

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0736440106](#)  
**Status:** **Active**  
**Overview:** [hdm](#)  
**Description:** 2.00mm (.079") Pitch HDM® Board-to-Board Backplane Header, Vertical, SMC, Press-Fit, Guide Post Location B, Polarizing Key Position D, 72 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) 72  
 Circuits (maximum) 72  
 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 12  
 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



**EU RoHS** **China RoHS**

**Compliance Status**

**Not Reviewed**

**REACH SVHC**

**Not Reviewed**

**Halogen-Free**

**Status**

**Not Reviewed**

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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        | <a href="#">0622013700</a> |
| HDM® Backplane Insertion Signal Contact Tool | <a href="#">0621001400</a> |
| Extraction Tool                              | <a href="#">0621001000</a> |

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

### **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**

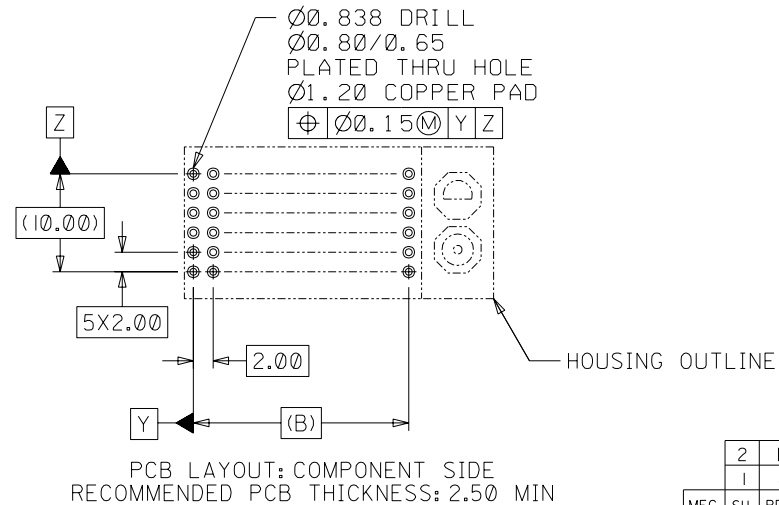
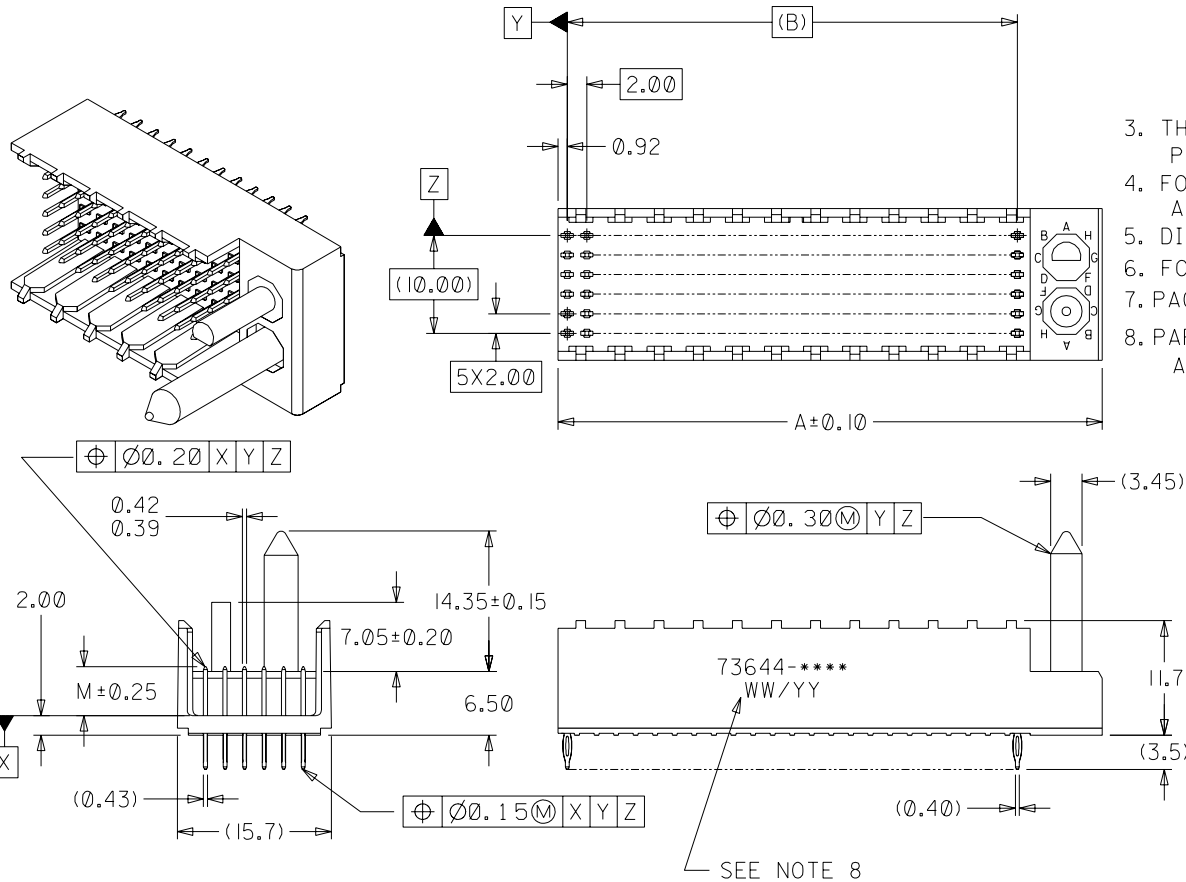
|                         |                |
|-------------------------|----------------|
| Packaging Specification | PK-70873-0818  |
| Sales Drawing           | SDA-73644-**** |

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- 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. |

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|   |                |  |                  |
|---|----------------|--|------------------|
| TITLE                                   |                | SALES ASSY, HDM BACKPLANE<br>MODULE, POLAR/GUIDE OPTION  |                  |
| MOLEX INCORPORATED<br>LISLE, ILL. 60532 |                | SHEET NO.<br>1 OF 2  | DATE<br>96/12/18 |
| PART NO.<br>SEE CHART                   |                | SDA-73644-****   |                  |
| DRWG. BY: JRR                           | CHK'D. BY: SMR | FILE NAME: S73644X1 DGN  | DIV. SIZE: DA B  |
| APP'D. BY: CAB                          | SCALE: 2 : 1   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |                  |

|  |                |  |  |
|--|----------------|--|--|
| DIMENSIONS SHOWN (METRIC) INCH                       |                | UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR $\pm 1/2^\circ$ |  |
| 3 PLACE  | $\pm$ N/A      | ---  |  |
| 2 PLACE  | $\pm$ N/A      | $\pm 0.05$   |  |
| 1 PLACE  | ---            | $\pm 0.10$   |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                |  |  |
| DRWG. BY: JRR  | CHK'D. BY: SMR |  |  |
| APP'D. BY: CAB                                       | SCALE: 2 : 1   |  |  |

|      |   |      |   |
|------|---|------|---|
| I    | REVISED<br>ECR UDT2000-0348<br>BINGHAM 99/10/12 |      |   |
| H    | REVISED<br>ECR UDT1999-0662<br>BINGHAM 99/05/18 |      |   |
| J    | REVISED<br>ECR UCP2003-2260<br>THOMAS 03/04/25  | G    | REVISED<br>ECR UDT1999-0476<br>BINGHAM 98/12/21 |
| LTR. | REVISIONS                                       | LTR. | REVISIONS                                       |

| 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 |

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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