

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

**Part Number:** [0736443001](#)  
**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 A, 144 Circuits

**Documents:**

[3D Model](#) [Drawing \(PDF\)](#)  
[Test Summary \(PDF\)](#) [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) 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 Tin  
 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) 15  
 Plating min: Termination (µm) 0.375



image - Reference only

**EU RoHS**

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

**China RoHS**



**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>
HDM® Backplane Insertion Head for 144 Positions	<a href="#">0622005703</a>
Extraction Tool	<a href="#">0621001000</a>

Polarized to PCB	No
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.



2	D
1	J
MFG. SH.	REV.

SEE NOTE 8

PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 2.50 MIN

		I		REVISED ECR UDT2000-0348 BINGHAM 99/10/12		DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		▽ = 0 ▼ = 0 REVISE ONLY ON CAD SYSTEM													
		H		REVISED ECR UDT1999-0662 BINGHAM 99/05/18		<table border="1"> <tr> <th></th> <th>INCH</th> <th>METRIC</th> </tr> <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>			INCH	METRIC	3 PLACE	± N/A	---	2 PLACE	± N/A	± 0.05	1 PLACE	---	± 0.10	TITLE SALES ASSY, HDM BACKPLANE MODULE, POLAR/GUIDE OPTION	
	INCH	METRIC																			
3 PLACE	± N/A	---																			
2 PLACE	± N/A	± 0.05																			
1 PLACE	---	± 0.10																			
J		G		REVISED ECR UDT1999-0476 BINGHAM 98/12/21		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED SHEET NO. DATE LISLE, ILL. 60532 U.S.A. 1 OF 2 96/12/18													
LTR. REVISIONS		LTR. REVISIONS		G		PART NO. DRWG. NO.		SEE CHART SDA-73644-****													
				J		FILE NAME S73644X1 DGN		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.													
				G		DRWG. BY: JRR CHK'D. BY: SMR APP'D. BY: CAB SCALE: 2 : 1		DIV. SIZE 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°  

	INCH	METRIC
3 PLACE	± N/A	---
2 PLACE	± N/A	± N/A
1 PLACE	---	± N/A

 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

REVISIONS:  = 0  = 0 REVISIONS ONLY ON CAD SYSTEM  
 TITLE: SALES ASSY, HDM BACKPLANE MODULE, POLAR/GUIDE OPTION  
 MOLEX INCORPORATED LITTLE ROCK, AR 72114  
 SHEET NO. 2 DATE 96/12/18  
 PART NO. 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

DRWG. BY: JRR	CHK'D. BY: SMR
APP'D. BY: CAB	SCALE: ---:---
LTR. REVISIONS	LTR. REVISIONS