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**Part Number:** [0736442116](#)  
**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 N/A, 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, Tin/Lead (SnPb)  
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 None  
Material - Metal Phosphor Bronze, Stainless Steel  
Material - Plating Mating Gold  
Material - Plating Termination Tin  
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) 15  
Plating min: Termination (µm) 0.375  
Polarized to PCB No



Series

image - Reference only

**EU RoHS**  
**RoHS Compliant by Exemption**  
**REACH SVHC**  
**Contains SVHC: No**  
**Halogen-Free**  
**Status**  
**Not Reviewed**

**China RoHS**

Pb

**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:

1. MATERIALS: HOUSING - LIQUID CRYSTAL POLYMER (LCP), GLASS-FILLED, UL94V-0, COLOR: BLACK, TERMINAL - PHOSPHOR BRONZE.
2. 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.
3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-73670-9999.
4. FOR MIXED CONTACT MATING LENGTHS, CONSULT FACTORY FOR AVAILABILITY.
5. DIMENSIONS ARE IN MILLIMETERS.
6. FOR SPECIFIC MATERIAL NUMBERS, REFER TO SHEET 2.
7. PACKAGE PER PK-70873-0818.
8. PARTS MARKED WITH PART NUMBER AND DATE CODE, ON EITHER SIDE, APPROXIMATELY WHERE SHOWN.



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 2.50 MIN

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

REVISIONS: 2 = 0, 1 = 0, REVISE ONLY ON CAD SYSTEM

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

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

|                                           |  |                                           |  |
|-------------------------------------------|--|-------------------------------------------|--|
| REVISED ECR UDT2000-0348 BINGHAM 99/10/12 |  | REVISED ECR UDT1999-0662 BINGHAM 99/05/18 |  |
| REVISED ECR UDT1999-0476 BINGHAM 98/12/21 |  | REVISED ECR UDT1999-0476 BINGHAM 98/12/21 |  |
| REVISED ECR UCP2003-2260 THOMAS 03/04/25  |  | REVISED ECR UCP2003-2260 THOMAS 03/04/25  |  |
| LTR. REVISIONS                            |  | LTR. REVISIONS                            |  |

| 10 |                    | 9                            | 8                                 | 7 | 6       |         | 7364    |
|----|--------------------|------------------------------|-----------------------------------|---|---------|---------|---------|
| F  | MATERIAL<br>NUMBER | NUMBER OF<br>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    |
| E  | 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

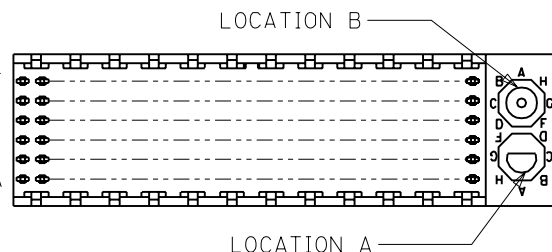
73644- \* \* \* \*

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
```



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



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

| NUMBER | GUIDE POST LOCATION | POLAR KEY POSITION |
|--------|---------------------|--------------------|
| 00     | B                   | A                  |
| 01     | A                   |                    |
| 02     | B                   | B                  |
| 03     | A                   |                    |
| 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                   | N/A                |
| 17     | A                   |                    |
| 18     | N/A                 |                    |

[illegible]