

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

**Part Number:** [0736441000](#)

**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 A, 144 Circuits

**Documents:**

[3D Model](#)

[Test Summary \(PDF\)](#)

[Drawing \(PDF\)](#)

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

**Agency Certification**

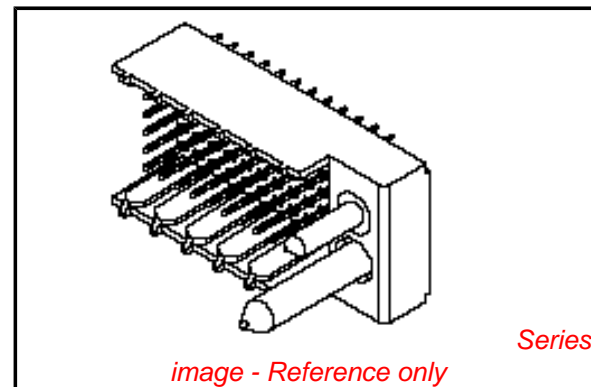
CSA	LR19980
UL	E29179

**General**

Product Family	Backplane Connectors
Series	<a href="#">73644</a>
Application	Backplane
Comments	Standard Press-Fit
Component Type	PCB Header
Overview	<a href="#">hdm</a>
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



*image - Reference only*

**EU RoHS**

**ELV and RoHS Compliant**

**REACH SVHC**

**Contains SVHC: No**

**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>

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

Extraction Tool	0621001000
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### 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

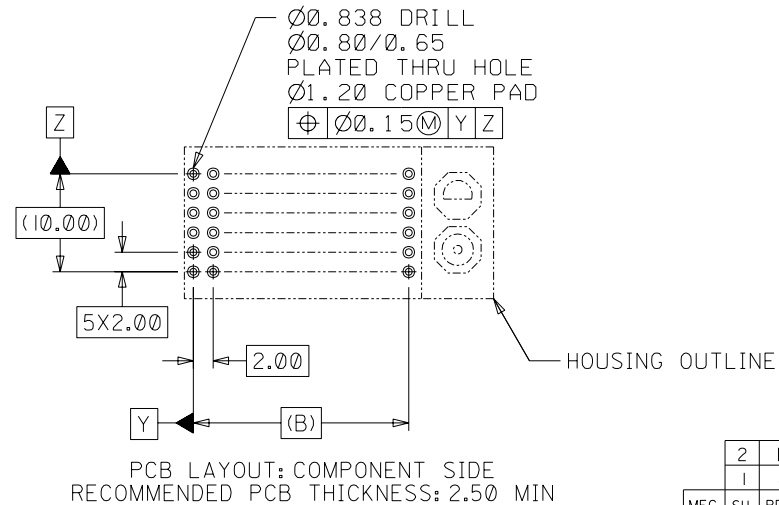
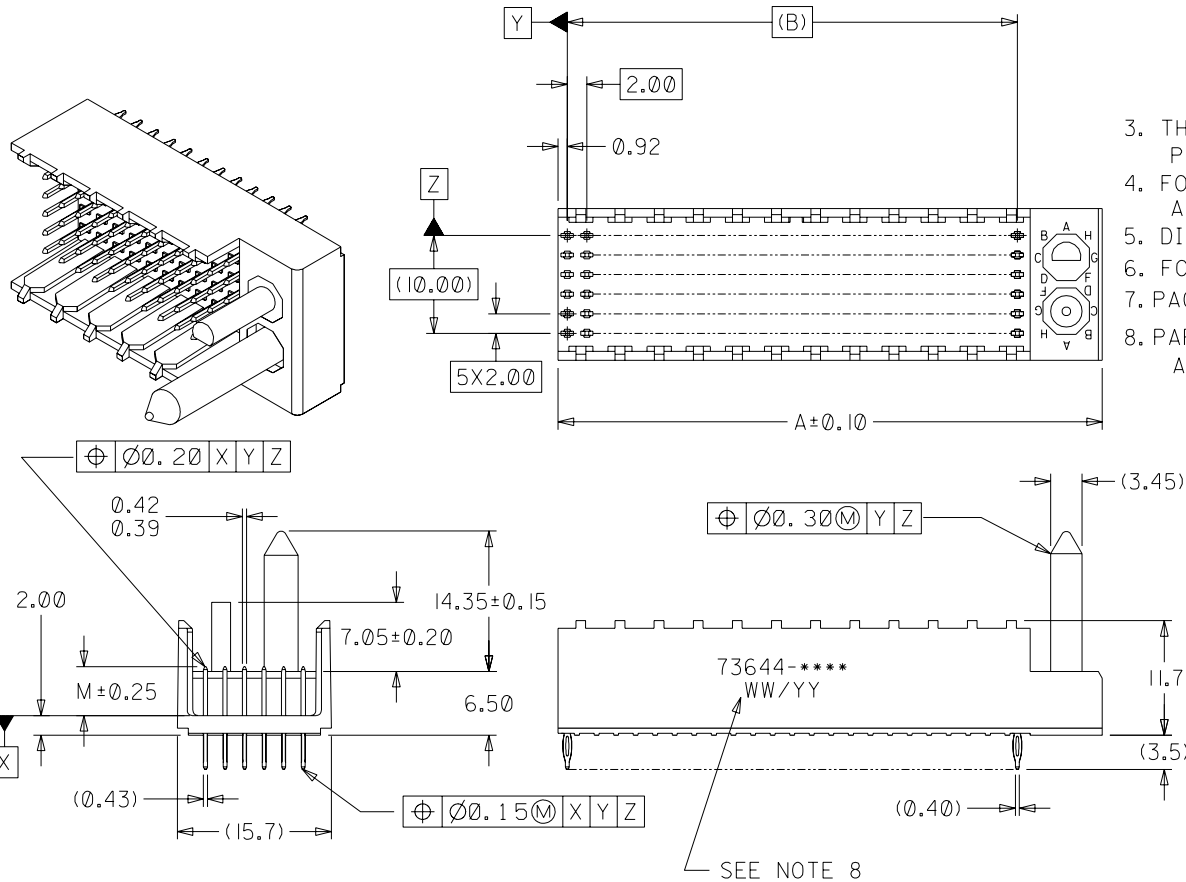
Packaging Specification	PK-70873-0818
Sales Drawing	SDA-73644-****

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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.

SEE NOTE 8

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		∇ = 0    ▼ = 0    REVISE ONLY ON CAD SYSTEM													
<table border="1"> <thead> <tr> <th></th> <th>INCH</th> <th>METRIC</th> </tr> </thead> <tbody> <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> </tbody> </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													
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED    SHEET NO.    DATE LISLE, ILL.    60532    U.S.A.    1 OF 2    96/12/18													
DRWG. BY: JRR    CHK'D. BY: SMR		PART NO.    DRWG. NO. SEE CHART    SDA-73644-****													
APP'D. BY: CAB    SCALE: 2 : 1		FILE NAME: S73644X1 DGN    THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.													
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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
LTR.	REVISIONS

REVISIONS: D SEE SHEET 1

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

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FILE NAME: S73644X2 DGN

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DRWG. NO.: SDA-73644-\*\*\*\*

DATE: 96/12/18

SHEET NO.: 2

REVISIONS: D SEE SHEET 1

REVISIONS: LTR. REVISIONS