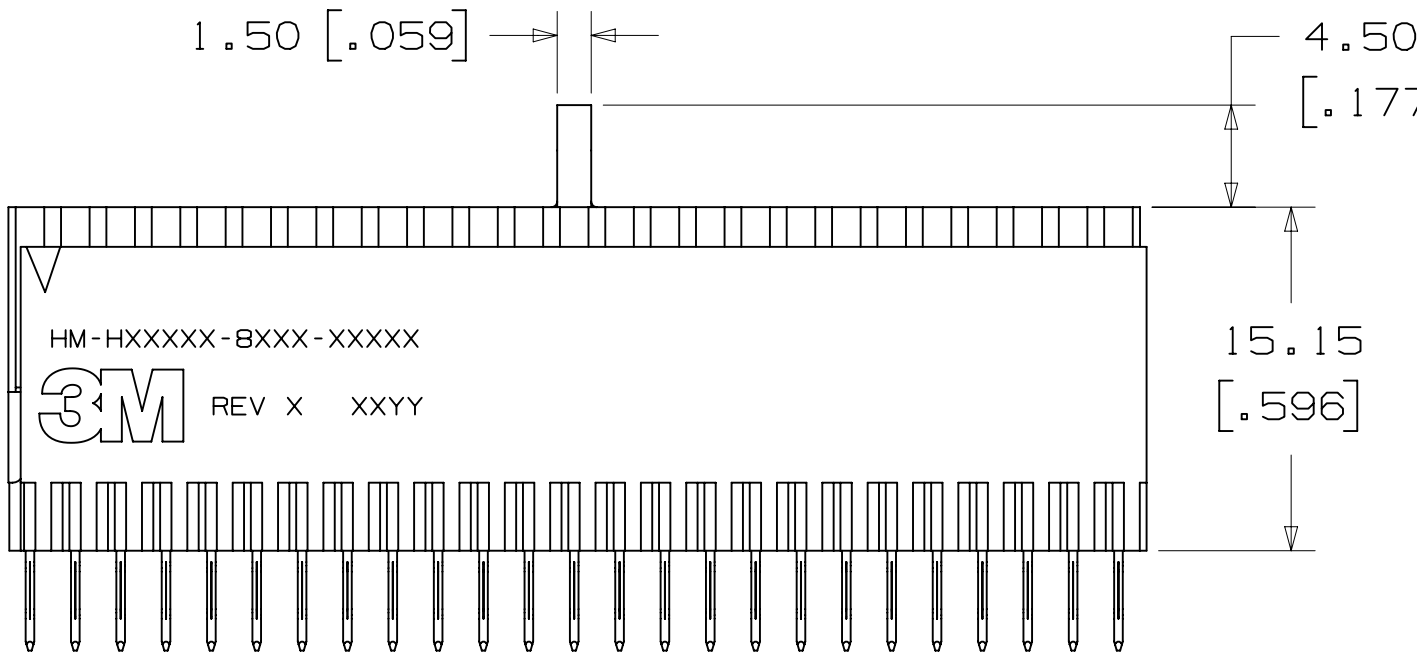
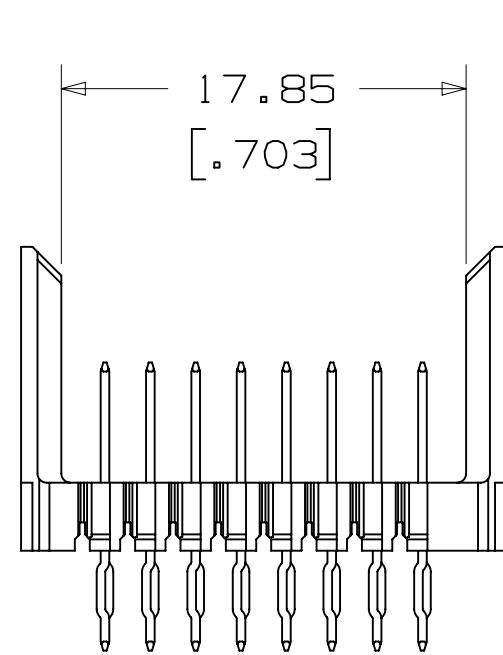
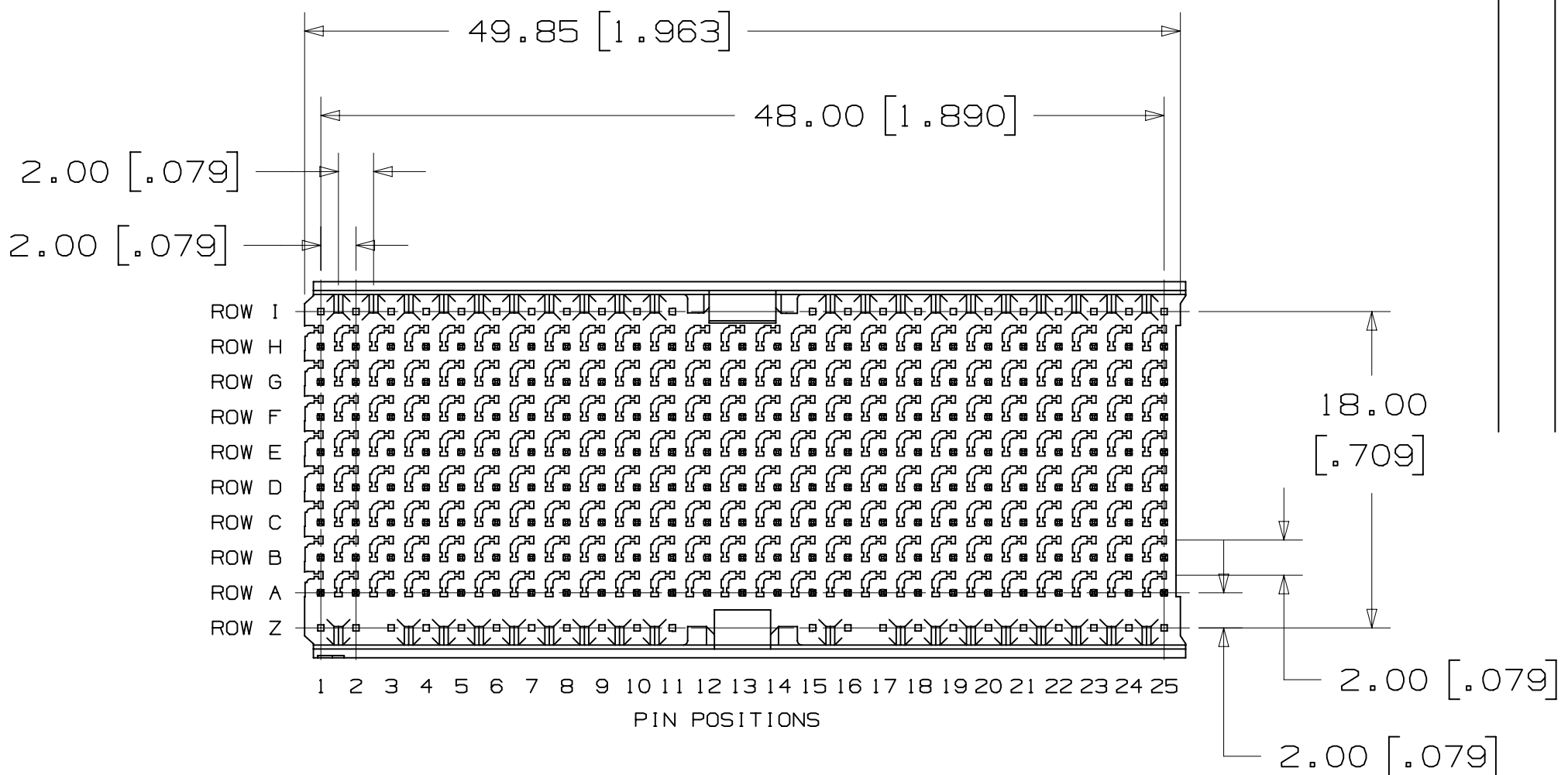
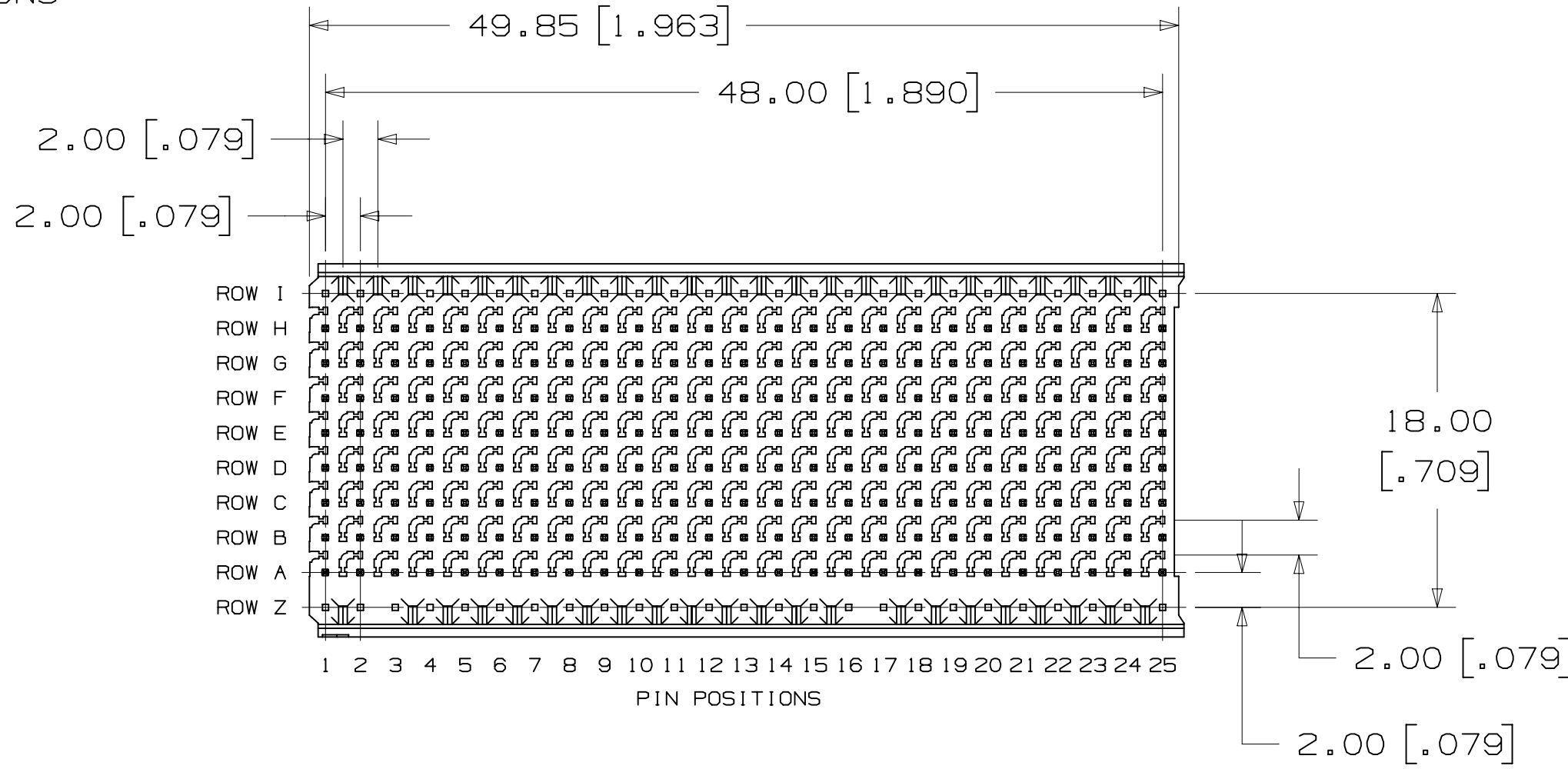
3M IS A TRADEMARK OF 3M COMPANY.
FOR TECHNICAL, SALES OR ORDERING
INFORMATION CALL 800-225-5373

cAUs
UL FILE NO: E68080

DIMENSIONS: MM [INCHES]			A	39815	MAR 28,2012		JNC	TS
DESIGN REFERENCE			REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
NEXT ASSEMBLY			REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
DIVISION			CHKD	DATE	APPR	DATE		
Interconnect Solutions			CHKD	DATE	APPR	DATE		
DO NOT SCALE DRAWING			CHKD	DATE	APPR	DATE		
THIRD ANGLE PROJECTION			CHKD	DATE	APPR	DATE		
MAX SURFACE ROUGHNESS			CHKD	DATE	APPR	DATE		
MARKED ONLY			CHKD	DATE	APPR	DATE		
TOLERANCES EXCEPT AS NOTED			CHKD	DATE	APPR	DATE		
INCHES			CHKD	DATE	APPR	DATE		
MILLIMETERS			CHKD	DATE	APPR	DATE		
INTERPRET PER ASME Y14.5 - 1994			CHKD	DATE	APPR	DATE		
CAGE NUMBER			CHKD	DATE	APPR	DATE		
MODEL			CHKD	DATE	APPR	DATE		
TITLE			CHKD	DATE	APPR	DATE		
HM PRESS-FIT HEADER, 8-ROW, HM SERIES			CHKD	DATE	APPR	DATE		
CAGE NUMBER			CHKD	DATE	APPR	DATE		
DRAWING NO.			CHKD	DATE	APPR	DATE		
78-5100-2517-0			CHKD	DATE	APPR	DATE		
REV.			CHKD	DATE	APPR	DATE		
A			CHKD	DATE	APPR	DATE		
SHT 1 OF 4			CHKD	DATE	APPR	DATE		

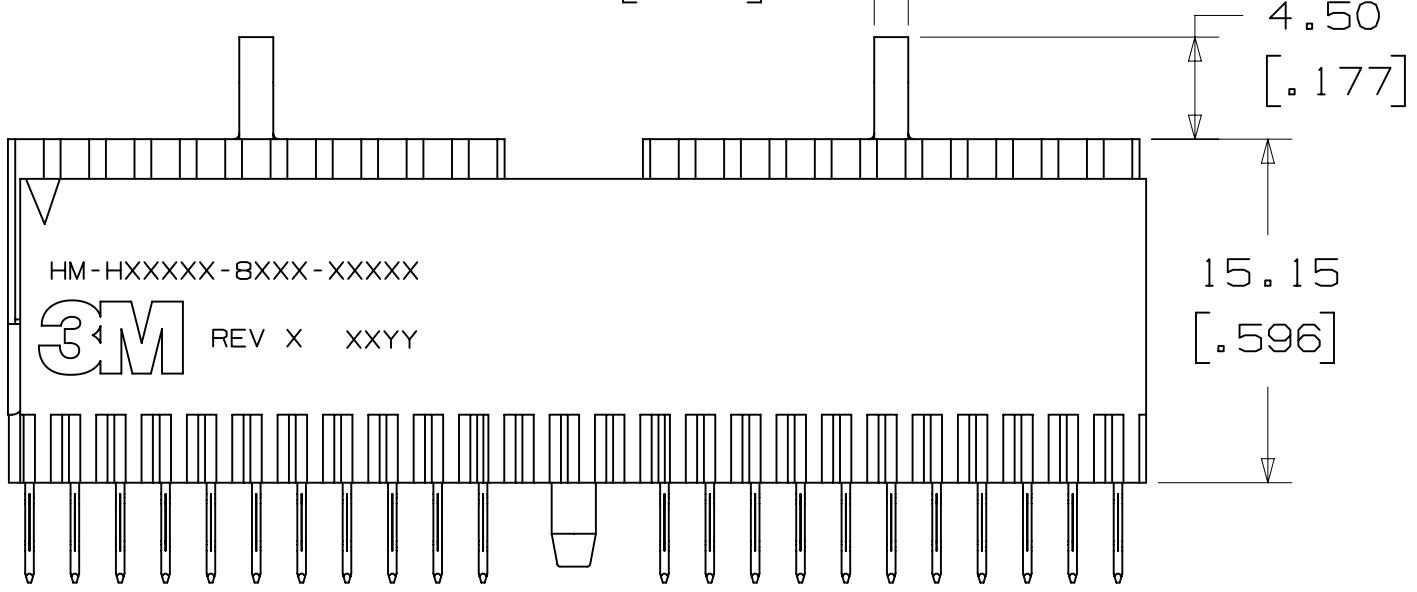
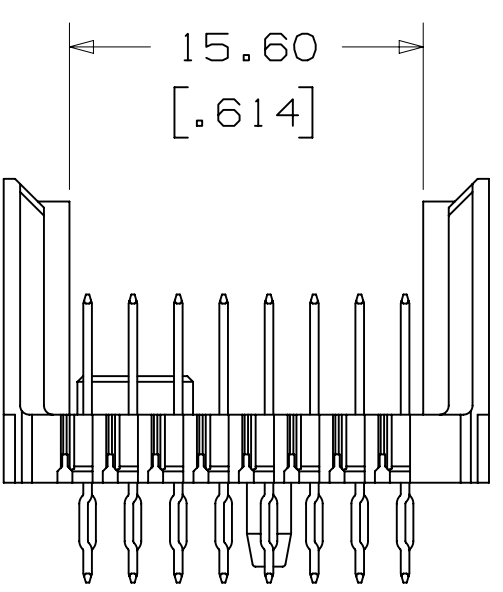
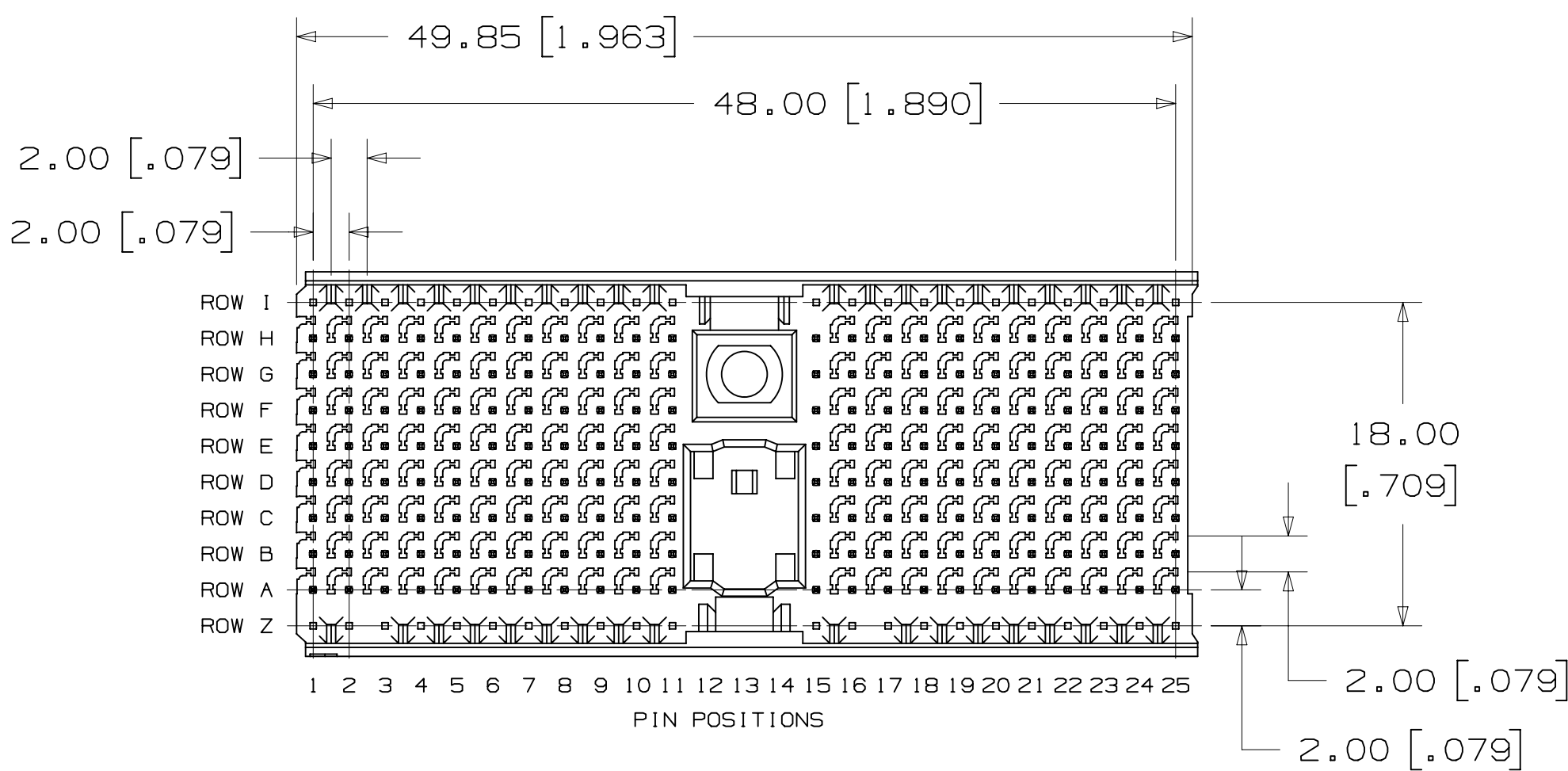
3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES
FOR HARD METRIC APPLICATIONS

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

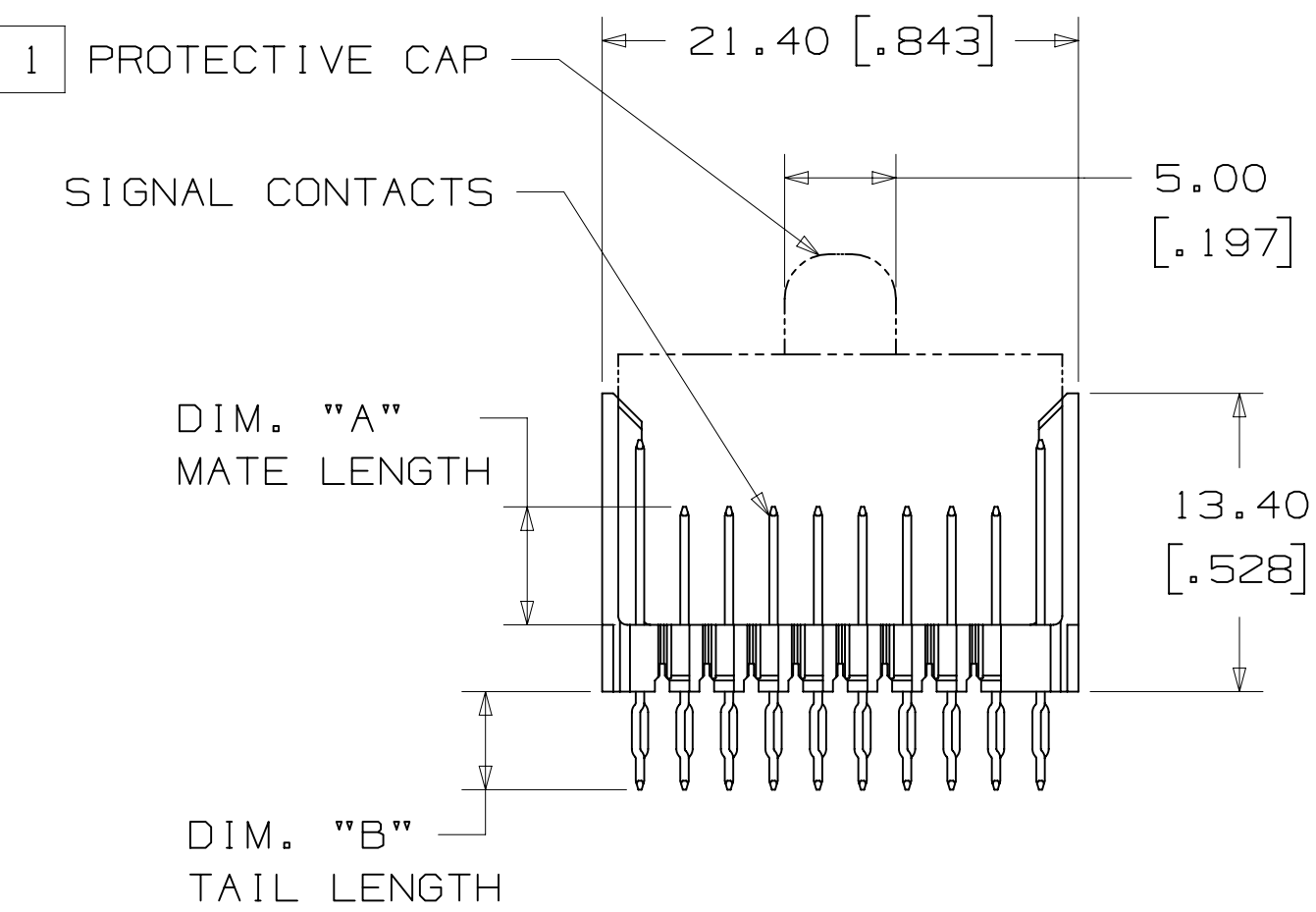


HM-H200E1-8CX1
HM-H244E2-8BX1

HM-H200DE1-8CX1
HM-H244DE2-8BX1



HM-H176D1-8CX1
HM-H220D2-8BX1



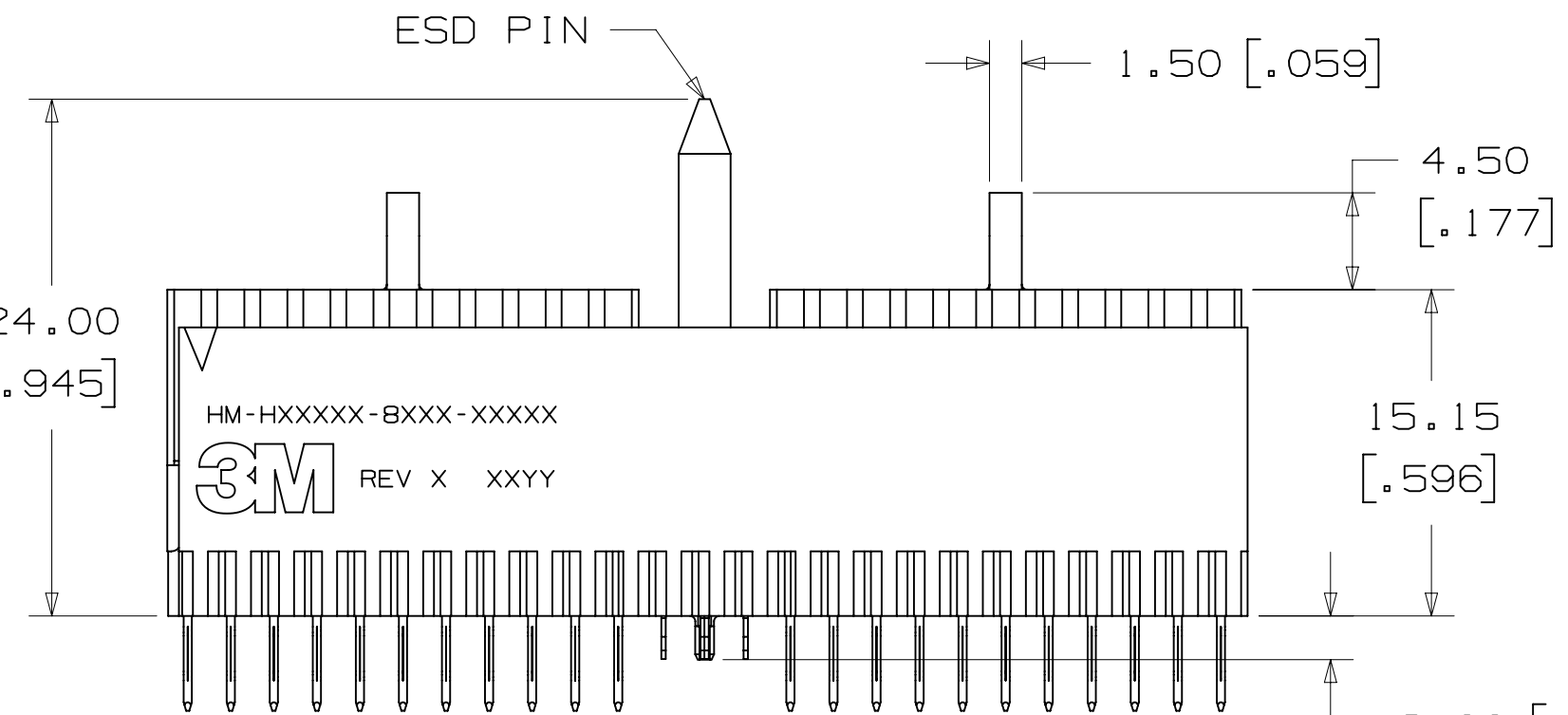
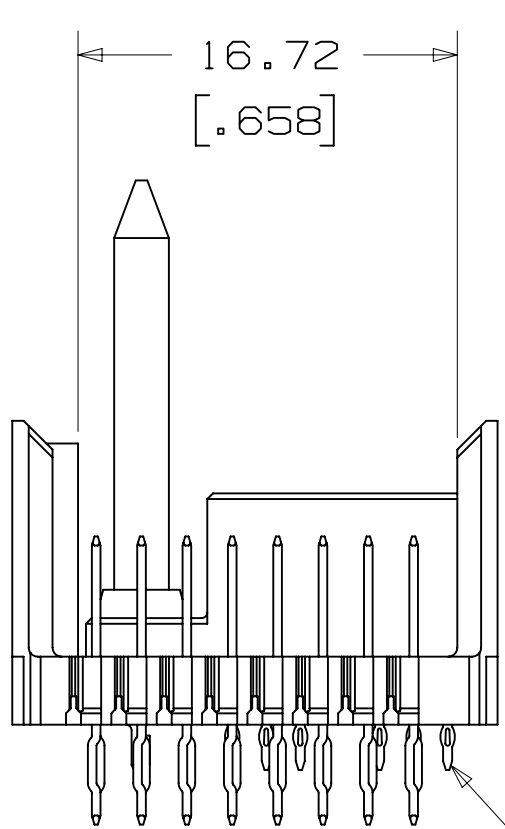
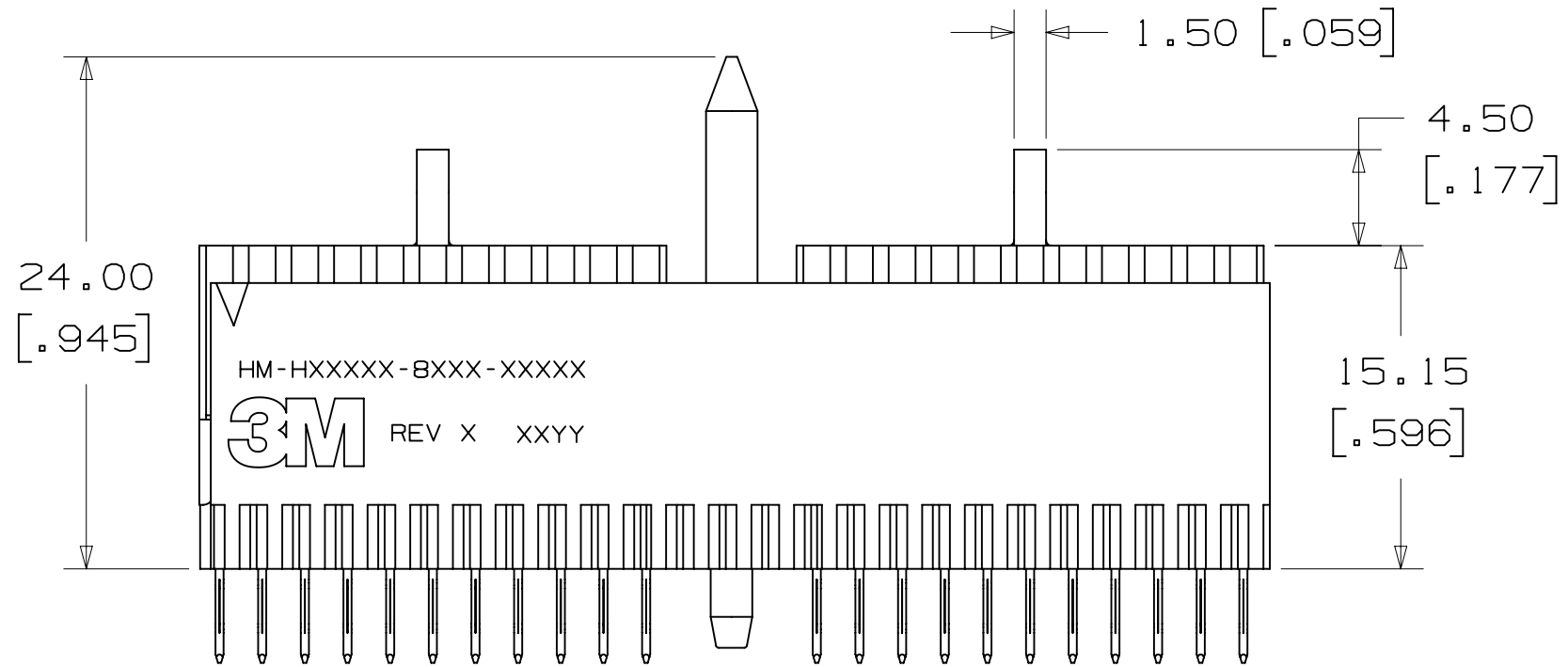
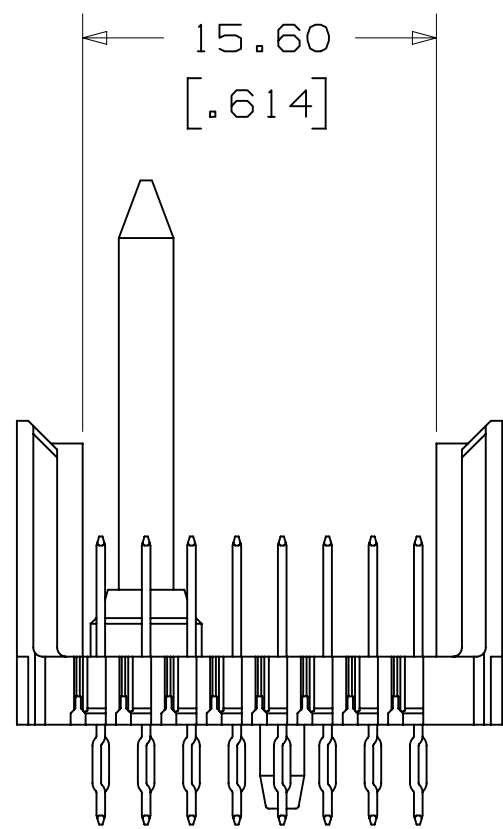
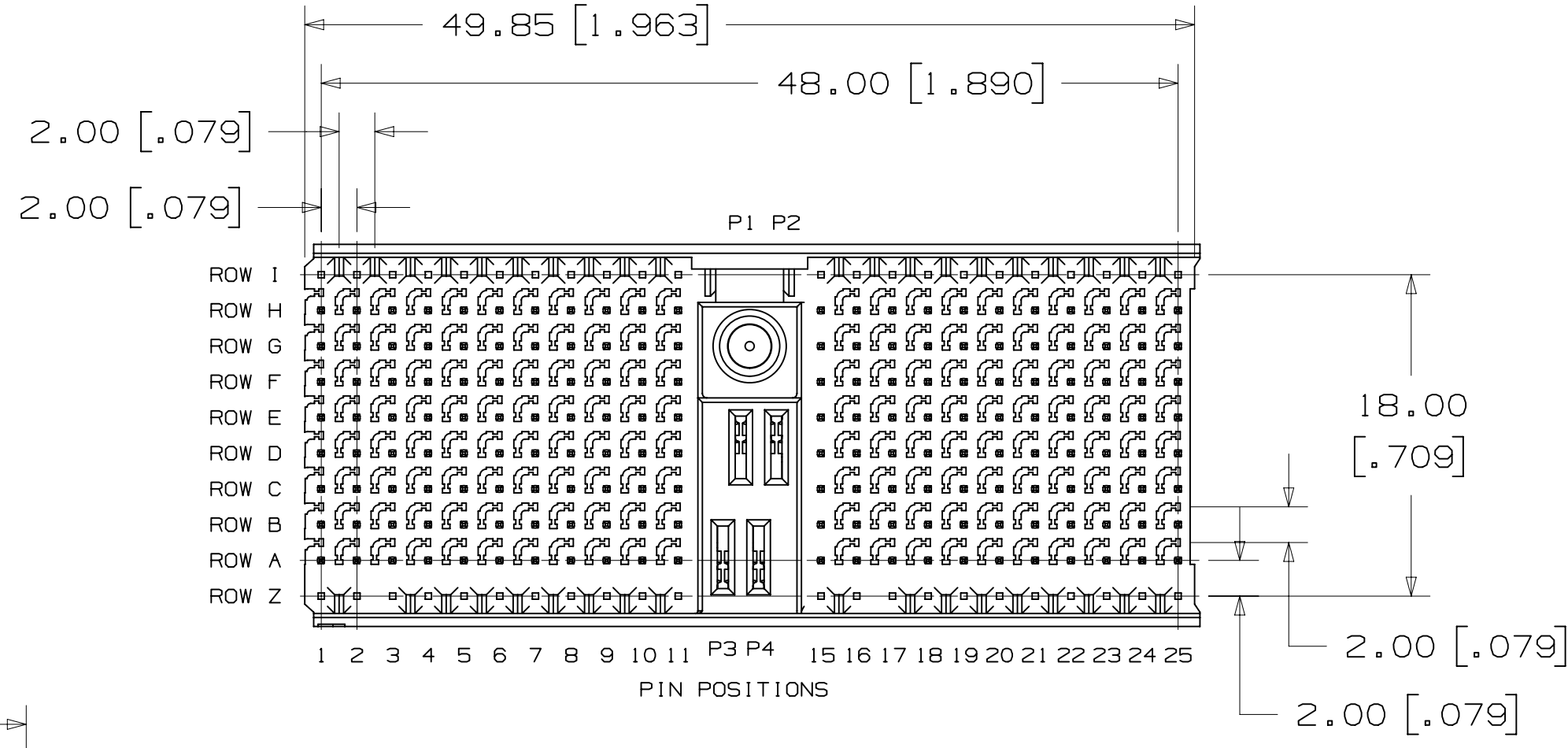
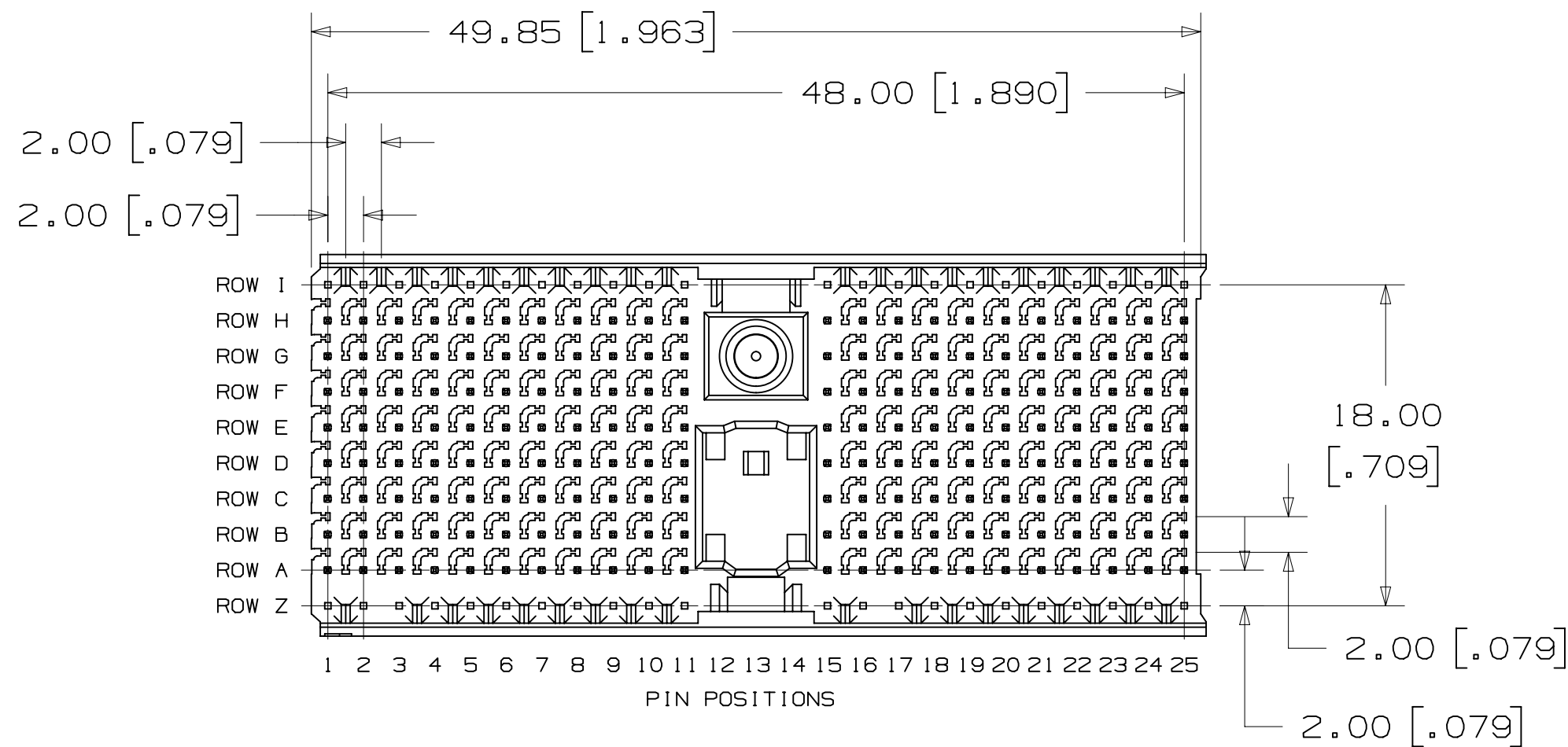
TYPICAL SIDE VIEW
DIMENSIONS FOR THE
HEADERS ON THIS DRAWING

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		A 39815		MAR 28, 2012		JNC TS	
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
DISTRIBUTION CODES		DISTRIBUTION CODES		DISTRIBUTION CODES		DISTRIBUTION CODES		DISTRIBUTION CODES	
DIVISION		DIVISION CODE		DIVISION CODE		DIVISION CODE		DIVISION CODE	
Interconnect Solutions		ISD		ISD		ISD		ISD	
DO NOT SCALE DRAWING		SCALE 3 1		TOLERANCES EXCEPT AS NOTED		TOLERANCES EXCEPT AS NOTED		TOLERANCES EXCEPT AS NOTED	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MILLIMETERS		MILLIMETERS		MILLIMETERS	
MAX SURFACE ROUGHNESS		SURFACES		SURFACES		SURFACES		SURFACES	
MARKED ONLY		MARKED ONLY		MARKED ONLY		MARKED ONLY		MARKED ONLY	
TITLE		TITLE		TITLE		TITLE		TITLE	
HM PRESS-FIT HEADER, 8-ROW, HM SERIES		HM PRESS-FIT HEADER, 8-ROW, HM SERIES		HM PRESS-FIT HEADER, 8-ROW, HM SERIES		HM PRESS-FIT HEADER, 8-ROW, HM SERIES		HM PRESS-FIT HEADER, 8-ROW, HM SERIES	
CAGE NUMBER		CAGE NUMBER		CAGE NUMBER		CAGE NUMBER		CAGE NUMBER	
D 78-5100-2517-0		D 78-5100-2517-0		D 78-5100-2517-0		D 78-5100-2517-0		D 78-5100-2517-0	
MODEL		MODEL		MODEL		MODEL		MODEL	
LISTS		LISTS		LISTS		LISTS		LISTS	
YES		YES		YES		YES		YES	
SHT 2 OF 4		SHT 2 OF 4		SHT 2 OF 4		SHT 2 OF 4		SHT 2 OF 4	

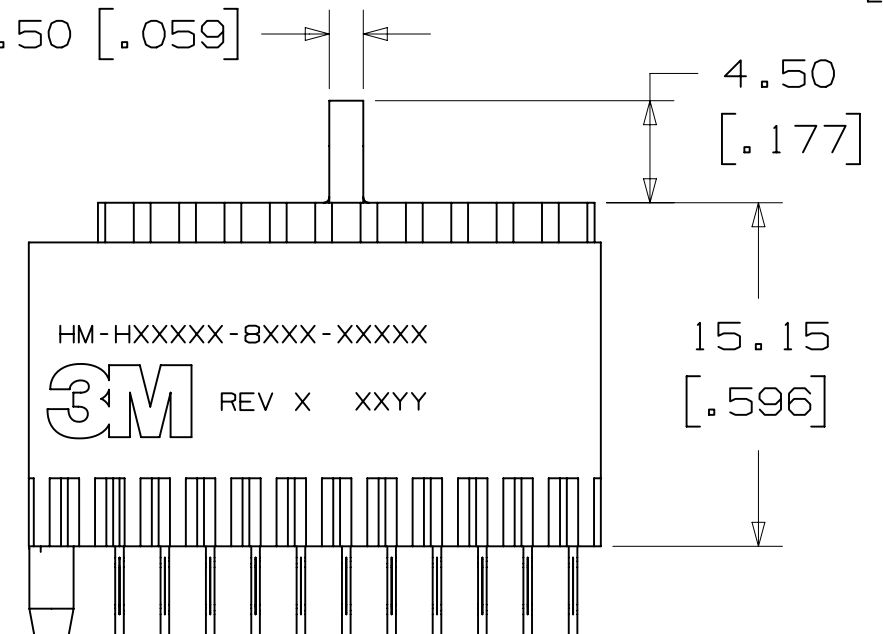
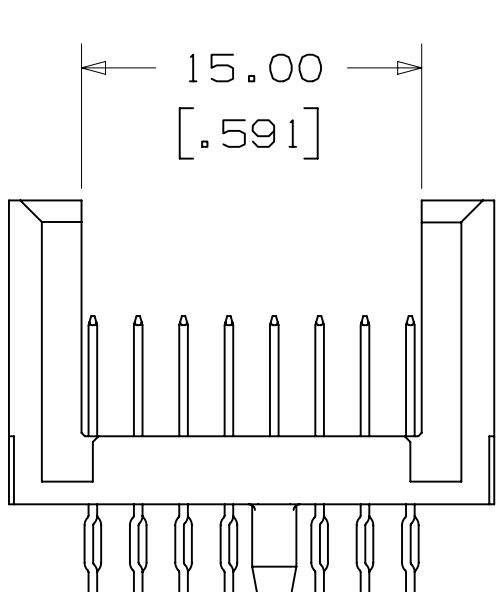
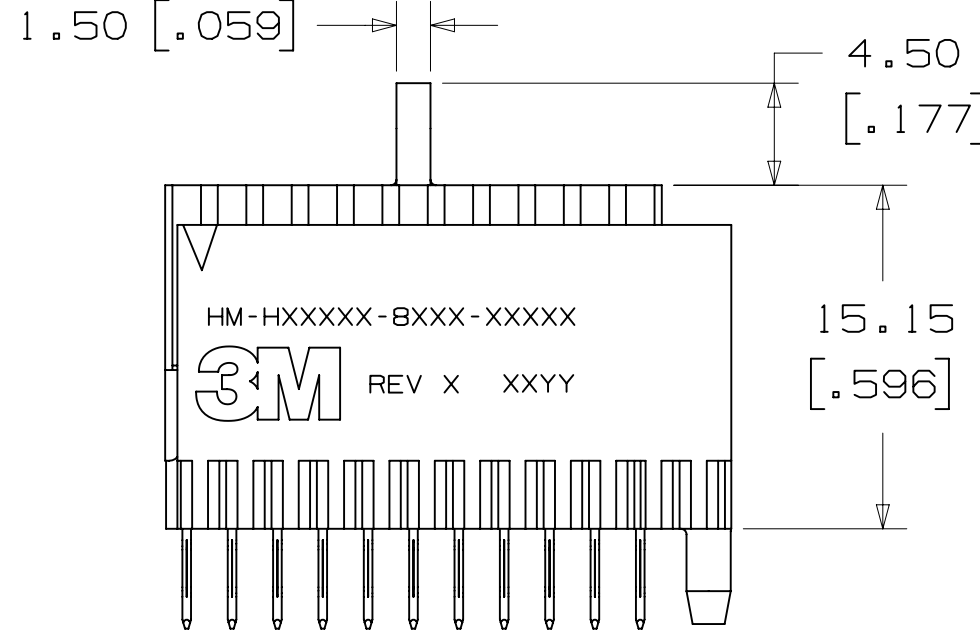
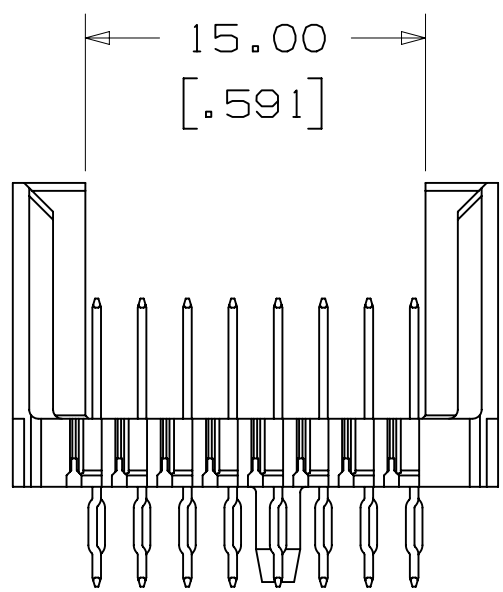
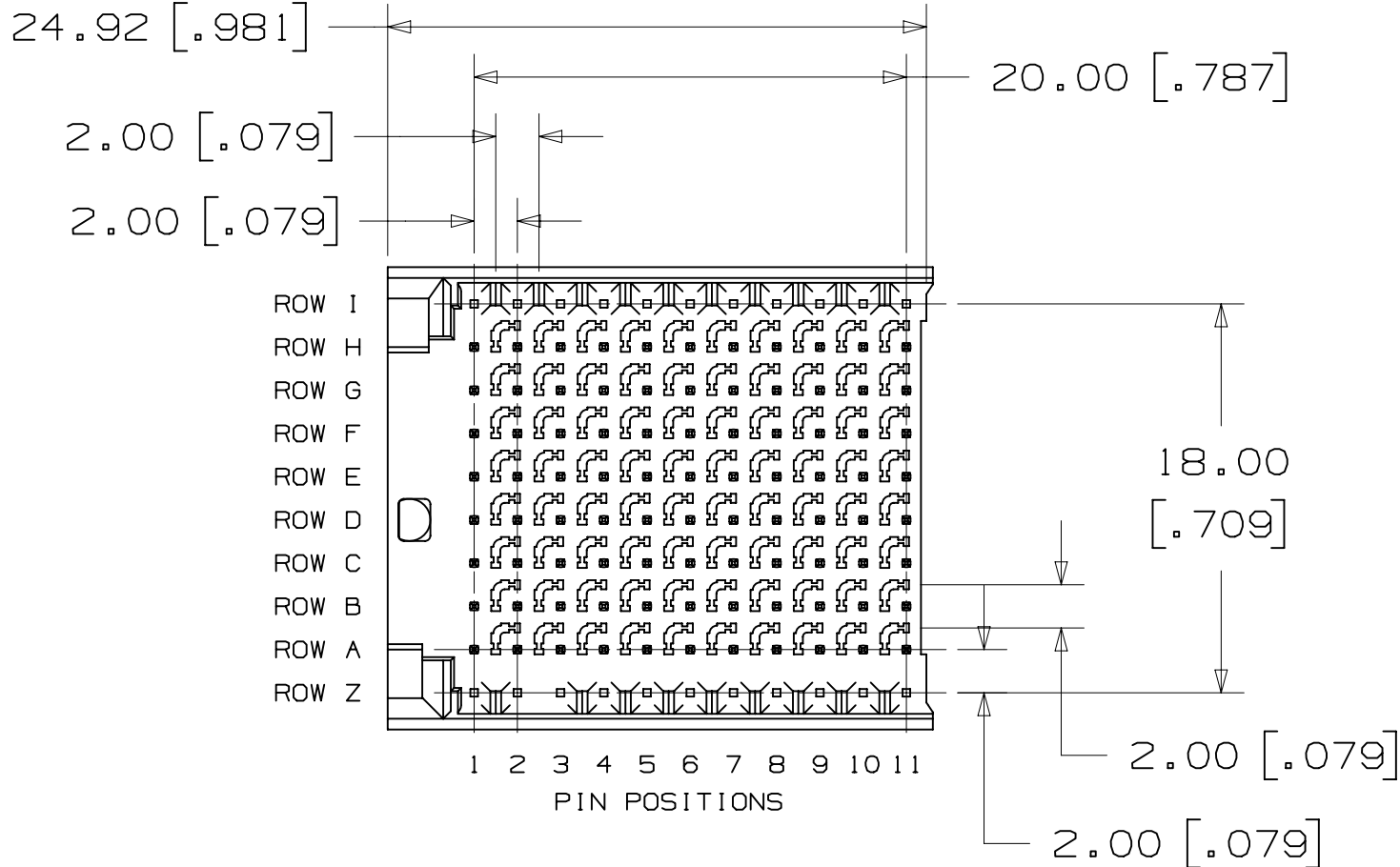
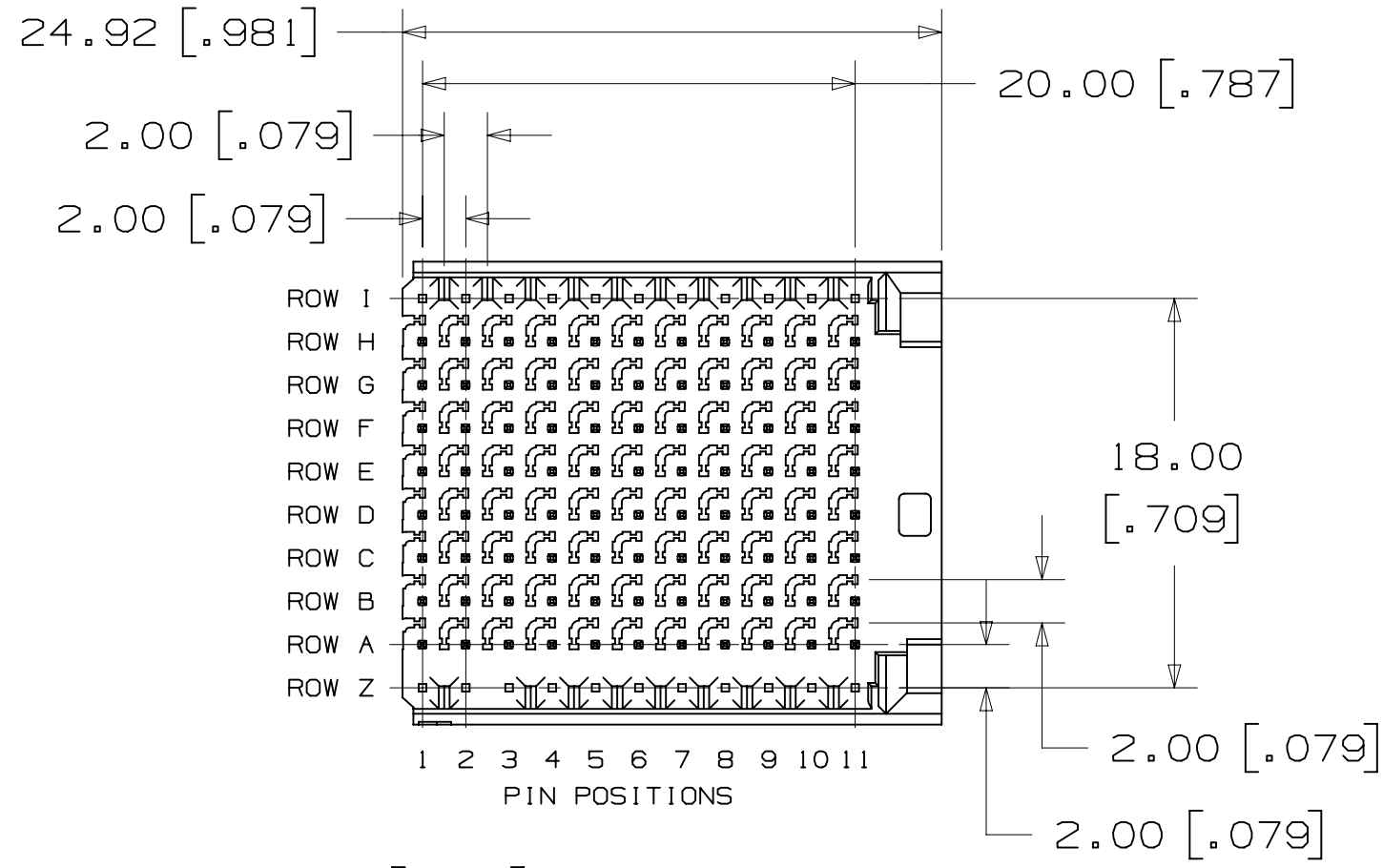
3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES
FOR HARD METRIC APPLICATIONS



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

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

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

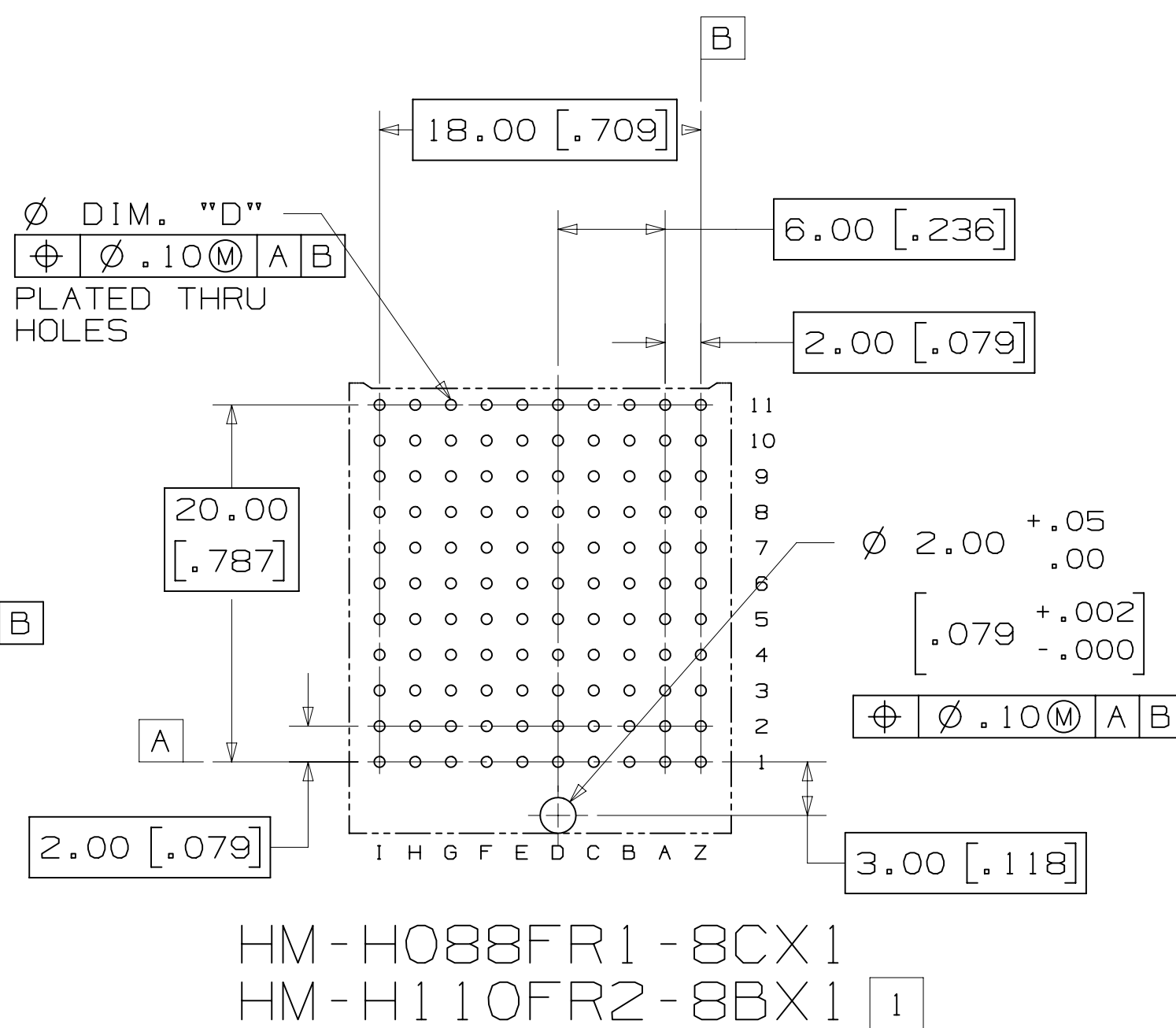
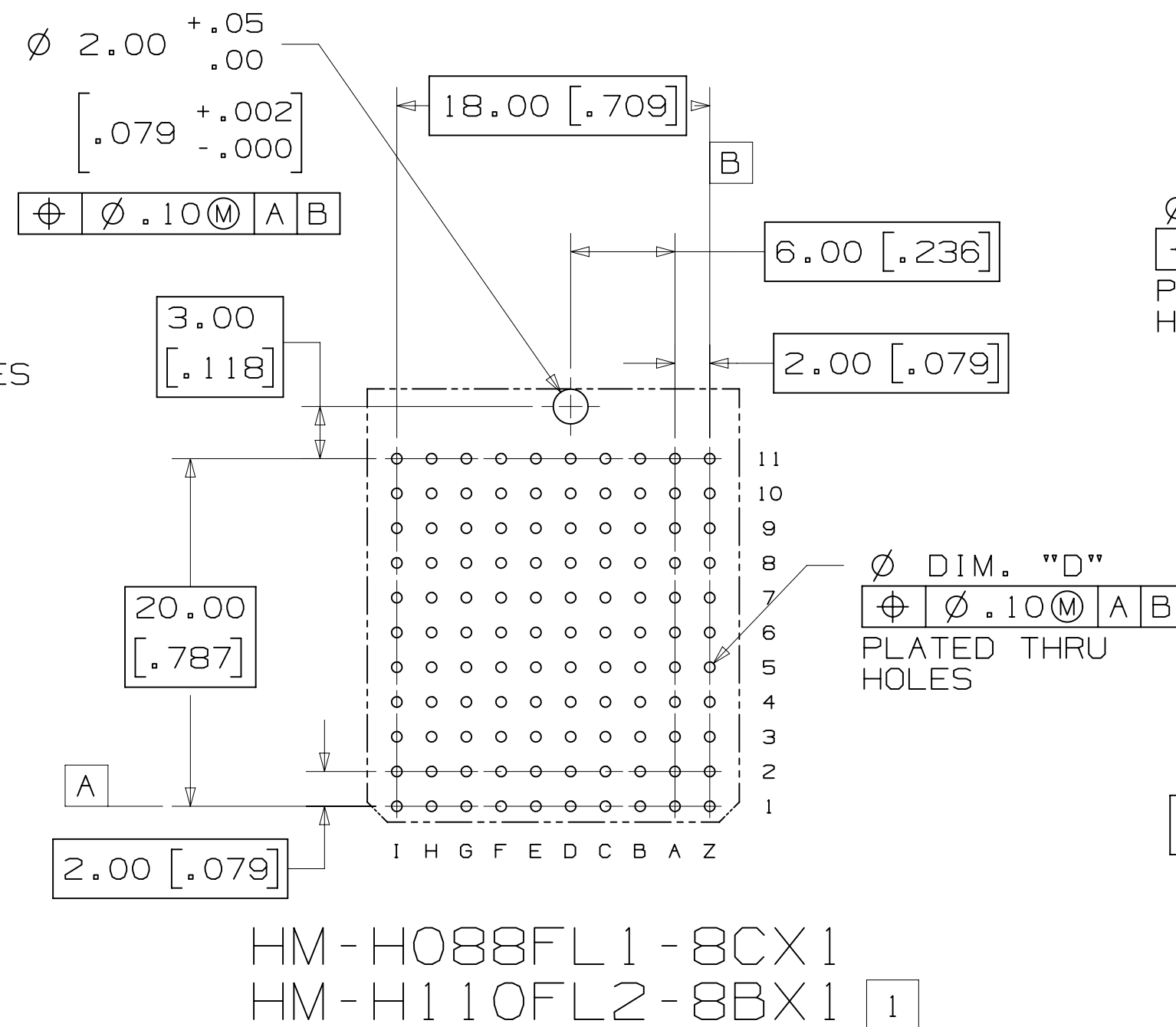
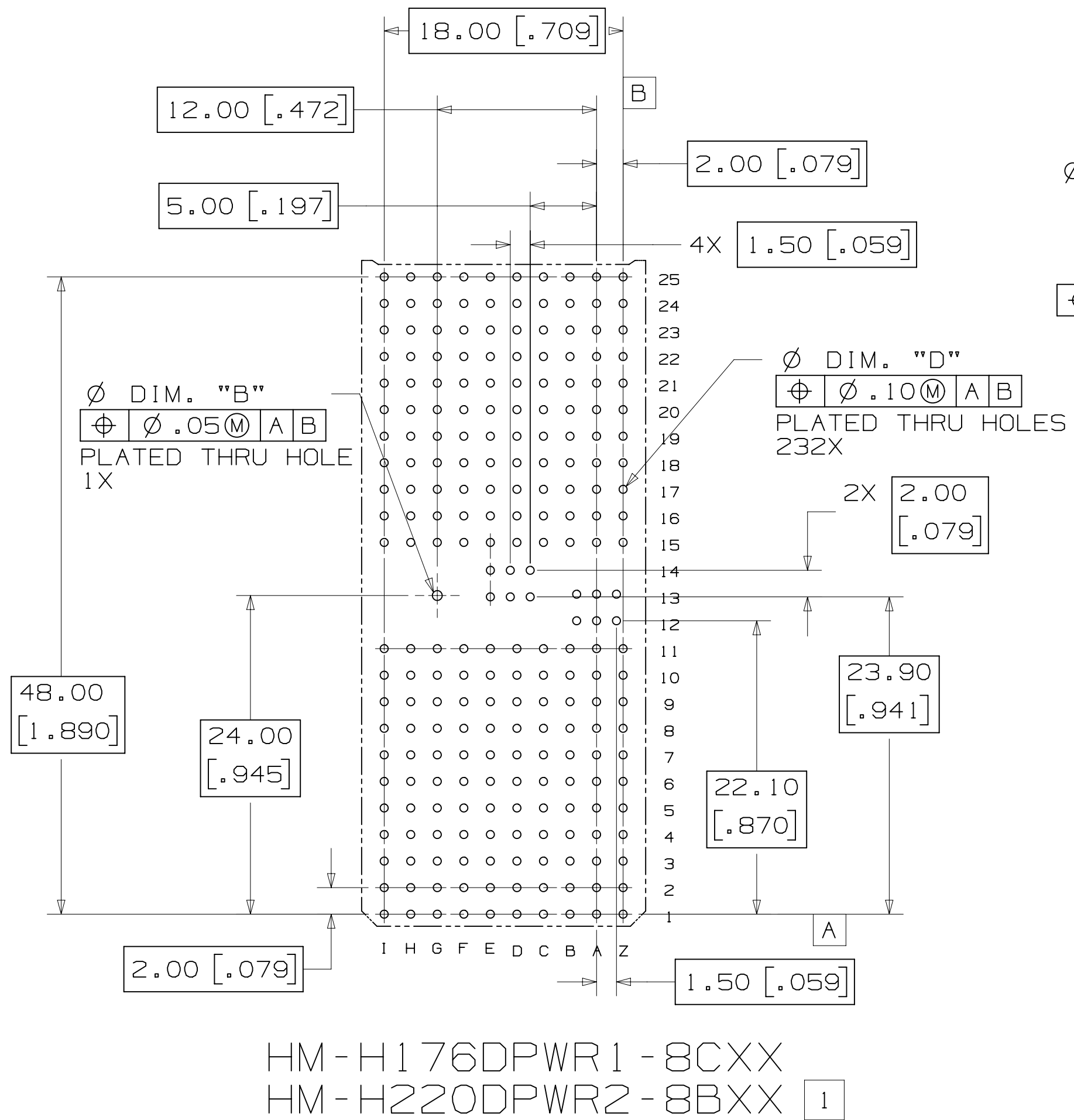
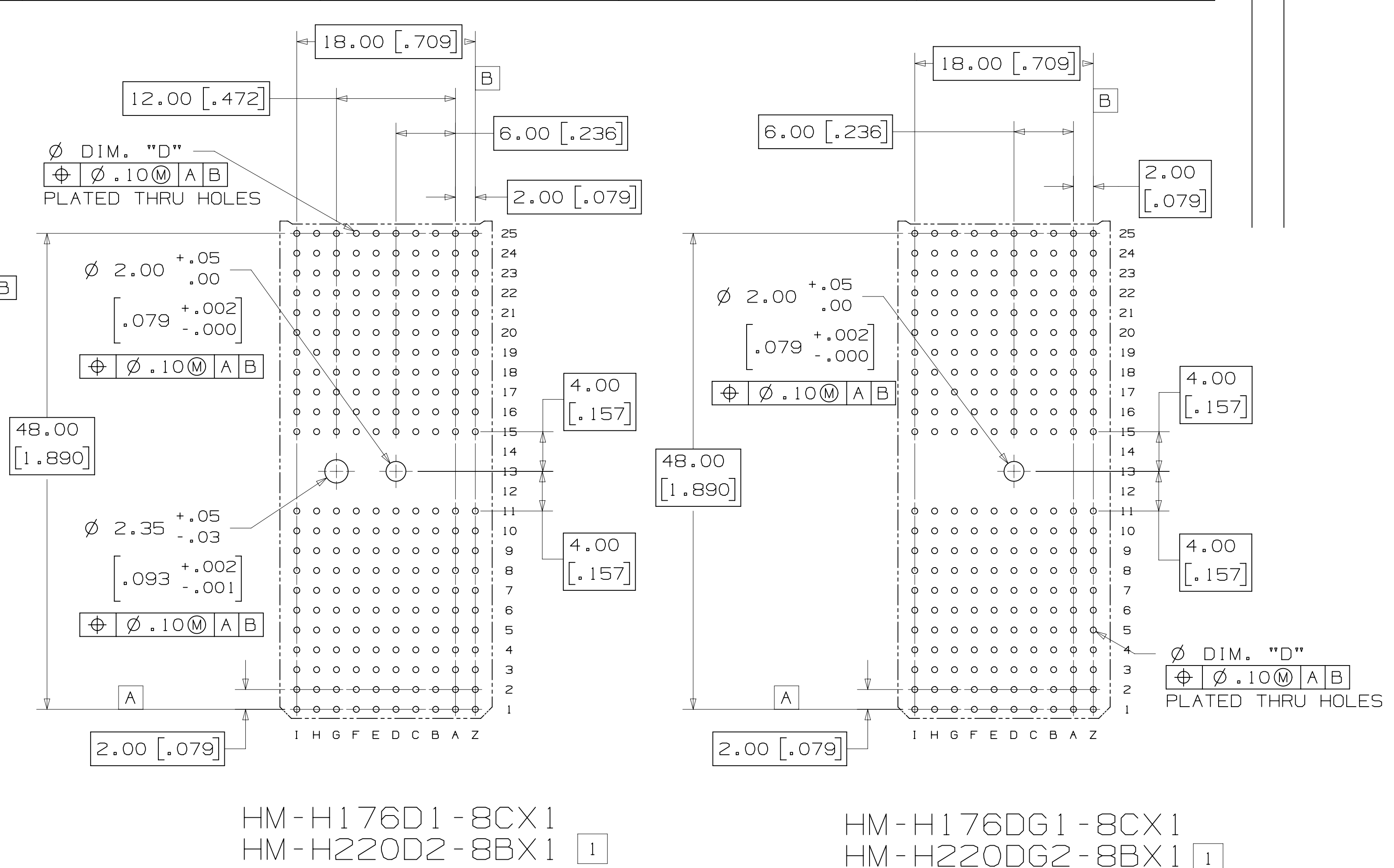
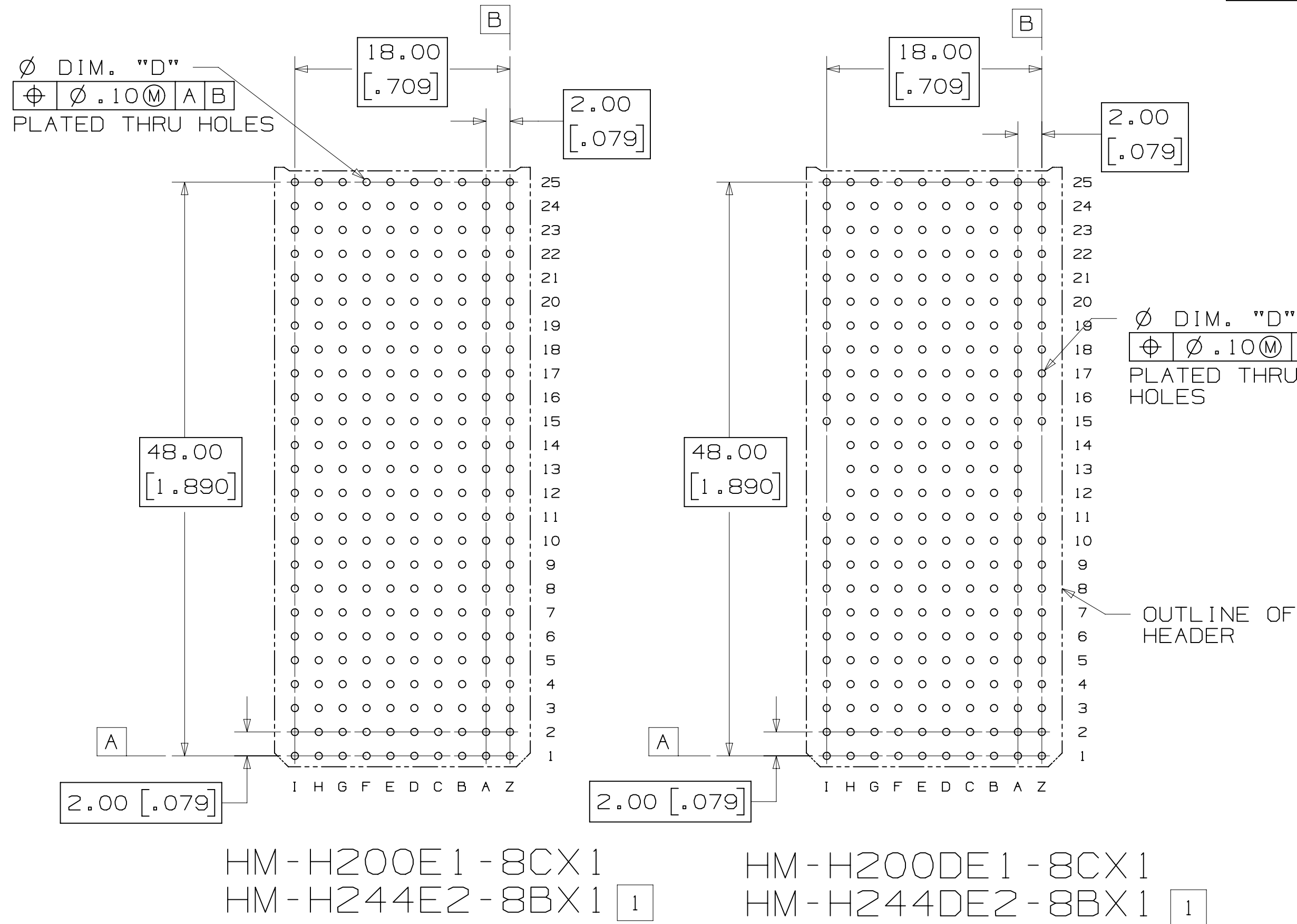


HM-H088FL1-8CX1
HM-H110FL2-8BX1

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

DESIGN REFERENCE		NEXT ASSEMBLY		A 39815		MAR 28, 2012		JNC	TS
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
DISTRIB CODES		DIVISION CODE		DATE		MFG		DATE	
CHKD		CHKD		DATE		APPR		DATE	
Interconnect Solutions		ISD		T. SUNIGA		MAR 28, 2012		MAR 28, 2012	
DO NOT SCALE DRAWING		SCALE 3/1		TOLERANCES EXCEPT AS NOTED		INCHES		MILLIMETERS	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		MAX SURFACE ROUGHNESS		0.00 ± .01		0.00 ± .005	
MAX SURFACE ROUGHNESS		0.00 ± .01		0.00 ± .005		0.00 ± .01		0.00 ± .005	
MARKED ONLY		ANGLES		TITLE		HM PRESS-FIT HEADER, 8-ROW, HM SERIES		CAGE NUMBER	
MODEL		DET		LISTS		YES		NO	
SHT 3 OF 4		SHT 3 OF 4		SHT 3 OF 4		SHT 3 OF 4		SHT 3 OF 4	

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



RECOMMENDED PCB MOUNTING HOLE PATTERN
(VIEWED FROM COMPONENT SIDE)

HOLE PLATING TABLE				
HOLE	(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]

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

A		39815		MAR 28, 2012		JNC		TS	
PRODUCTION RELEASE									
REV		ECO		ISSUE DATE AND DESCRIPTION		DFT		CHKD	
B71		CASTIGLIONE		MAR 28, 2012		MFG		DATE	
CHKD				DATE		APPROV		DATE	
						T. SUNIGA		MAR 28, 2012	
DIVISION		DIVISION CODE		© 3M COPYRIGHT 2012					
Interconnect Solutions		ISD		3M Center St. Paul, MN 55144		This document and the information it contains are 3M property and may not be reproduced or further distributed without the written 3M authorization, or used or disclosed other than for 3M authorized purposes. All rights reserved.			
DO NOT SCALE		SCALE		TOLERANCES EXCEPT AS NOTED					
DRAWING		1		INCHES					
				.00 ± .01 .000 ± .005 .0000 ±					
THIRD ANGLE PROJECTION				MILLIMETERS					
INTERPRET PER ASME Y14.5 - 1994				.00 ± .3 .00 ± .13 .000 ±					
MAX. SURFACE ROUGHNESS				CAGE NUMBER		SIZE		DRAWING NO.	
				D		78-5100		2517-0	
✓ ☐ MARKED SURFACES				MODEL		DET.		REV.	
✓ ☐ MARKED ONLY						LISTS		YES ☐ NO ☒	
								SHT 4 OF 4	