

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

**Part Number:** [0739447007](#)  
**Status:** **Active**  
**Overview:** [hdm](#)  
**Description:** 2.00mm (.079") Pitch HDM® Board-to-Board Backplane Header, Vertical, SMC, Solder Tail, Guide Pin Option, 144 Circuits

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-73670-9999 \(PDF\)](#)

**Agency Certification**

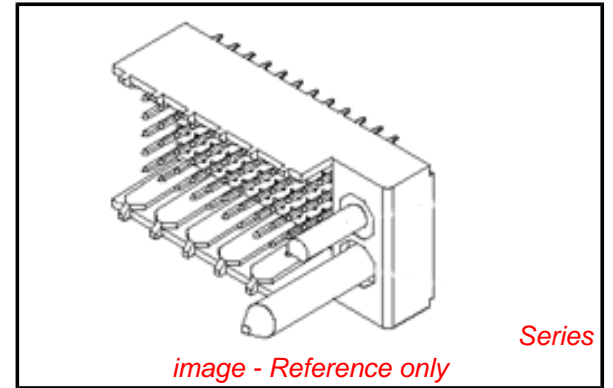
CSA LR19980  
 UL E29179

**General**

Product Family Backplane Connectors  
 Series [73944](#)  
 Application Backplane  
 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 None  
 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) 100  
 Plating min: Termination (µm) 2.5  
 Polarized to PCB No



**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](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**

[73944Series](#)

**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 #
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

### **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
Product Specification	PS-73670-9999
Sales Drawing	SD-73944-001

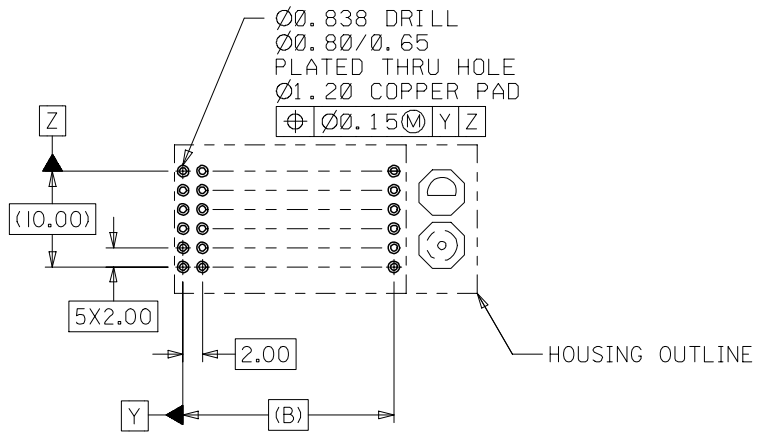
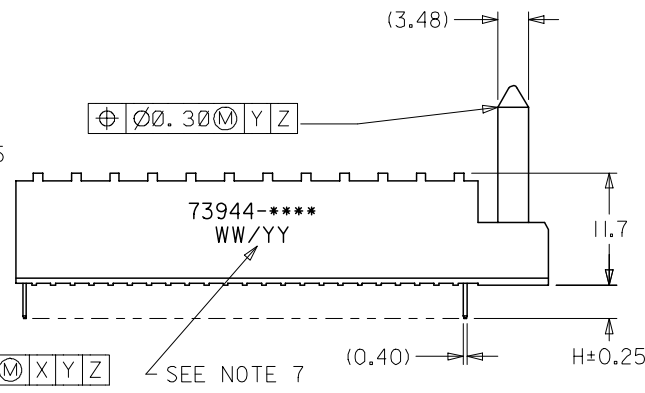
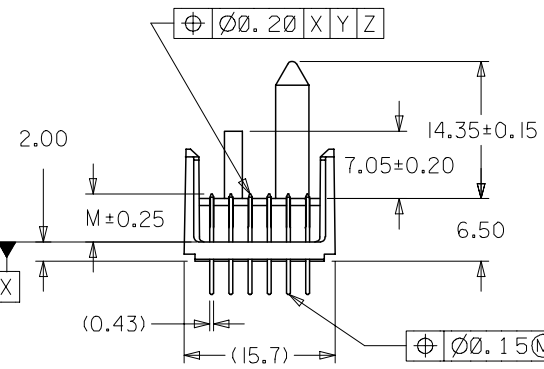
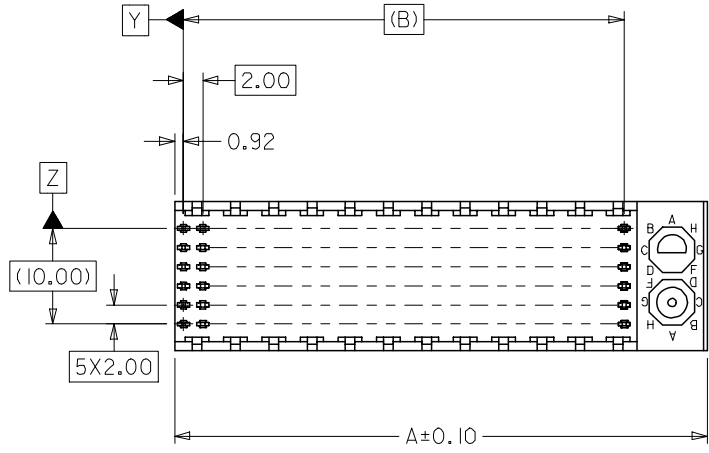
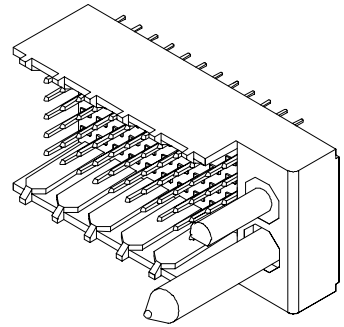
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This document was generated on 05/14/2010

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**NOTES:**

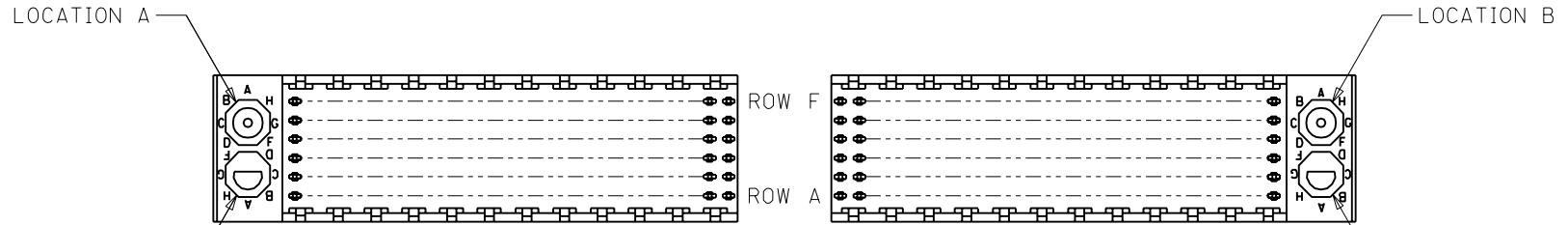
1. MATERIALS: HOUSING--LIQUID CRYSTAL POLYMER (LCP), GLASS FILLED, UL94V-0, COLOR: BLACK,  
TERMINAL: PHOSPHOR BRONZE.
2. FINISH: 0.75 MICROMETERS MINIMUM SELECTIVE GOLD (Au) IN MATING AREA  
2.50 MICROMETERS MINIMUM SELECTIVE TIN (Sn) IN TAIL AREA  
NICKEL (Ni) UNDERPLATE OVERALL.
3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-73670-9999.
4. FOR MIXED CONTACT MATING LENGTHS, CONSULT FACTORY FOR AVAILABILITY.
5. SEE SHEET 2 FOR SPECIFIC MATERIAL NUMBERS.
6. PACKAGE PER PK-70873-0818.
7. 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	A
1	G
SHT	REV

MODIFY FINISH NOTE EC NO: UCP2007-2259 DRWN:MSIBARRA 2007/03/13 CHKD:BBARKER 2007/03/21 APPR:SMILLER 2007/03/22	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY JB INGHAM	DATE 1998/01/14	TITLE SALES ASSY HDM BACKPLANE POLAR/GUIDE OPTION SOLDER TAIL VERSION			
		4 PLACES	± ---	± ---	CHECKED BY SREED	DATE 1998/01/14	MATERIAL NO. SEE CHART			
		3 PLACES	± ---	± ---	APPROVED BY CBIXLER	DATE 1998/01/14	DOCUMENT NO. SD-73944-001			
	2 PLACES	± 0.05	± ---	ANGULAR ±1/2°		MOLEX INCORPORATED		SHEET NO. 1 OF 2		
	1 PLACE	± 0.10	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				



REF. MATERIAL NUMBER 73944-1009  
GUIDE PIN IS IN LOCATION A  
POLARIZING KEY IS IN LOCATION B, POSITION E

REF. MATERIAL NUMBER 73944-1008  
GUIDE PIN IS IN LOCATION B  
POLARIZING KEY IS IN LOCATION A, POSITION E

### MATERIAL NUMBER ASSIGNMENT

73944- \* \* \* \*

NUMBER	CIRCUIT SIZE	DIM "A"	DIM "B"	DIM "H"
0	72	31.60	22.00	2.00
1	144	55.60	46.00	2.00
2	72	31.60	22.00	2.50
3	144	55.60	46.00	2.50
4	72	31.60	22.00	3.00
5	144	55.60	46.00	3.00
6	72	31.60	22.00	3.50
7	144	55.60	46.00	3.50

NUMBER	DIM "M"
0	5.00
1	5.50
2	6.00

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

SEE SHEET 1  
EC No. U81577  
DRWN: BINGHAM 98/02/03  
CHK: REED 98/02/03  
APPR: BIXLER 98/02/03

DESCRIPTION  
A

REV

QUALITY SYMBOLS  
MAJOR  $\blacktriangledown = 0$   
CRITICAL  $\nabla = 0$

GENERAL TOLERANCES: (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	$\pm 0.$	$\pm .$
3 PLACES	$\pm 0.$	$\pm .$
2 PLACES	$\pm 0.N/A$	$\pm .$
1 PLACE	$\pm 0.N/A$	$\pm .$

ANGULAR:  $\pm 1/2^\circ$

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

SCALE 2 : 1  
DESIGN UNITS  mm  INCH

DRAWN BY & DATE  
JBINGHAM 98/01/14

CHECKED BY & DATE  
SREED 98/01/14

APPROVED BY & DATE  
CBIXLER 98/01/14

CAD FILENAME  
S73944X2.DGN

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DIMENSIONS:  
 mm  INCH  mm ONLY

SHT REV  
REVISE ON CAD ONLY

TITLE: SALES ASSY, HDM BACKPLANE  
POLAR/GUIDE OPTION  
SOLDER TAIL VERSION

MOLEX MOLEX INCORPORATED

MATERIAL NO. SEE CHART  
DRAWING NO. SD-73944-001  
SHEET NO. 2

SIZE B