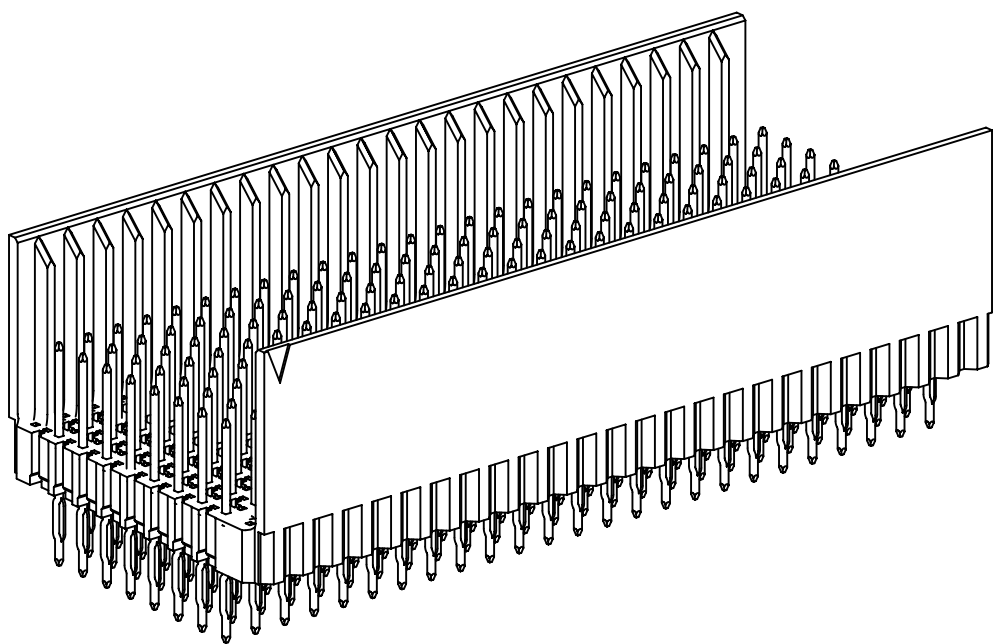
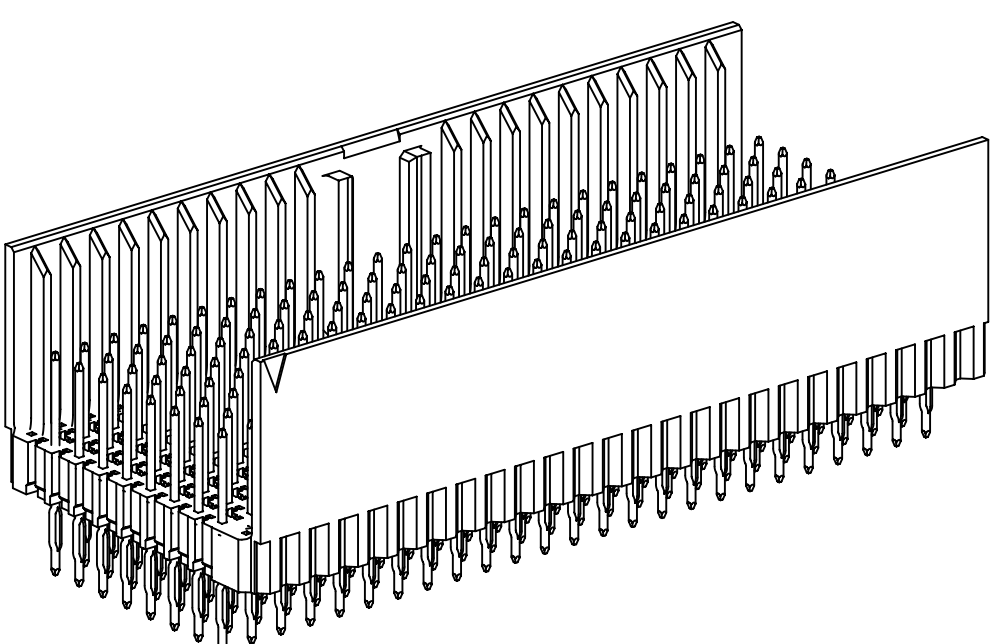


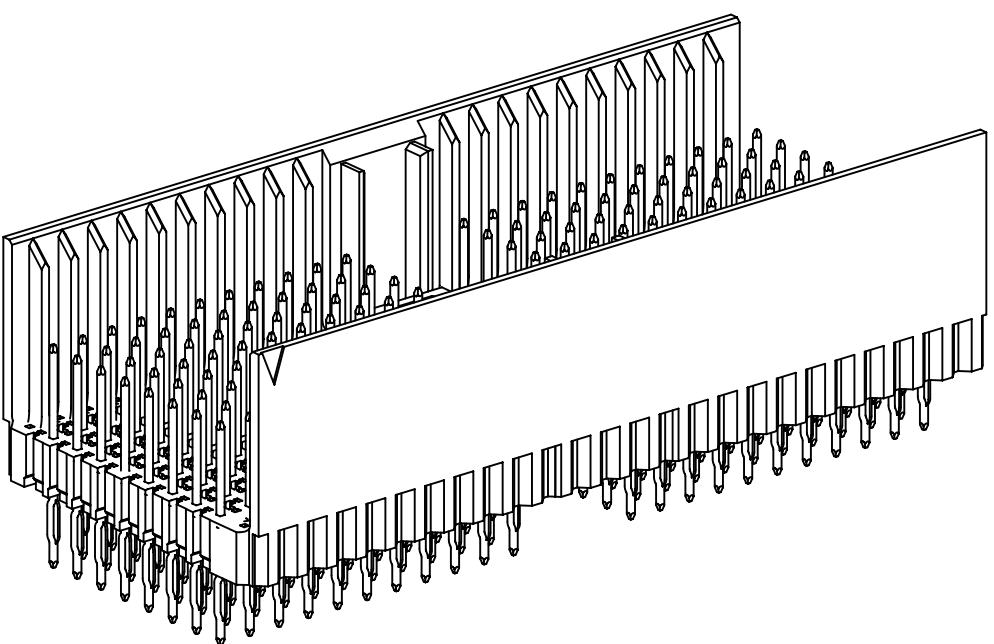
3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES
FOR HARD METRIC APPLICATIONS



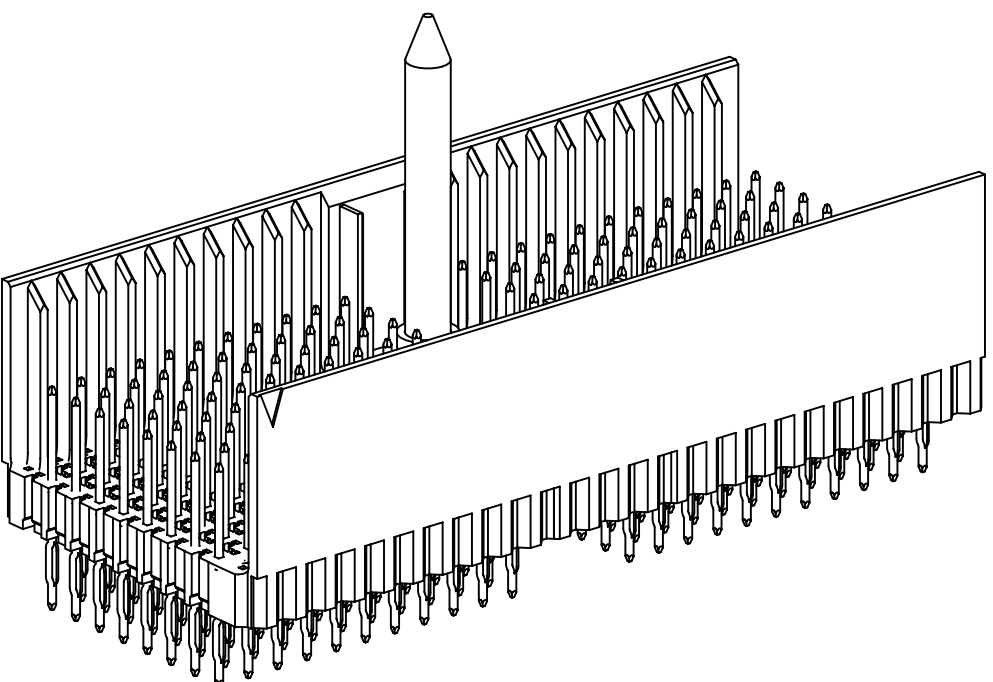
HM-H200E1-8CX1
HM-H244E2-8BX1



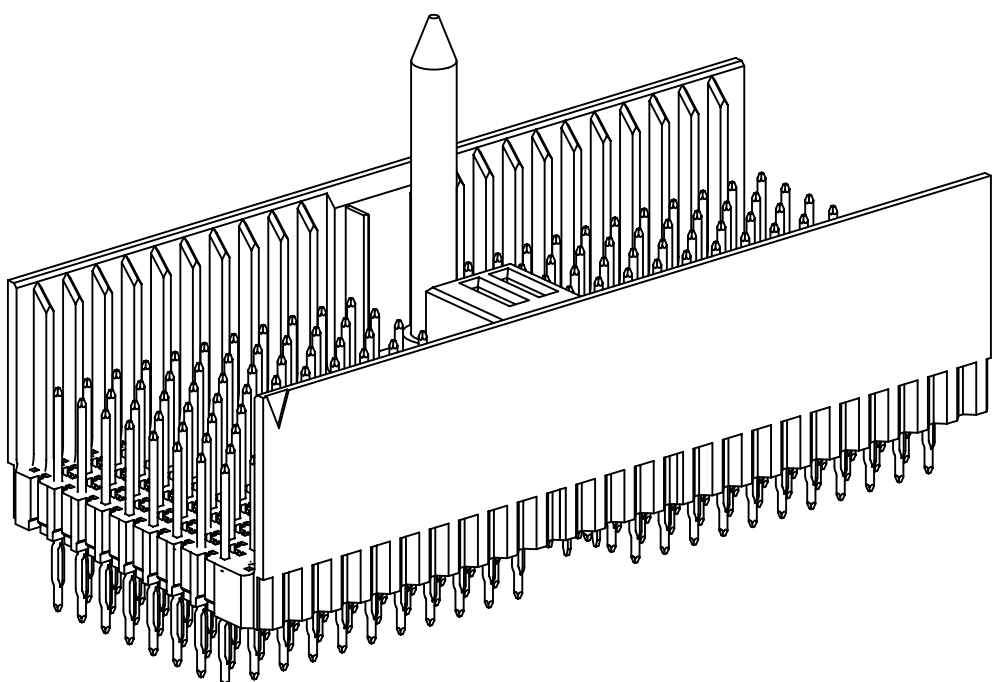
HM-H200DE1-8CX1
HM-H244DE2-8BX1



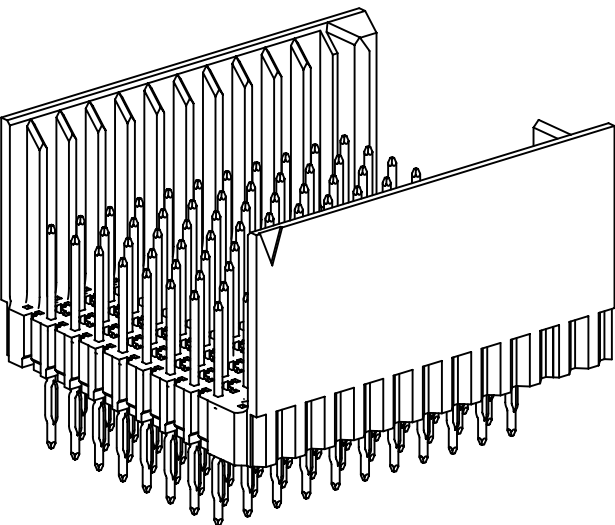
HM-H176D1-8CX1
HM-H220D2-8BX1



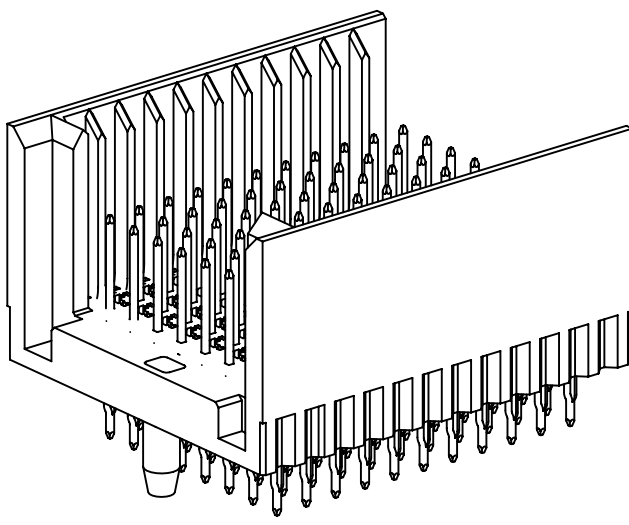
HM-H176DG1-8CX1
HM-H220DG2-8BX1



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
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)

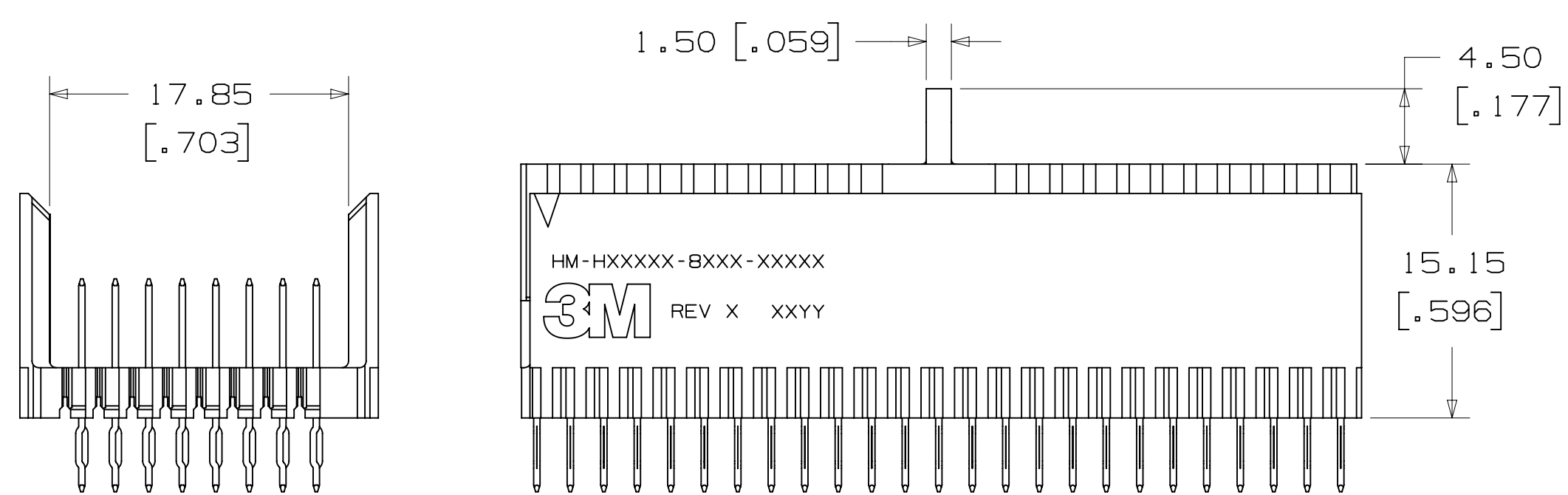
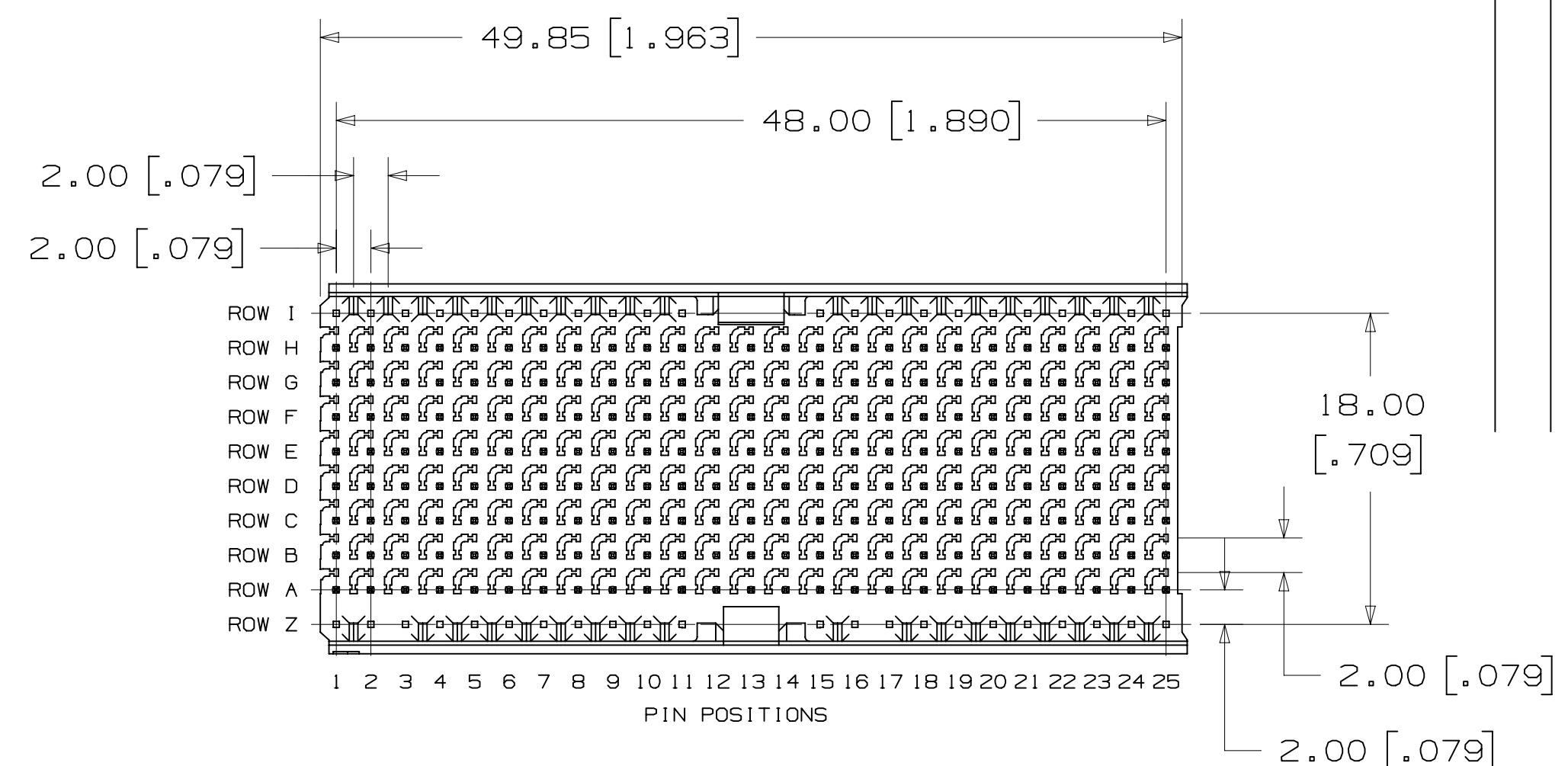
3M™ ELECTRONIC SOLUTIONS DIVISION
INTERCONNECT SOLUTIONS
<http://www.3mconnectors.com>

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

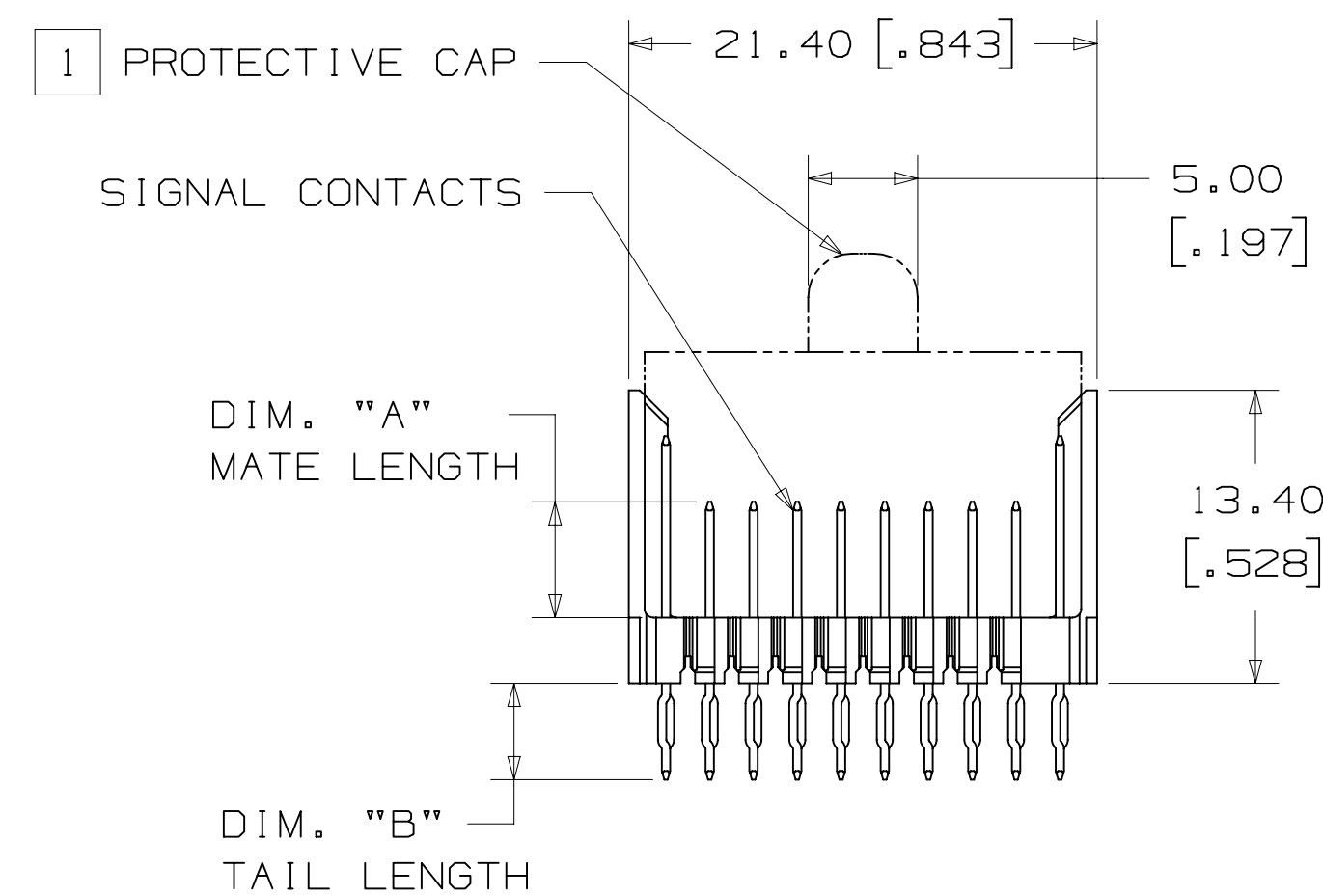
cAUs
UL FILE NO: E68080

DIMENSIONS: MM [INCHES]			A	39815	MAR 28,2012		JNC	TS
DESIGN REFERENCE			REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
NEXT ASSEMBLY			REV	ECO	DATE		DATE	DATE
DIVISION CODES			CHKD	CASTIGLIONE	MAR 28,2012		DATE	DATE
DIVISION			CHKD	DATE	APPROV		DATE	DATE
Interconnect Solutions			CHKD	DATE	T. SUNIGA		DATE	MAR 28,2012
DO NOT SCALE DRAWING			TOLERANCES EXCEPT AS NOTED			INCHES		
THIRD ANGLE PROJECTION			MILLIMETERS			.0		
INTERPRET PER ASME Y14.5 - 1994			.00			.01		
MAX SURFACE ROUGHNESS			.000			.005		
SURFACES			.0000			.000		
MARKED ONLY			.0			.3		
			.00			.13		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		
			.000			.000		

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



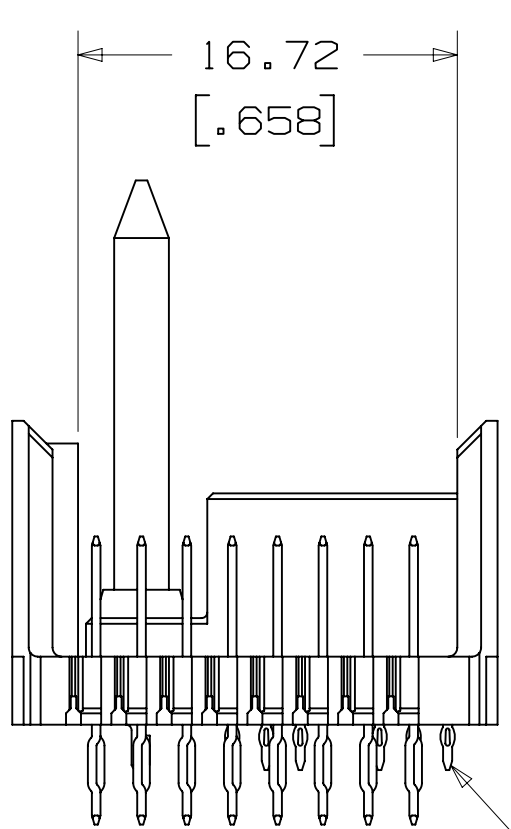
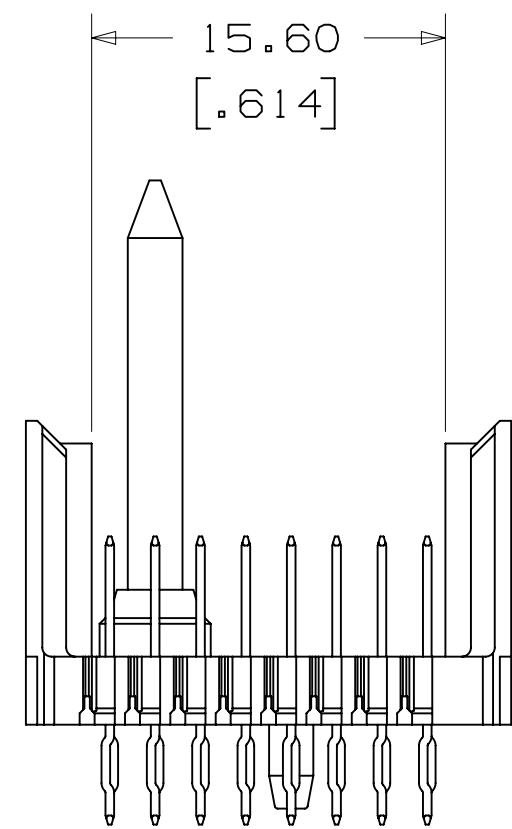
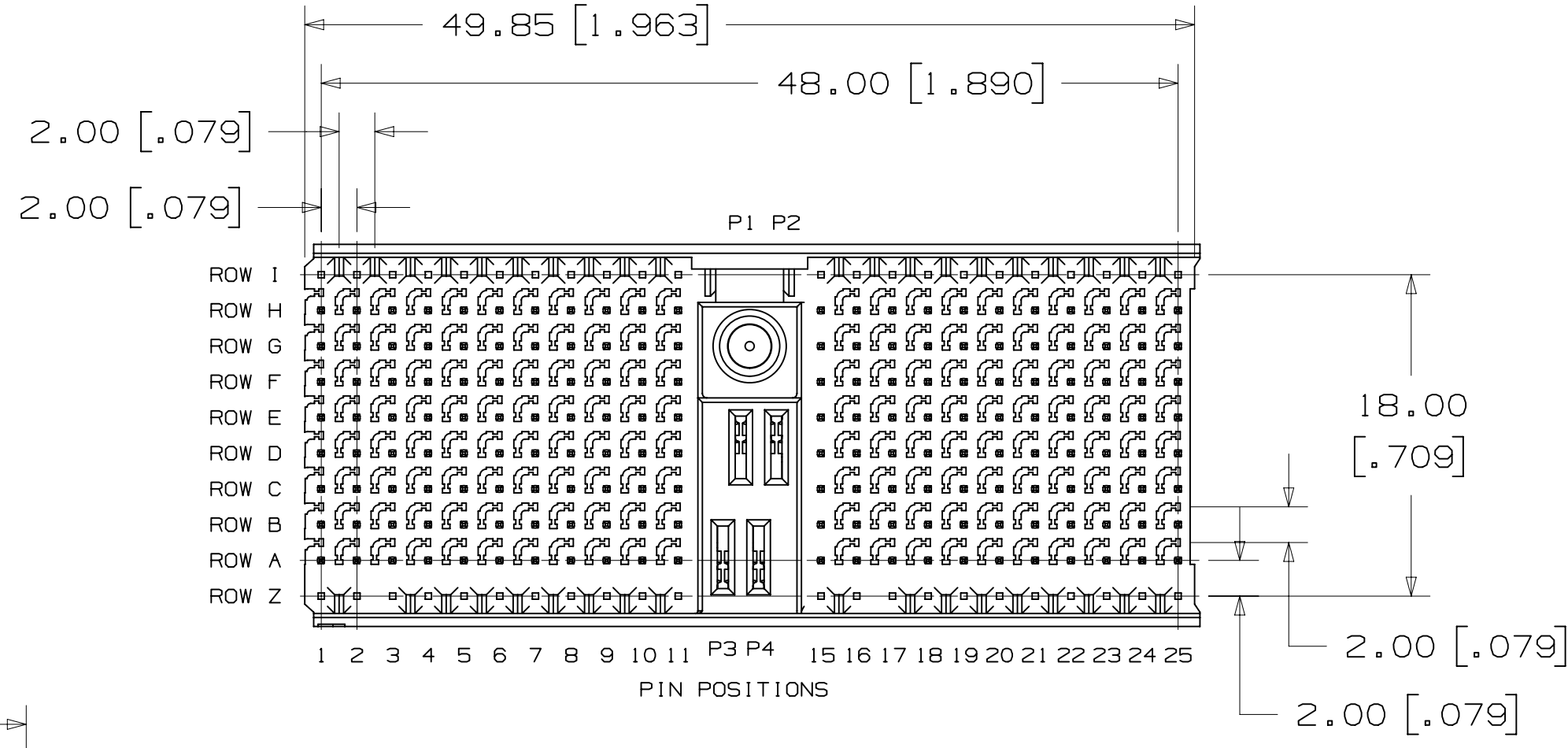
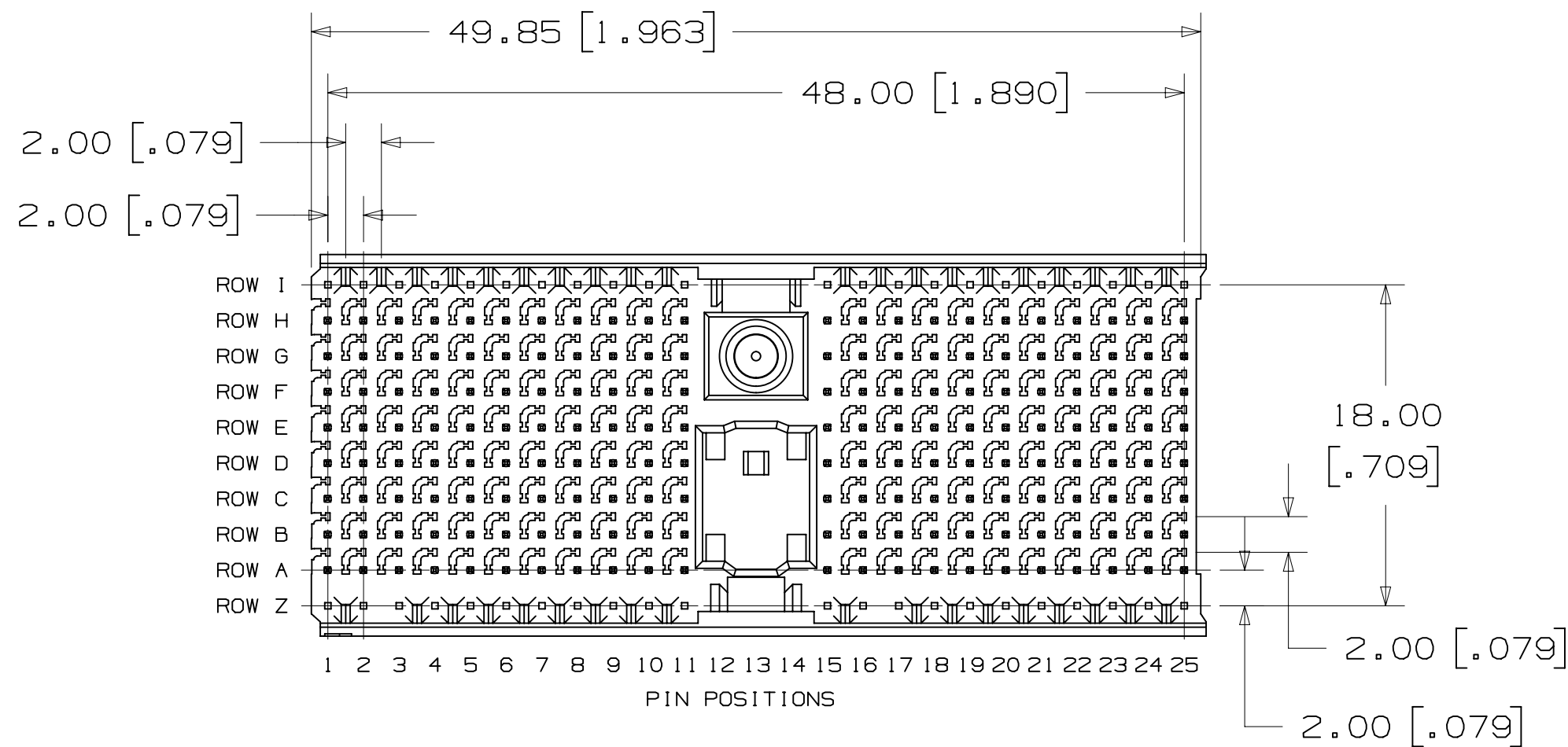
HM-H200DE1-8CX1
HM-H244DE2-8BX1



STANDARD CONFIGURATION		
DIM. "A"	5.3 [.21]	FOR ROWS A THRU H
DIM. "B"	4.4 [.17]	EXCEPT AS NOTED

		A	39815	MAR 28, 2012		JNC	TS
				PRODUCTION RELEASE			
DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION	DRAFT CHKD
DISTORTION CODES				DATE MAR 28, 2012	DATE MAR 28, 2012	APPROVAL T. SUNIGA	DATE MAR 28, 2012
DIVISION CODE Interconnect Solutions		DIVISION CODE ISD		CHKD			
DO NOT SCALE DRAWING		SCALE 3 1		TOLERANCES EXCEPT AS NOTED		 © 3M COPYRIGHT 2012 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.	
THIRD ANGLE PROJECTION		INCHES 0.0 ± .01 0.000 ± .005 0.0000 ±		TITLE HM PRESS-FIT HEADER, 8-ROW, HM SERIES			
INTERPRET PER ASME Y14.5 - 1994		MILLIMETERS 0 ± .3 0.00 ± .13 0.000 ±		CAGE NUMBER D	SIZE 78-5100-2517-0	REV. A	
MAX SURFACE ROUGHNESS ALL SURFACES ☒ UNFINISHED ☐ MARKED ONLY		ANGLES 		MODEL		DET. LISTS ☐ YES ☒ NO SHT 2 OF 4	

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

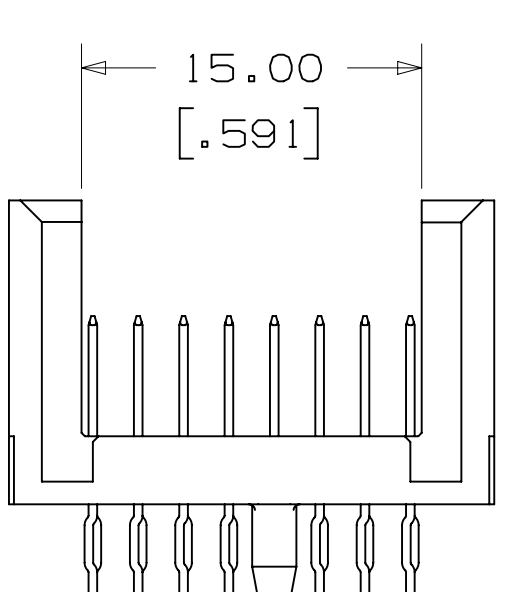
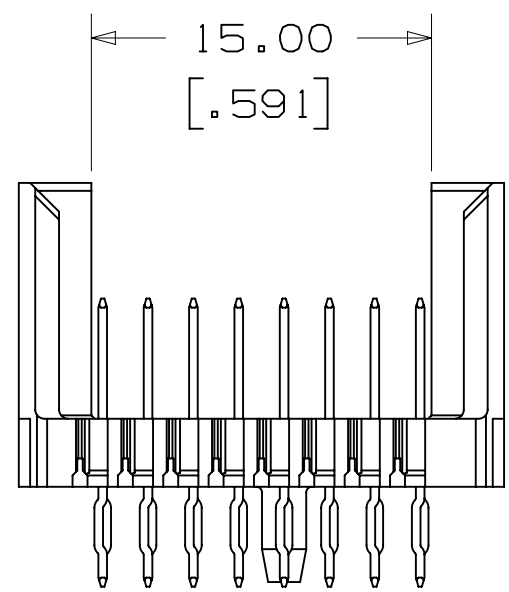
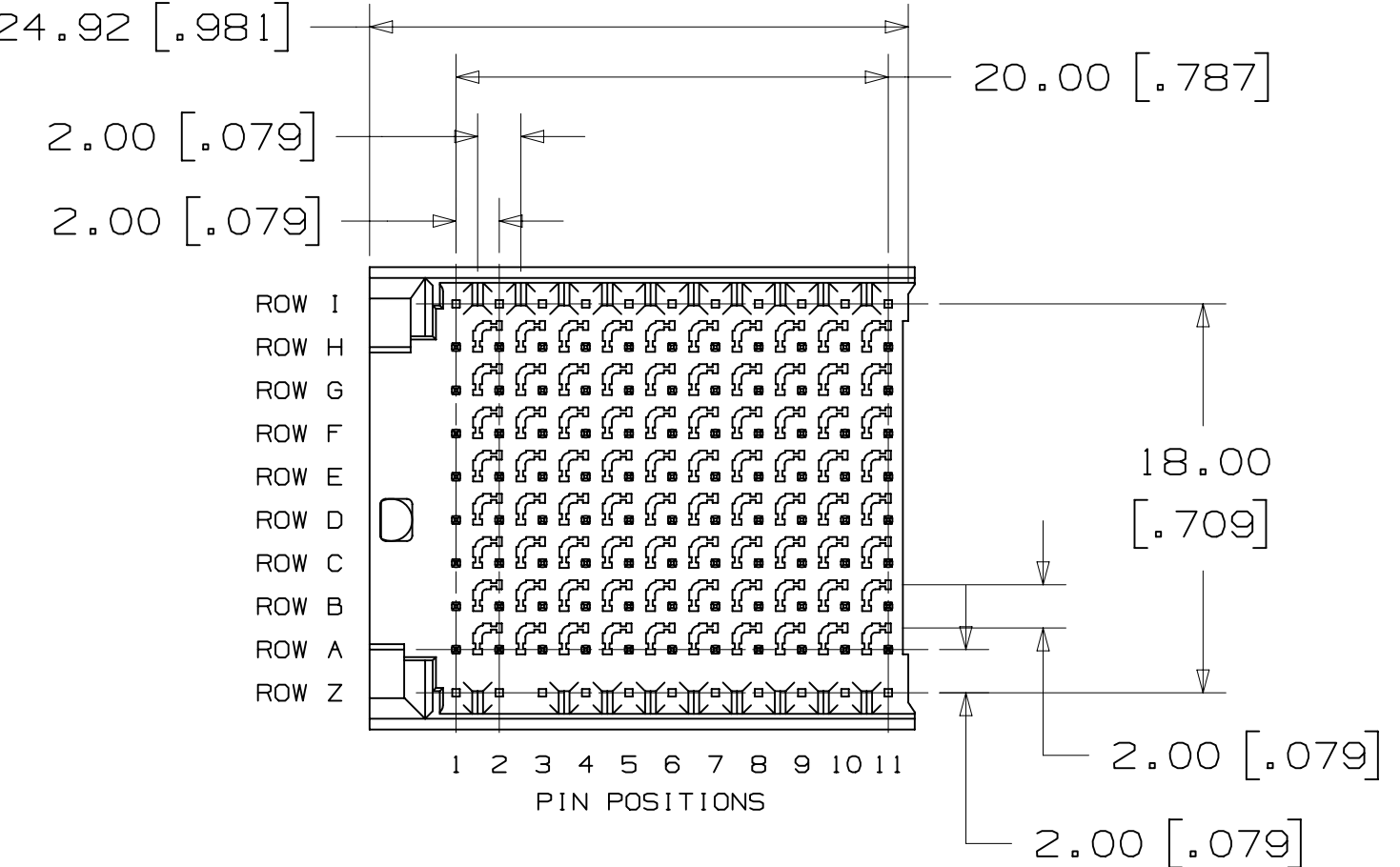
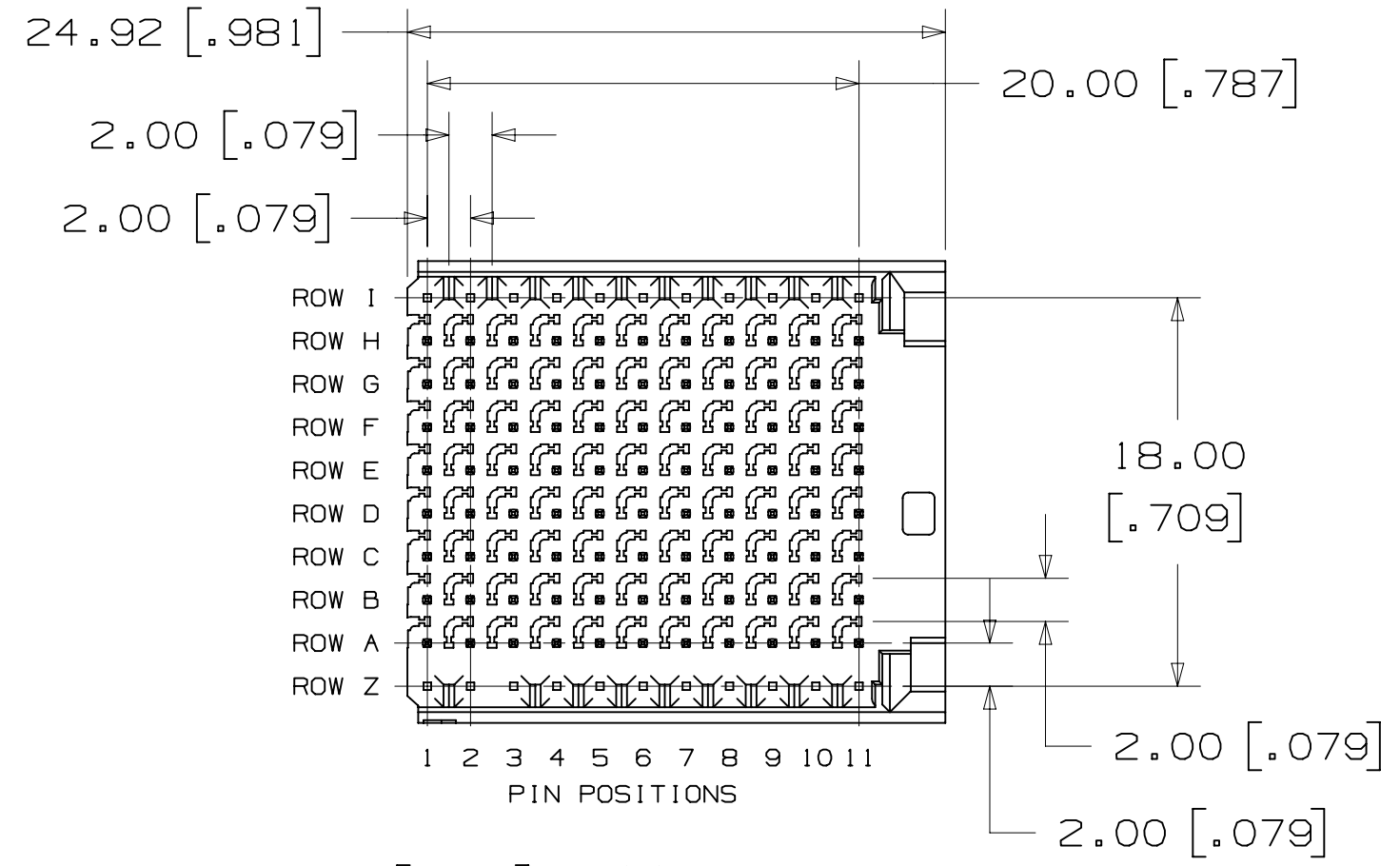


POWER TAILS
(4 CONTACTS,
12 LEADS)

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

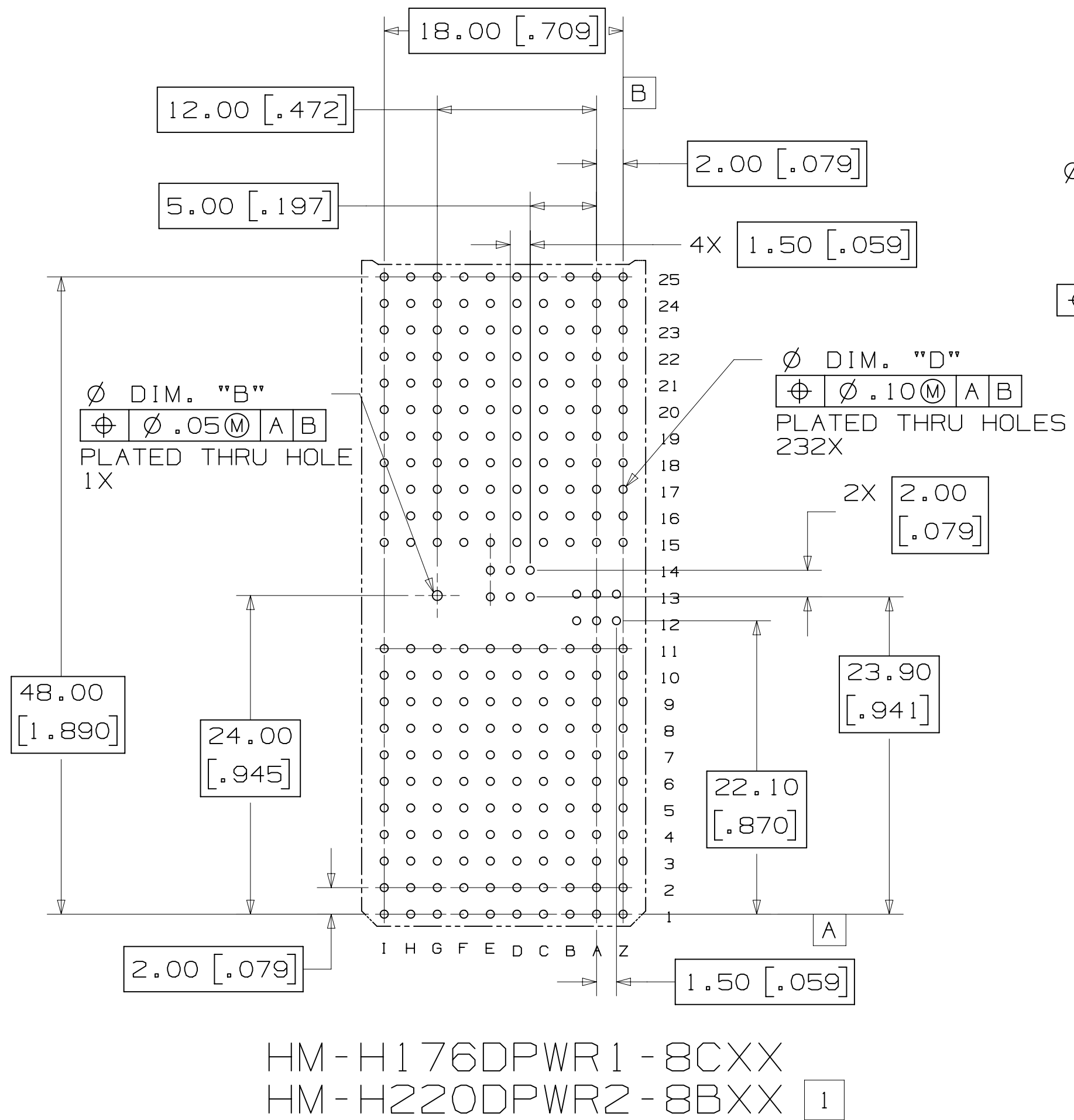
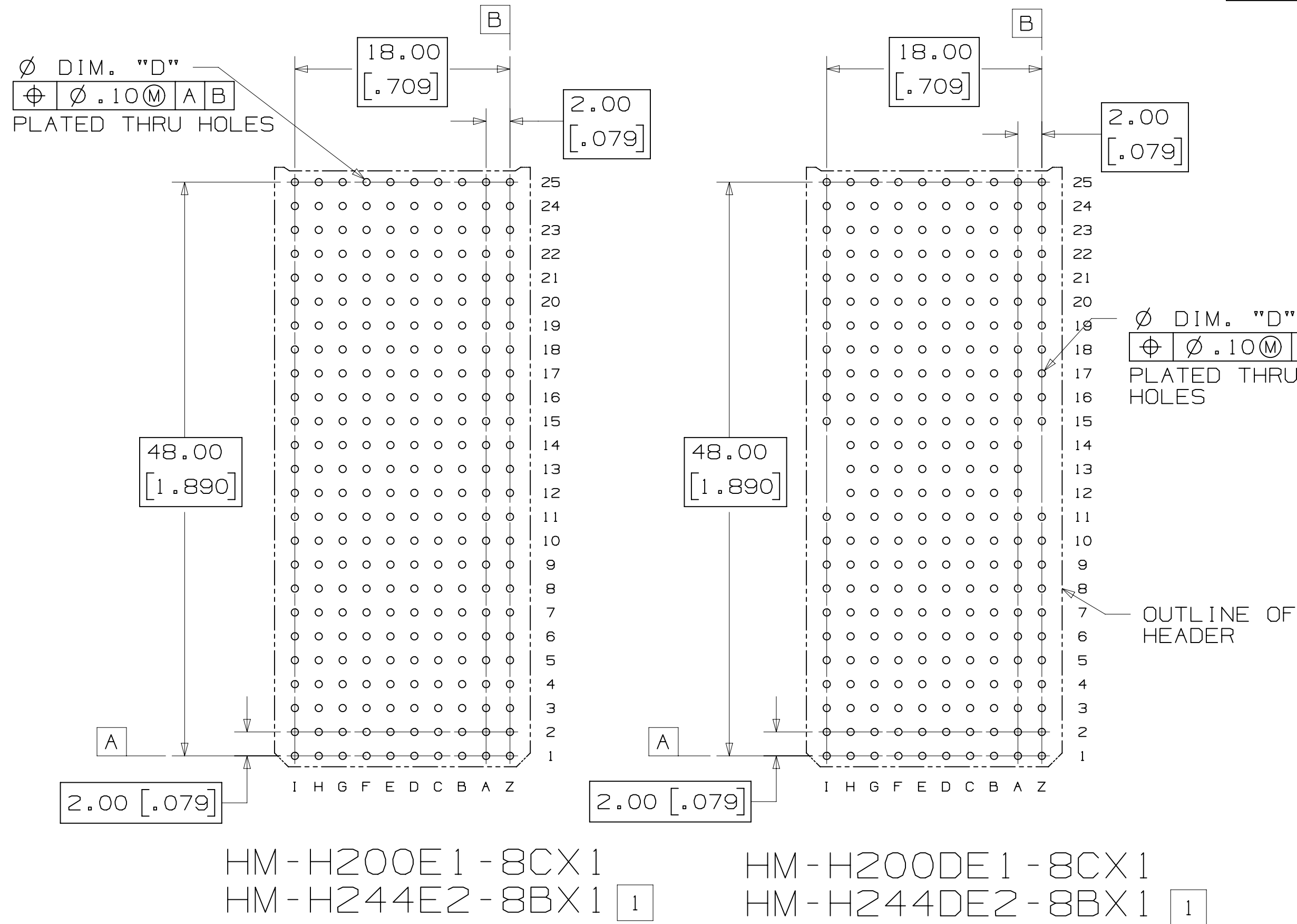


HM-H088FL1-8CX1
HM-H110FL2-8BX1

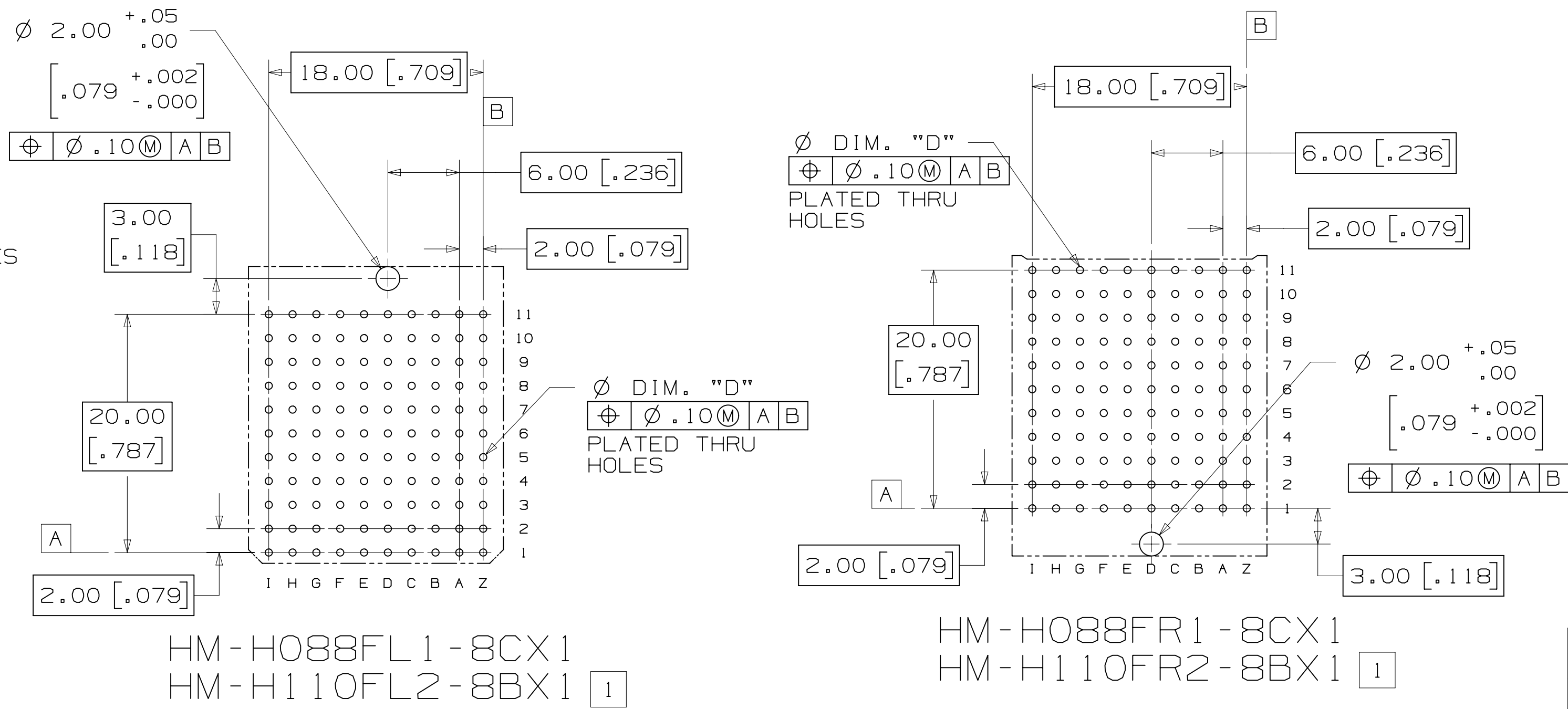
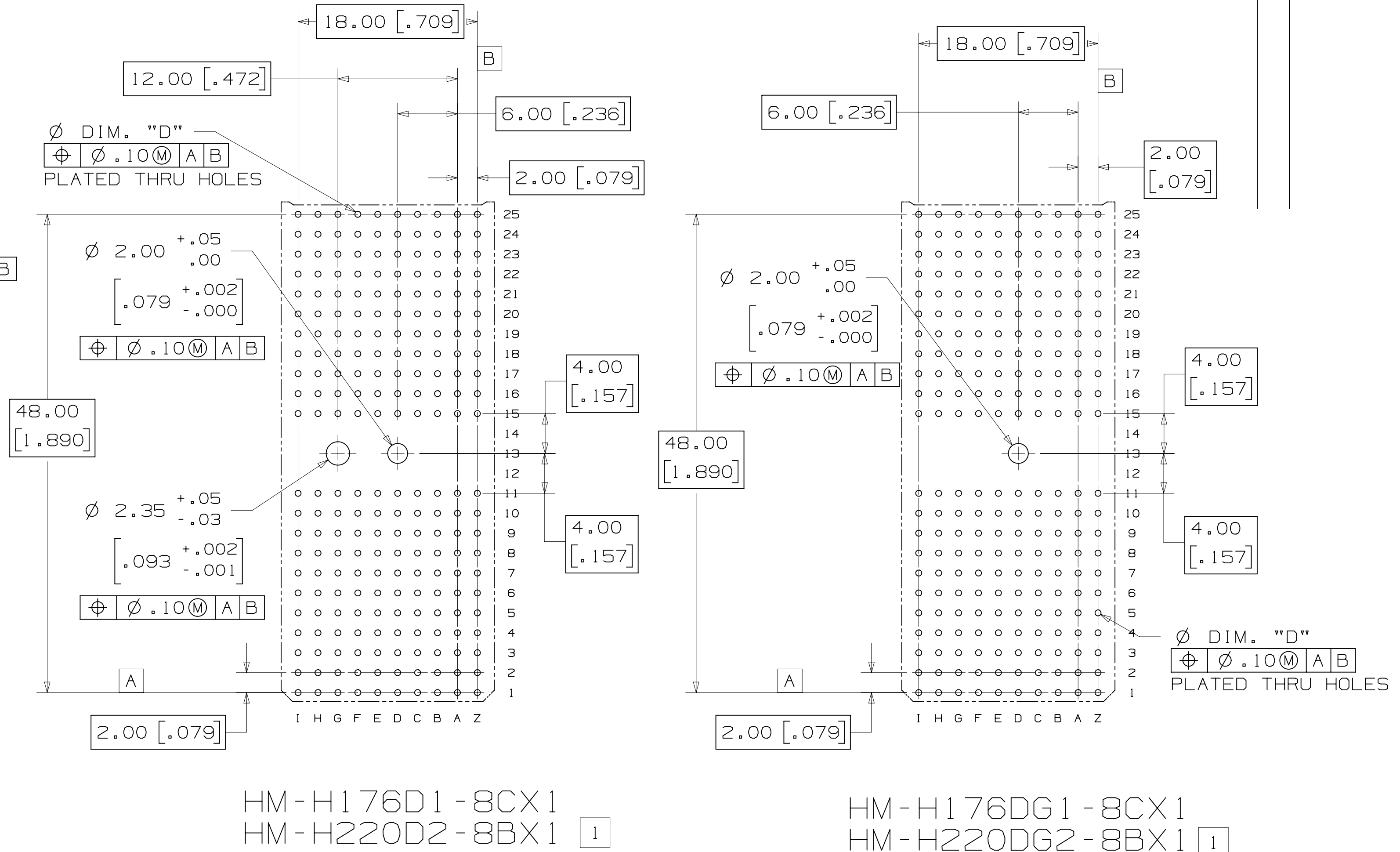
HM-H088FR1-8CX1
HM-H110FR2-8BXX1

DESIGN REFERENCE		NEXT ASSEMBLY		A 39815		MAR 28, 2012		JNC	TS
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
DISTRIB CODES		DIVISION CODE		DATE		DATE		DATE	
CHKD		CHKD		DATE		DATE		DATE	
DIVISION		INTERCONNECT SOLUTIONS		ISD		DATE		DATE	
DO NOT SCALE DRAWING		SCALE		3 1		TOLERANCES EXCEPT AS NOTED		DATE	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 1994		INCHES		MILLIMETERS		DATE	
MAX SURFACE ROUGHNESS		SURFACES		0.00 ± .01		0.00 ± .005		DATE	
MARKED ONLY		ANGLES		0.00 ± .03		0.00 ± .13		DATE	
TITLE		HM PRESS-FIT HEADER, 8-ROW, HM SERIES		CAGE NUMBER		SIZE		DRAWING NO.	
MODEL		DET		LISTS		YES		NO	
SHT		3		OF		4		A	

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



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]



RECOMMENDED PCB MOUNTING HOLE PATTERN
(VIEWED FROM COMPONENT SIDE)

DESIGN REFERENCE		NEXT ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
DISTANCE		CODES		DRFT		CASTIGLIONE		DATE		MFG		DATE	
				CHKD				DATE		APPROV		DATE	
										SUNIGA		MAR 28, 2012	
DIVISION				DIVISION CODE				3M Center St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
Interconnect Solutions				TOLERANCES EXCEPT AS NOTED				3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and 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		SCALE		TOLERANCES EXCEPT AS NOTED		INCHES		TITLE					
DRAWING		1		.00 ± .01		.000 ± .005		HM PRESS-FIT HEADER,					
				.000 ± .005				8-ROW, HM SERIES					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
THIRD ANGLE PROJECTION				MILLIMETERS				3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
INTERPRET PER ASME Y14.5 - 1994				0 ±				3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
MAX SURFACE ROUGHNESS				.00 ± .13				3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
MAX SURFACES				.000 ±				3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
✓ ☐ MARKED ONLY				ANGLES				3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.					
								3M St. Paul, MN 55144 © 3M COPYRIGHT 2012 3M property and not					