

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0736441007](#)
Status: **Active**
Overview: [hdm](#)
Description: 2.00mm (.079") Pitch HDM® Board-to-Board Backplane Header, Vertical, SMC, Press-Fit, Guide Post Location A, Polarizing Key Position D, 144 Circuits

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family Backplane Connectors
 Series [73644](#)
 Application Backplane
 Comments Standard Press-Fit
 Component Type PCB Header
 Overview [hdm](#)
 Product Name HDM®
 Style N/A

Physical

Circuits (Loaded) 144
 Circuits (maximum) 144
 Color - Resin Black, Natural
 Durability (mating cycles max) 250
 First Mate / Last Break No
 Flammability 94V-0
 Guide to Mating Part Yes
 Keying to Mating Part Yes
 Material - Metal Phosphor Bronze, Stainless Steel
 Material - Plating Mating Gold
 Material - Plating Termination Gold
 Material - Resin High Temperature Thermoplastic
 Number of Columns 24
 Number of Pairs Open Pin Field
 Number of Rows 6
 Orientation Vertical
 PC Tail Length (in) 0.138 In
 PC Tail Length (mm) 3.50 mm
 PCB Locator No
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.098 In
 PCB Thickness Recommended (mm) 2.50 mm
 Packaging Type Tube
 Pitch - Mating Interface (in) 0.079 In
 Pitch - Mating Interface (mm) 2.00 mm
 Pitch - Term. Interface (in) 0.079 In
 Pitch - Term. Interface (mm) 2.00 mm
 Plating min: Mating (µin) 30
 Plating min: Mating (µm) 0.75
 Plating min: Termination (µin) 2
 Plating min: Termination (µm) 0.05
 Polarized to PCB No

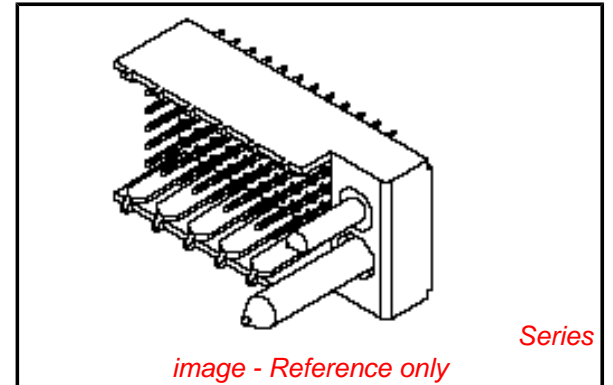


image - Reference only

EU RoHS

**ELV and RoHS
 Compliant
 REACH SVHC
 Not Reviewed
 Halogen-Free
 Status
 Not Reviewed**

China RoHS



Need more information on product environmental compliance?

Email productcompliance@molex.com
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[73644Series](#)

Mates With

[73632 HDM PLUS® Board-to-Board Daughtercard Receptacle](#). [73780 HDM® Board-to-Board Daughtercard Receptacle](#)

Application Tooling | FAQ

Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.

Global

| Description | Product # |
|---|----------------------------|
| Flat Rock Tooling for Pneumatic Press | 0622013700 |
| HDM® Backplane Insertion Signal Contact Tool | 0621001400 |
| HDM® Backplane Insertion Head for 144 Positions | 0622005703 |

| | |
|--------------------------------|------------------------------|
| Stackable | No |
| Surface Mount Compatible (SMC) | Yes |
| Temperature Range - Operating | -55°C to +105°C |
| Termination Interface: Style | Through Hole - Compliant Pin |

| | |
|-----------------|------------|
| Extraction Tool | 0621001000 |
|-----------------|------------|

Electrical

| | |
|-------------------------------|----------|
| Current - Maximum per Contact | 1A |
| Data Rate | 1.0 Gbps |
| Real Signals (per 25mm) | 75 |
| Shielded | No |
| Voltage - Maximum | 250V AC |

Material Info

Reference - Drawing Numbers

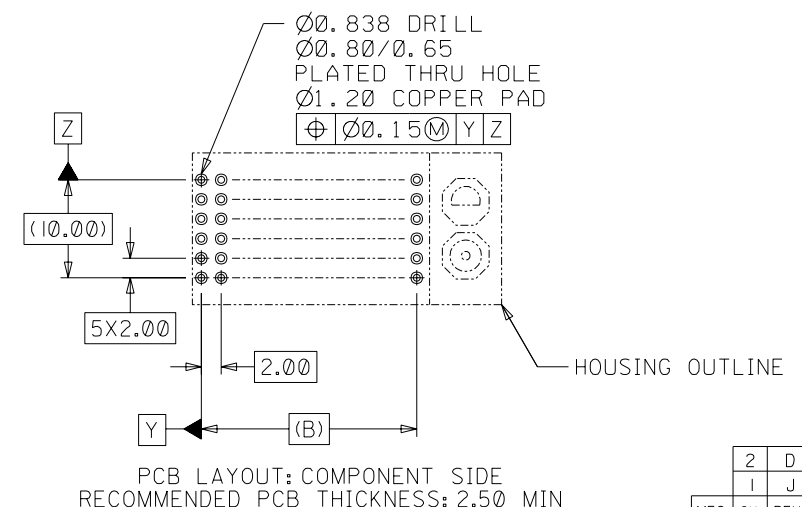
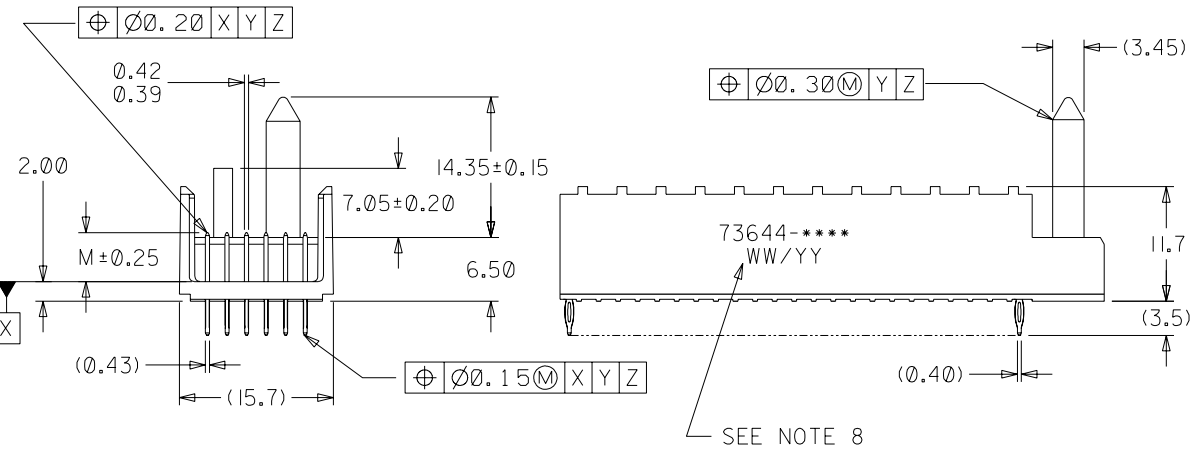
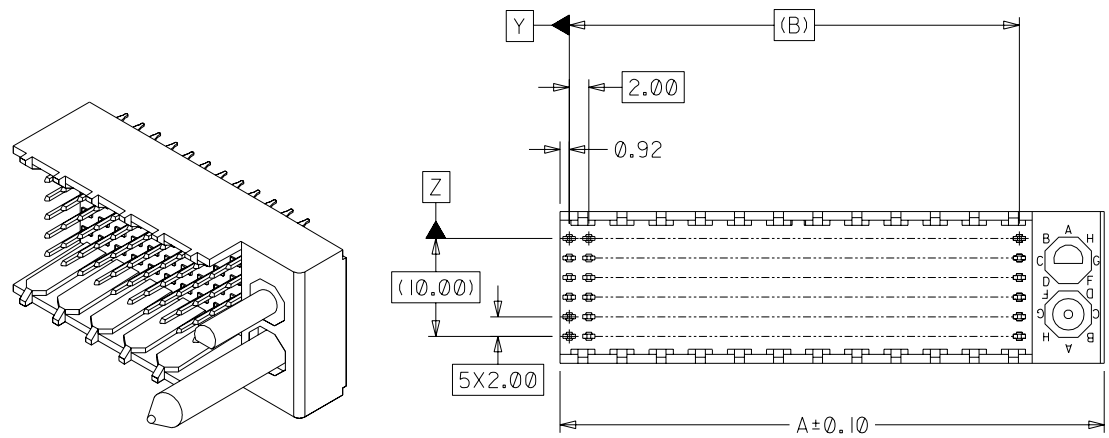
| | |
|-------------------------|----------------|
| Packaging Specification | PK-70873-0818 |
| Sales Drawing | SDA-73644-**** |

HDM and High Density Metric are trademarks of Amphenol Corporation

This document was generated on 05/14/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

- NOTES:**
- MATERIALS: HOUSING - LIQUID CRYSTAL POLYMER (LCP), GLASS-FILLED, UL94V-0, COLOR: BLACK, TERMINAL - PHOSPHOR BRONZE.
 - FINISHES: SELECTIVE GOLD (Au) IN CONTACT AREA, 0.00076mm MINIMUM THICKNESS; NICKEL (Ni) AND GOLD FLASH OVERALL SELECTIVE GOLD (Au) IN CONTACT AREA, 0.00076mm MIN. THICKNESS; SELECTIVE TIN/LEAD (Sb/Pb) IN TAIL AREA; NICKEL (Ni) OVERALL.
 - THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-73670-9999.
 - FOR MIXED CONTACT MATING LENGTHS, CONSULT FACTORY FOR AVAILABILITY.
 - DIMENSIONS ARE IN MILLIMETERS.
 - FOR SPECIFIC MATERIAL NUMBERS, REFER TO SHEET 2.
 - PACKAGE PER PK-70873-0818.
 - PARTS MARKED WITH PART NUMBER AND DATE CODE, ON EITHER SIDE, APPROXIMATELY WHERE SHOWN.



| | |
|----------|------|
| 2 | D |
| 1 | J |
| MFG. SH. | REV. |

SEE NOTE 8

| | | | | | | | | | | | | | | | | |
|---------|-------|--------|--|---|---|---|-------|---|---------|-------|--------|---------|-----|--------|---|--|
| | | I | | REVISED ECR UDT2000-0348 BINGHAM 99/10/12 | DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2° <table border="1"> <tr> <td>3 PLACE</td> <td>± N/A</td> <td>---</td> </tr> <tr> <td>2 PLACE</td> <td>± N/A</td> <td>± 0.05</td> </tr> <tr> <td>1 PLACE</td> <td>---</td> <td>± 0.10</td> </tr> </table> | 3 PLACE | ± N/A | --- | 2 PLACE | ± N/A | ± 0.05 | 1 PLACE | --- | ± 0.10 | ▽ = 0 ▾ = 0 REVISE ONLY ON CAD SYSTEM TITLE SALES ASSY, HDM BACKPLANE MODULE, POLAR/GUIDE OPTION | |
| 3 PLACE | ± N/A | --- | | | | | | | | | | | | | | |
| 2 PLACE | ± N/A | ± 0.05 | | | | | | | | | | | | | | |
| 1 PLACE | --- | ± 0.10 | | | | | | | | | | | | | | |
| | | H | | REVISED ECR UDT1999-0662 BINGHAM 99/05/18 | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DRWG. BY: JRR CHK'D. BY: SMR APP'D. BY: CAB SCALE: 2 : 1 | MOLEX INCORPORATED SHEET NO. DATE LISLE, ILL. 60532 U.S.A. 1 OF 2 96/12/18 PART NO. DRWG. NO. SEE CHART SDA-73644-**** | | | | | | | | | | |
| J | | G | | REVISED ECR UCP2003-2260 THOMAS 03/04/25 | | FILE NAME S73644X1 DGN | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. | | | | | | | | |
| LTR. | | LTR. | | REVISIONS | REVISIONS | DA | B | | | | | | | | | |

| MATERIAL NUMBER | NUMBER OF SIGNAL CONTACTS | PLATING | DIM "A" | DIM "B" | DIM "M" |
|-----------------|---------------------------|-----------------------------------|---------|---------|---------|
| 73644-00** | 72 | SELECTIVE GOLD/GOLD FLASH | 31.60 | 22.00 | 5.00 |
| 73644-01** | 72 | SELECTIVE GOLD/GOLD FLASH | 31.60 | 22.00 | 5.50 |
| 73644-02** | 72 | SELECTIVE GOLD/GOLD FLASH | 31.60 | 22.00 | 6.00 |
| 73644-10** | 144 | SELECTIVE GOLD/GOLD FLASH | 55.60 | 46.00 | 5.00 |
| 73644-11** | 144 | SELECTIVE GOLD/GOLD FLASH | 55.60 | 46.00 | 5.50 |
| 73644-12** | 144 | SELECTIVE GOLD/GOLD FLASH | 55.60 | 46.00 | 6.00 |
| 73644-20** | 72 | SELECTIVE GOLD/SELECTIVE TIN-LEAD | 31.60 | 22.00 | 5.00 |
| 73644-21** | 72 | SELECTIVE GOLD/SELECTIVE TIN-LEAD | 31.60 | 22.00 | 5.50 |
| 73644-22** | 72 | SELECTIVE GOLD/SELECTIVE TIN-LEAD | 31.60 | 22.00 | 6.00 |
| 73644-30** | 144 | SELECTIVE GOLD/SELECTIVE TIN-LEAD | 55.60 | 46.00 | 5.00 |
| 73644-31** | 144 | SELECTIVE GOLD/SELECTIVE TIN-LEAD | 55.60 | 46.00 | 5.50 |
| 73644-32** | 144 | SELECTIVE GOLD/SELECTIVE TIN-LEAD | 55.60 | 46.00 | 6.00 |

MATERIAL NUMBER ASSIGNMENT

73644- * * * *

0 = 72-CIRCUIT, GOLD/GOLD FLASH
 1 = 144-CIRCUIT, GOLD/GOLD FLASH
 2 = 72-CIRCUIT, GOLD/TIN-LEAD
 3 = 144-CIRCUIT, GOLD/TIN-LEAD

0 = 5.00 MATING LENGTH
 1 = 5.50 MATING LENGTH
 2 = 6.00 MATING LENGTH

| NUMBER | GUIDE POST LOCATION | POLAR KEY POSITION |
|--------|---------------------|--------------------|
| 00 | B | |
| 01 | A | A |
| 02 | B | |
| 03 | A | B |
| 04 | B | C |
| 05 | A | |
| 06 | B | D |
| 07 | A | |
| 08 | B | E |
| 09 | A | |
| 10 | B | F |
| 11 | A | |
| 12 | B | G |
| 13 | A | |
| 14 | B | H |
| 15 | A | |
| 16 | B | |
| 17 | A | N/A |
| 18 | N/A | |



REF. MATERIAL NUMBER 73644-0009
 GUIDE PIN IS IN LOCATION A
 POLARIZING KEY IS IN LOCATION B, POSITION E

REF. MATERIAL NUMBER 73644-0008
 GUIDE PIN IS IN LOCATION B
 POLARIZING KEY IS IN LOCATION A, POSITION E

| DIMENSIONS SHOWN (METRIC) INCH | |
|---|----------------|
| UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR = 1/2° | |
| | |
| 3 PLACE | ± N/A --- |
| 2 PLACE | ± N/A ± N/A |
| 1 PLACE | --- ± N/A |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | |
| DRWG. BY: JRR | CHK'D. BY: SMR |
| APP'D. BY: CAB | SCALE: ---:--- |
| LTR. REVISIONS | LTR. REVISIONS |

| | |
|---|--|
| DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR = 1/2° 3 PLACE ± N/A --- 2 PLACE ± N/A ± N/A 1 PLACE --- ± N/A DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DRWG. BY: JRR CHK'D. BY: SMR APP'D. BY: CAB SCALE: ---:--- | ▽ = 0 ▼ = 0 REVISE ONLY ON CAD SYSTEM TITLE SALES ASSY, HDM BACKPLANE MODULE, POLAR/GUIDE OPTION MOLEX INCORPORATED SHEET NO. 2 DATE 96/12/18 LISLE, ILL. 60532 U.S.A. PART NO. DRWG. NO. SEE CHART SDA-73644-**** FILE NAME S73644X2.DGN THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. DIV. DA SIZE B |
|---|--|