

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

**Part Number:** [0749811003](#)  
**Status:** **Active**  
**Overview:** [vhdm\\_hsd](#)  
**Description:** 2.00mm (.079") Pitch 6-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Shield End Version, 40 Circuits, Pin Length 4.25mm (.167")

**Documents:**

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

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family Backplane Connectors  
 Series [74981](#)  
 Application Backplane  
 Application Tooling Documents [Tooling Manual](http://www.molex.com/pdm_docs/ats/TM-622010999.pdf)  
 Comments No Keying Position  
 Component Type PCB Header  
 Overview [vhdm\\_hsd](#)  
 Product Name VHDM-HSD™  
 Style N/A

**Physical**

Circuits (Loaded) 40  
 Circuits (maximum) 40  
 Color - Resin Black  
 Durability (mating cycles max) 200  
 First Mate / Last Break No  
 Flammability 94V-0  
 Guide to Mating Part Yes  
 Keying to Mating Part None  
 Material - Metal Copper-Nickel-Silicon, High Performance Alloy (HPA), Stainless Steel  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin-Lead  
 Material - Resin High Temperature Thermoplastic  
 Number of Columns 10  
 Number of Pairs Open Pin Field  
 Number of Rows 6  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.070 In  
 PCB Thickness Recommended (mm) 1.80 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) 30  
 Plating min: Termination (µm) 0.75

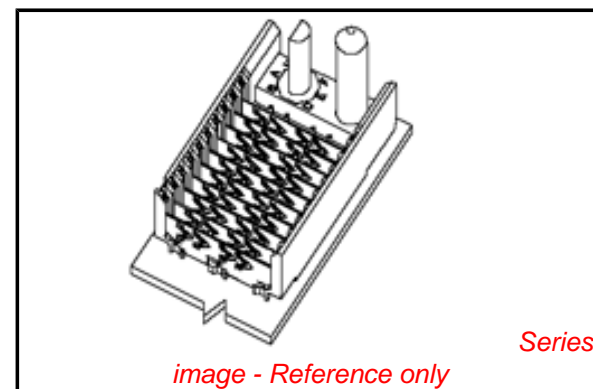


image - Reference only

**EU RoHS**

**RoHS Compliant by Exemption**  
**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**

[74981Series](#)

**Mates With**

[74880 VHDMHSD Daughtercard](#)

**Use With**

[Daughtercard Modules](#)

**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 #
VHDM® Signal Pin Inserter Repair Tool	<a href="#">0622015700</a>
VHDM-HSD™ Signal Header, 6 Row by 10 Wide, 20.00mm (.787")	<a href="#">0622020216</a>

Polarized to PCB	Yes
Stackable	Yes
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	5.0 Gbps
Real Signals (per 25mm)	48
Shielded	No
Voltage - Maximum	120V AC (RMS)/DC

### **Material Info**

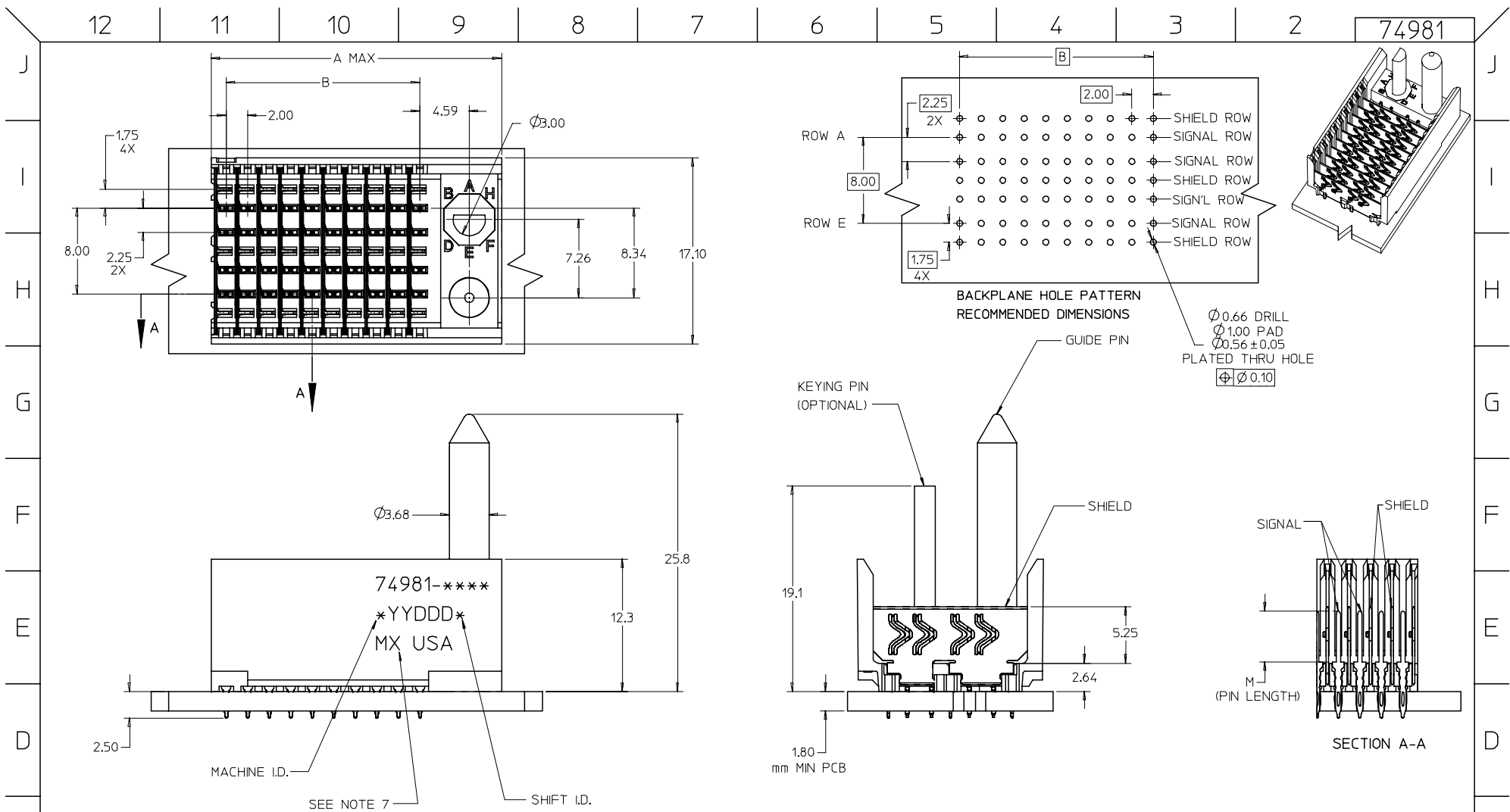
#### **Reference - Drawing Numbers**

Sales Drawing	SD-74981-010
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VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 06/08/2010

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NOTES:

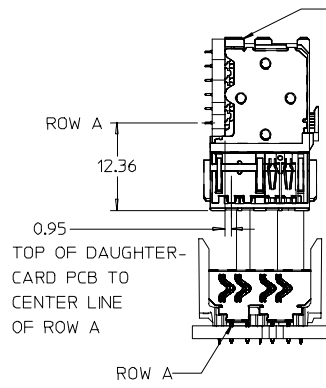
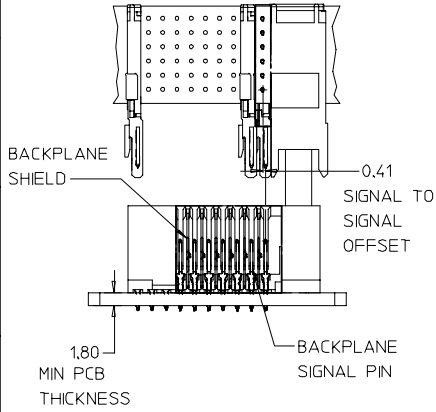
1. MATERIAL: HOUSING-LIQUID CRYSTAL POLYMER (LCP) GLASS-FILLED. UL 94V-0. COLOR-BLACK. SIGNAL AND SHIELD - HIGH PERFORMANCE COPPER ALLOY.
2. FINISHES:  
 CONTACT AREA: SELECTIVE GOLD (Au)  
 PCB TAILS: SELECTIVE TIN/LEAD (Sn/Pb) OR SELECTIVE MATTE TIN (Sn) NICKEL (Ni) OVERALL.
3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-74031-999.
4. FOR MIXED CONTACT LENGTHS - CONSULT MOLEX FOR AVAILABILITY.
5. FOR SPECIFIC PART NUMBER AND MATING INFORMATION REFER TO SHEET 2.
6. PACKAGE PER PK-74058-003.
7. EITHER MARK PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON TUBE.

ADD LEADFREE PNs EC NO: UCP2006-0067 DRAWN: KMULVEY 2005/07/15 CHKD: 2005/07/18 APPR: SREED 2005/08/11	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY		
		$\nabla = 0$  $\nabla C = 0$		m	INCH	DIMENSION STYLE MM ONLY		TITLE		
			4 PLACES	±	---	±	---	DRAWN BY NMARTIN	DATE 2002/09/06	HSD SALES ASSEMBLY 6 ROW SHIELD END BACKPLANE
			3 PLACES	±	---	±	---	CHECKED BY SREED	DATE 2002/09/06	
		ANGULAR ± 1 °		APPROVED BY CBIXLER		DATE 2002/09/06	MATERIAL NO. SEE SHEET 2	DOCUMENT NO. SD-74981-010	SHEET NO. 1 OF 2	
		DRAFT WHERE APPLICABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

12 11 10 9 8 7 6 5 4 3 2 74981

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DAUGHTERCARD CONNECTOR SIDE

74981-\*\*\*\*

NUMBER OF COLUMNS/PLATING  
 10 = 10 COLUMN TIN/LEAD  
 25 = 25 COLUMN TIN/LEAD  
 90 = 10 COLUMN MATTE TIN  
 85 = 25 COLUMN MATTE TIN

SIGNAL PIN LENGTH (mm)  
 1 & 6 = 4.75  
 2 & 7 = 6.25  
 3 & 8 = 4.25  
 4 & 9 = 5.15

P/N 74981-( )	---0* O	---1* A	---2* B	---3* C	---4* D	---5* E	---6* F	---7* G	---8* H
KEYING PIN ORIENTATION									

PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A MAX	B	M	Au (µm) MIN THICKNESS	Sn/Pb (µm) THICKNESS
74981-*0*1	10	40	10	27.00	18.00	4.75	0.76	0.38-152
74981-*0*6							1.27	
74981-*5*1	25	100	25	57.00	48.00	4.75	0.76	
74981-*5*6							1.27	
74981-*0*2	10	40	10	27.00	18.00	6.25	0.76	
74981-*0*7							1.27	
74981-*5*2	25	100	25	57.00	48.00	6.25	0.76	
74981-*5*7							1.27	
74981-*0*3	10	40	10	27.00	18.00	4.25	0.76	
74981-*0*8							1.27	
74981-*5*3	25	100	25	57.00	48.00	4.25	0.76	
74981-*5*8							1.27	
74981-*0*4	10	40	10	27.00	18.00	5.15	0.76	
74981-*0*9							1.27	
74981-*5*4	25	100	25	57.00	48.00	5.15	0.76	
74981-*5*9							1.27	

SEE SHT 1 EC NO: UCP2006-0067 DRAWN: KMULVEY 2005/07/15 CHKD: 2005/07/18 APPR: SREED 2005/08/11	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY															
	▽ = 0 ◁ = 0	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table> ANGULAR ± 1 °		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± ---	± ---	1 PLACE	± ---	± ---	DIMENSION STYLE MM ONLY	TITLE	HSD SALES ASSEMBLY 6 ROW SHIELD END BACKPLANE	
		mm	INCH																		
	4 PLACES	± ---	± ---																		
3 PLACES	± ---	± ---																			
2 PLACES	± ---	± ---																			
1 PLACE	± ---	± ---																			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY DATE NMARTIN 2002/09/06 CHECKED BY DATE SREED 2002/09/06 APPROVED BY DATE CBIXLER 2002/09/06	DIMENSION STYLE MM ONLY TITLE MOLEX INCORPORATED	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74981-010	SHEET NO. 2 OF 2																
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11 10 9 8 7 6 5 4 3 2 1