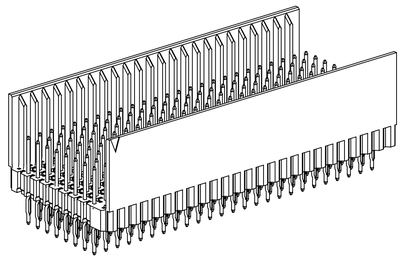
# 3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES

FOR HARD METRIC APPLICATIONS

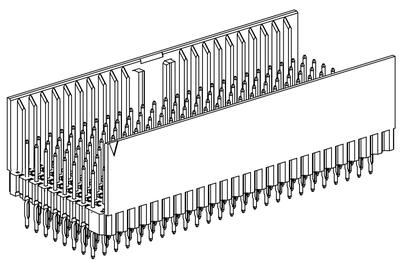
* MODULAR/SCALABLE FORMAT IEC 61076-4-101
* PRESS-FIT OF SOLDER TAIL VERSION
* 101 MATED LINES PER INCH
* SHIPS WITH PROTECTIVE CAP, WHICH ALSO SERVIES AS AN INSERTION TOOL
* END-TO-END STACKABLE WITH 8 ROW 3M™ HM AND HSHM PRODUCTS
* INTEGRATED GUIDE AND GUIDE PIN
* MULTI-PURPOSE CENTER (MPC) KEYING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



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



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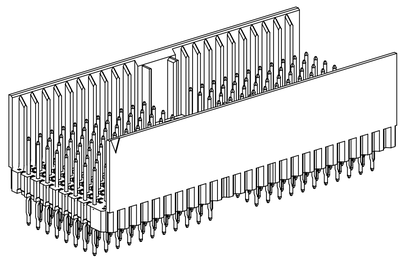

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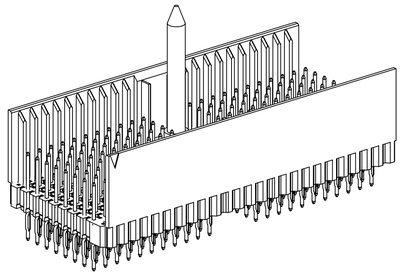
HM-H220D2-8BX1



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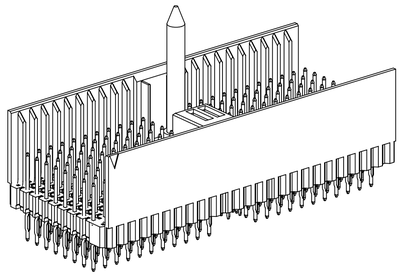

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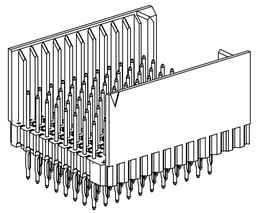

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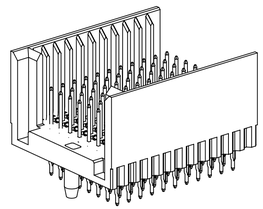
HM-H110FL2-8BX1



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

## 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: | $1 \times 10^4$ MΩ @ 100 $V_{DC}$ |
| WITHSTANDING VOLTAGE: | 750$V_{RMS}$ |

## 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) |

(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.

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

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UL FILE NO: E68080

DIMENSIONS: MM [ INCHES ]

| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|---|---|---|---|---|
| A | 39815 | MAR 28,2012 PRODUCTION RELEASE | JNC | TS |

DESIGN REFERENCE | NEXT ASSEMBLY | DISTRIBUTION CODES

DRFT: CASTIGLIONE, DATE: MAR 28,2012 | MFG | DATE
CHKD | DATE | APPVL: T. SUNIGA, DATE: MAR 28,2012

DIVISION: Interconnect Solutions | DIVISION CODE: ISD

DO NOT SCALE DRAWING | SCALE: 5/2

TOLERANCES EXCEPT AS NOTED
INCHES: .0 ± | .00 ± .01 | .000 ± .005 | .0000 ±
MILLIMETERS: 0 ± | .0 ± .3 | .00 ± .13 | .000 ±
ANGLES ±

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 1994

MAX SURFACE ROUGHNESS: ☐ ALL SURFACES ☐ MARKED ONLY

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3M Center, St. Paul, MN 55144

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

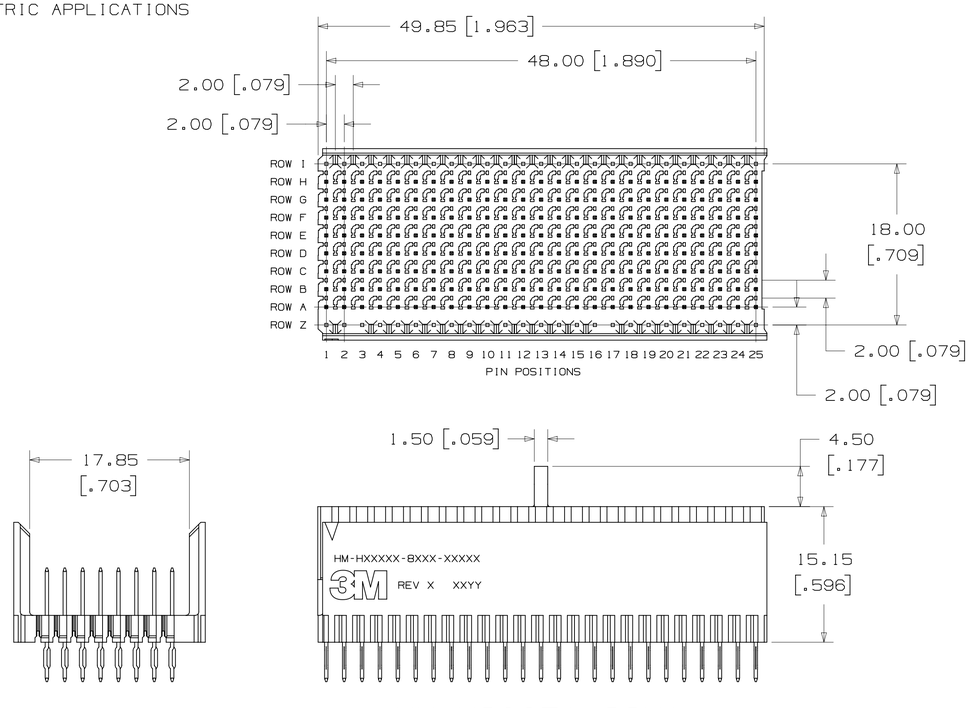
CAGE NUMBER | SIZE: D | DRAWING NO.: 78-5100-2517-0 | REV.: A

MODEL | DET. LISTS ☐ YES ☒ NO | SHT 1 OF 4

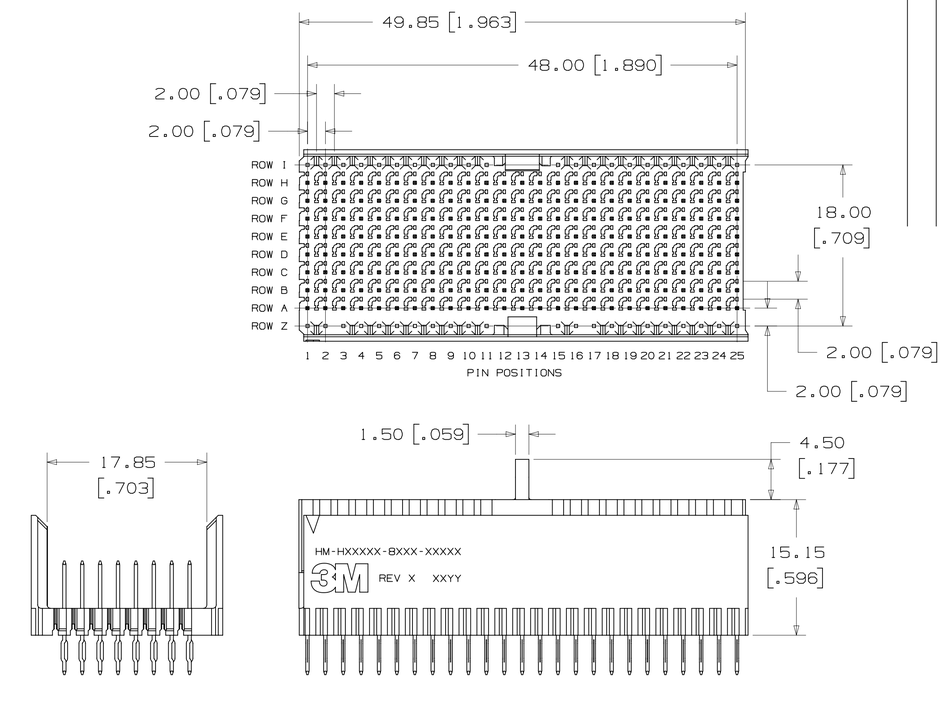
78-5100-2517-0 DRAWING NUMBER | A REVISION

# 3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES

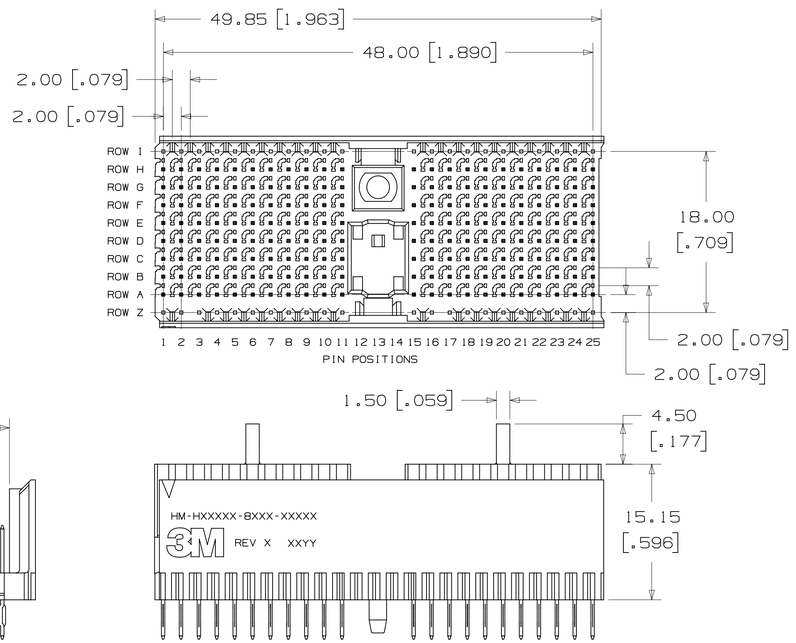
FOR HARD METRIC APPLICATIONS




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




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

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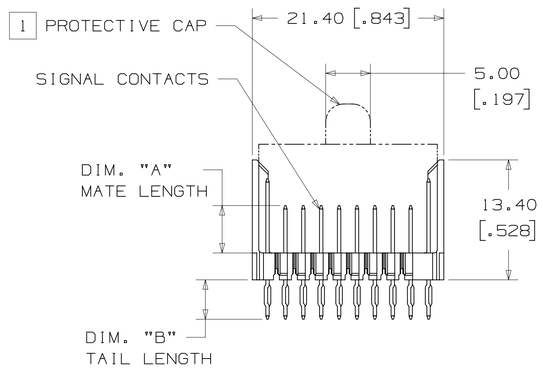
HM-H220D2-8BX1




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

NOTES

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

| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|---|---|---|---|---|
| A | 39815 | MAR 28,2012 PRODUCTION RELEASE | JNC | TS |

DESIGN REFERENCE | NEXT ASSEMBLY

DRFT: CASTIGLIONE — DATE: MAR 28,2012 — MFG — DATE

CHKD — DATE — APPVL: T. SUNIGA — DATE: MAR 28,2012

DIVISION: Interconnect Solutions — DIVISION CODE: 1SD

DO NOT SCALE DRAWING — SCALE: 3/1

TOLERANCES EXCEPT AS NOTED

INCHES: .0 ± / .00 ± .01 / .000 ± .005 / .0000 ±

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 1994

MILLIMETERS: 0 ± / .0 ± .3 / .00 ± .13 / .000 ±

MAX SURFACE ROUGHNESS: ☐ ALL SURFACES ☐ MARKED ONLY

ANGLES ±

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

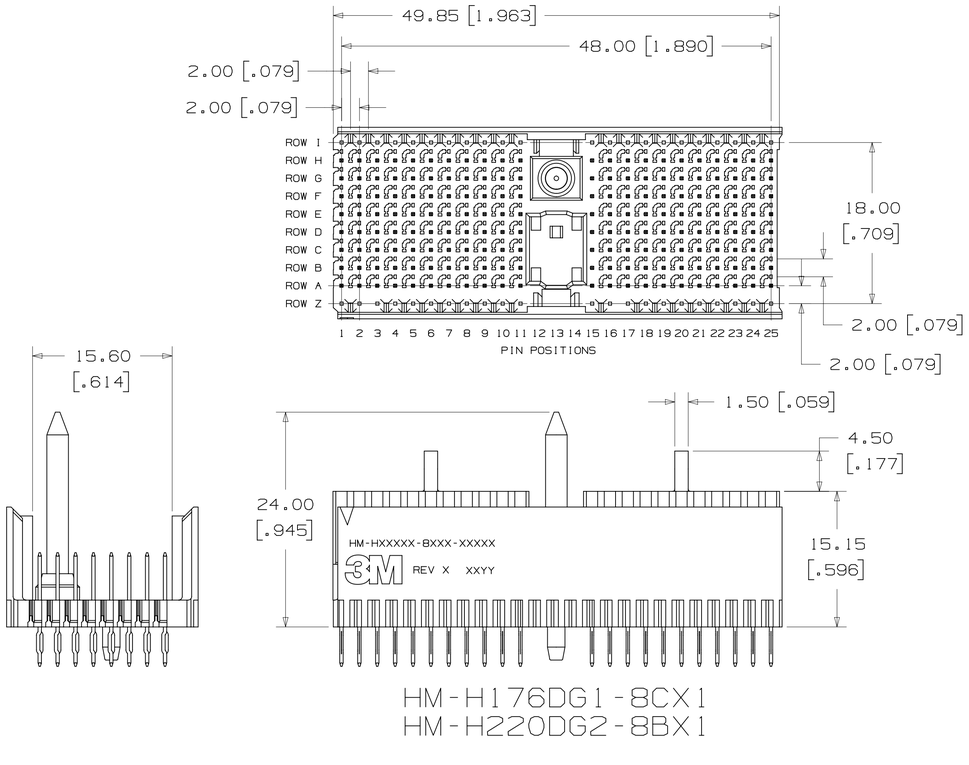
CAGE NUMBER — SIZE: D — DRAWING NO.: 78-5100-2517-0 — REV.: A

MODEL — DET. LISTS ☐ YES ☒ NO — SHT 2 OF 4

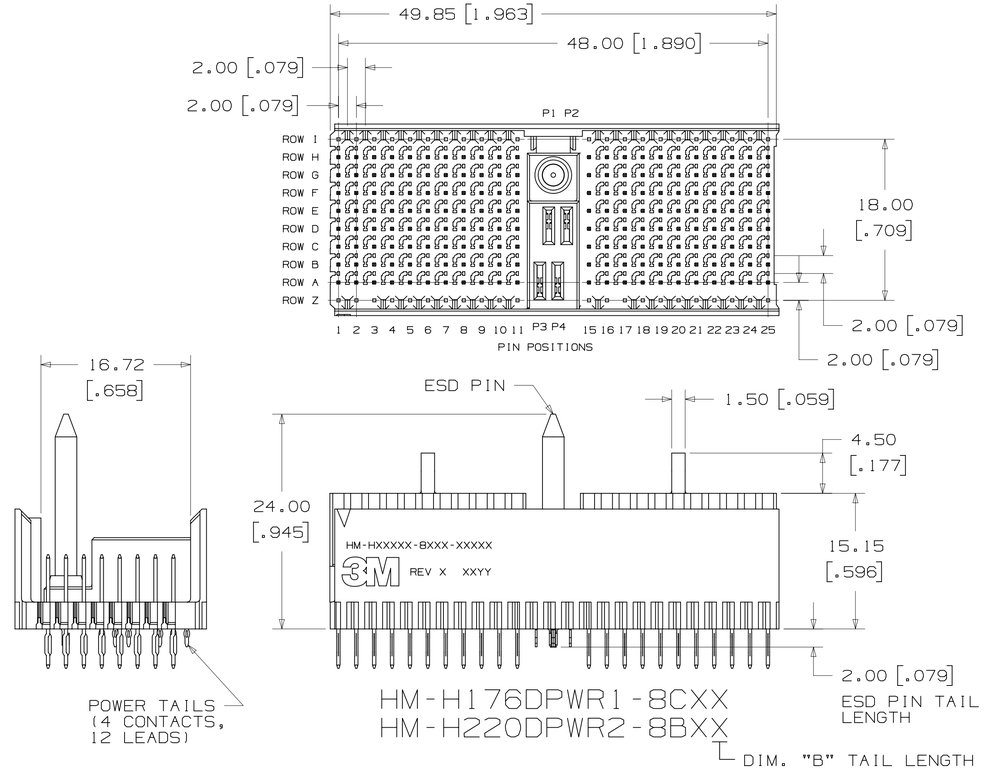
78-5100-2517-0 DRAWING NUMBER — A REVISION

# 3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES

FOR HARD METRIC APPLICATIONS



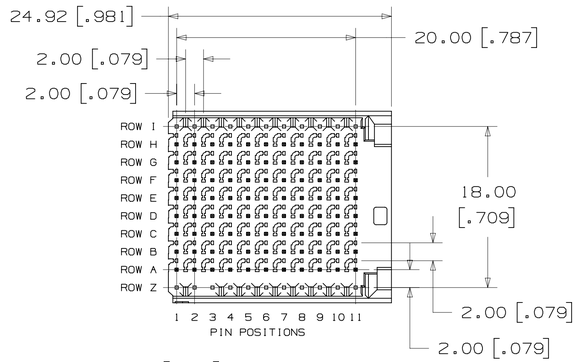

HM-H176DG1-8CX1
HM-H220DG2-8BX1




POWER TAILS
(4 CONTACTS,
12 LEADS)

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

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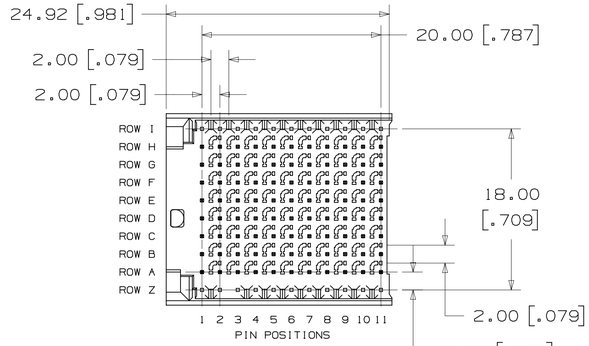
HM-H110FL2-8BX1




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

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|---|---|---|---|---|
| A | 39815 | MAR 28,2012 PRODUCTION RELEASE | JNC | TS |

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DISTRIBUTION CODES

DRFT: CASTIGLIONE | DATE: MAR 28,2012 | MFG | DATE

CHKD | DATE | APPVL: T. SUNIGA | DATE: MAR 28,2012

DIVISION: Interconnect Solutions | DIVISION CODE: ISD

DO NOT SCALE DRAWING | SCALE 3/1

TOLERANCES EXCEPT AS NOTED
INCHES
.0 ±
.00 ±.01
.000 ±.005
.0000 ±
MILLIMETERS
0 ±
.0 ±.3
.00 ±.13
.000 ±
ANGLES ±

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 1994

MAX SURFACE ROUGHNESS
☐ ALL SURFACES
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TITLE: HM PRESS-FIT HEADER, 8-ROW, HM SERIES

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2517-0 | REV. A

MODEL

DET LISTS ☐ YES ☒ NO | SHT 3 OF 4

78-5100-2517-0 (DATA NO. NUMBER) | A (REVISION)

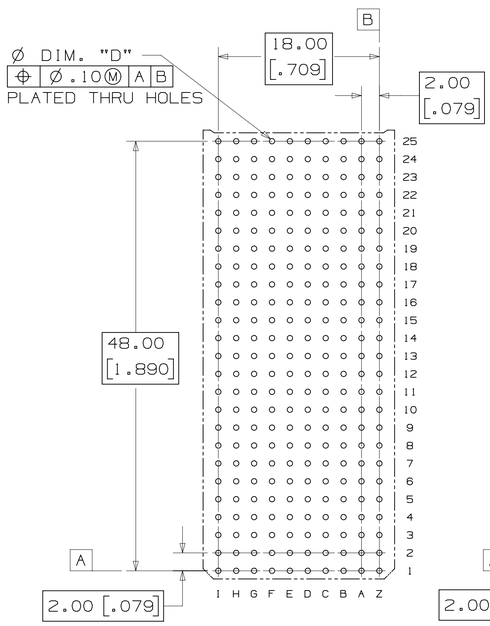
# 3M™ HM PRESS-FIT HEADER, 8-ROW, HM SERIES

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 ] |

NOTES

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

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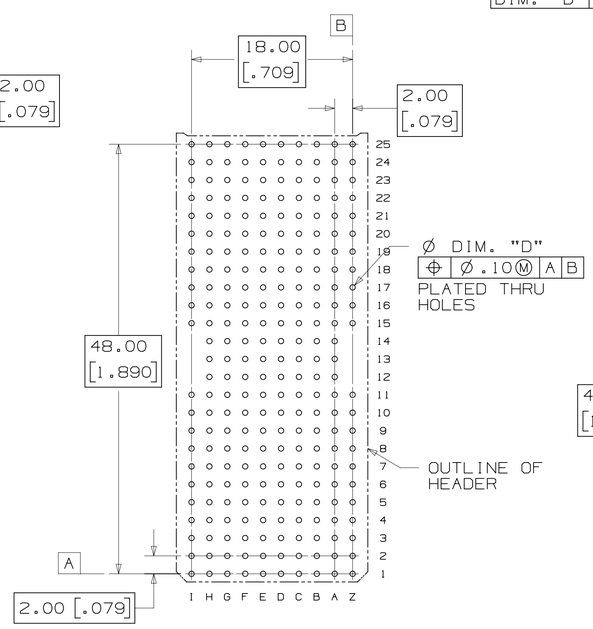
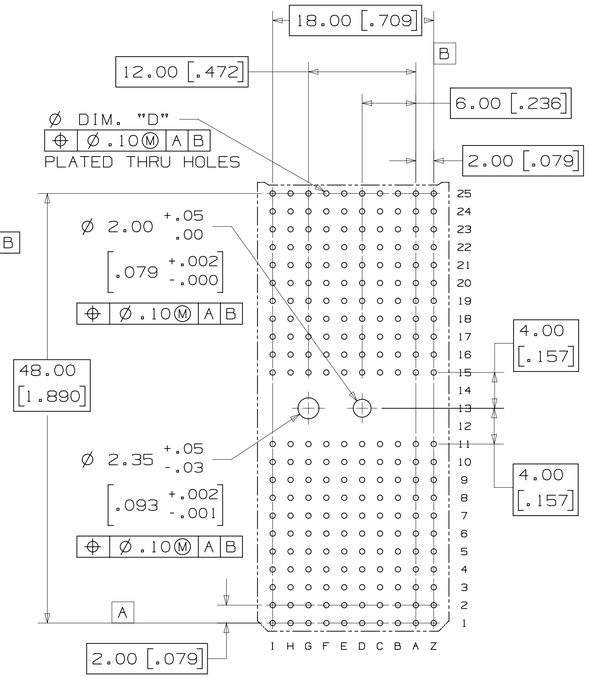
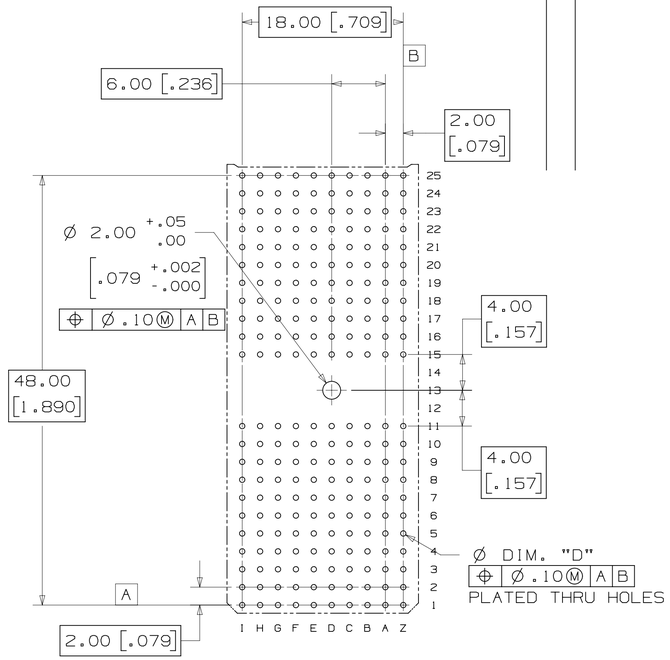
HM-H244E2-8BX1 [1]




HM-H200DE1-8CX1
HM-H244DE2-8BX1 [1]




HM-H176D1-8CX1
HM-H220D2-8BX1 [1]

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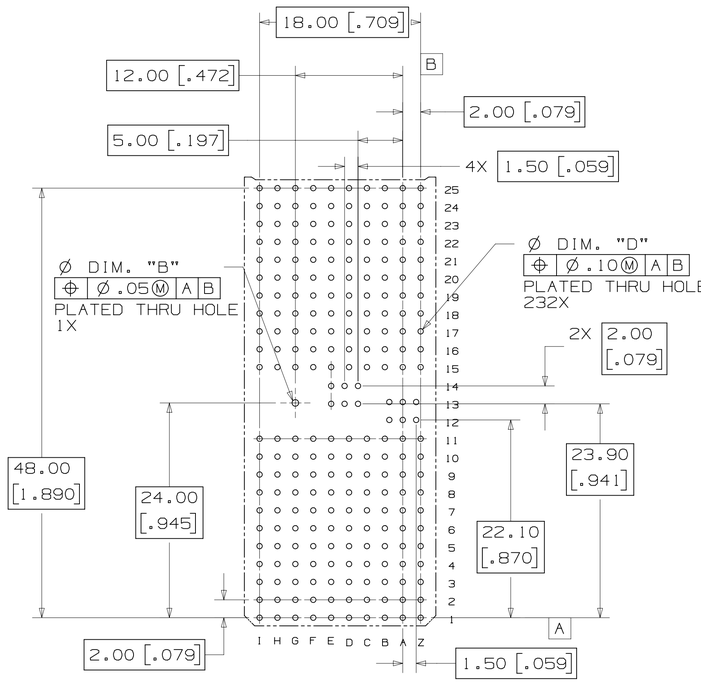
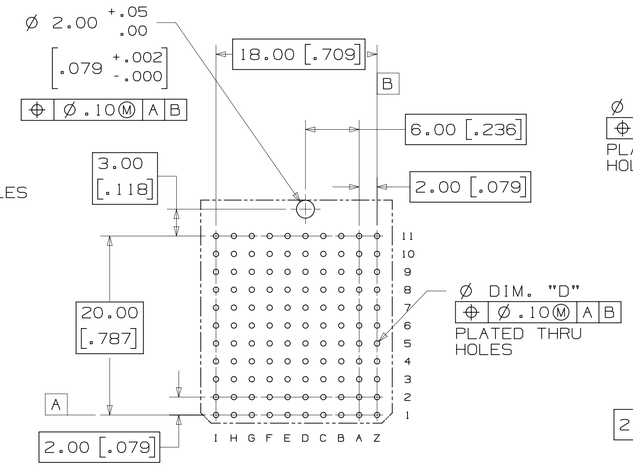
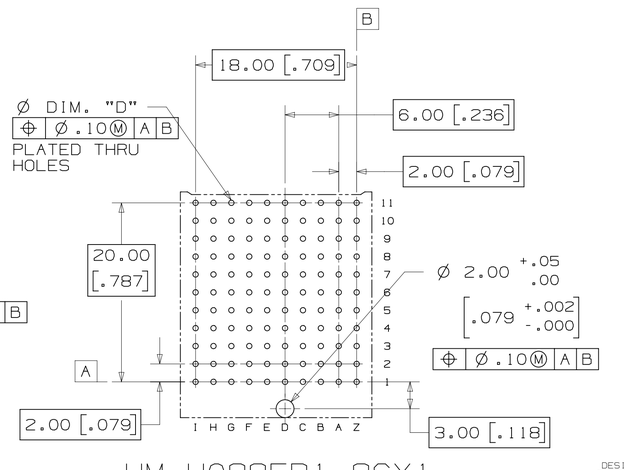
HM-H220DG2-8BX1 [1]




HM-H176DPWR1-8CXX
HM-H220DPWR2-8BXX [1]




HM-H088FL1-8CX1
HM-H110FL2-8BX1 [1]




HM-H088FR1-8CX1
HM-H110FR2-8BX1 [1]

## RECOMMENDED PCB MOUNTING HOLE PATTERN (VIEWED FROM COMPONENT SIDE)

| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|---|---|---|---|---|
| A | 39815 | MAR 28,2012 PRODUCTION RELEASE | JNC | TS |

DESIGN REFERENCE | NEXT ASSEMBLY

DISTRIBUTION CODES

DRFT CASTIGLIONE DATE MAR 28,2012 MFG DATE

CHKD DATE APPVL T. SUNIGA DATE MAR 28,2012

DIVISION: Interconnect Solutions

DIVISION CODE: ISD

DO NOT SCALE DRAWING | SCALE 3/1

TOLERANCES EXCEPT AS NOTED

INCHES: .0 ± | .00 ± .01 | .000 ± .005 | .0000 ±

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 1994

MILLIMETERS: 0 ± | .0 ± .3 | .00 ± .13 | .000 ±

MAX SURFACE ROUGHNESS: ALL SURFACES / MARKED ONLY

ANGLES ±

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3M Center, St. Paul, MN 55144

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

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2517-0 | REV. A

MODEL

DET LISTS ☐ YES ☒ NO | SHT 4 OF 4

78-5100-2517-0 DRAWING NUMBER | A REVISION

# OCEAN CHIPS
## Океан Электроники
## Поставка электронных компонентов

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
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- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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