

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

**Part Number:** [0749811001](#)  
**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 4.75mm (.187")

**Documents:**

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

**Agency Certification**

UL E29179

**General**

Product Family	Backplane Connectors
Series	<a href="#">74981</a>
Application	Backplane
Application Tooling Documents	<a href="http://www.molex.com/pdm_docs/ats/TM-622010999.pdf">Tooling Manual</a>
Comments	No Keying Position
Component Type	PCB Header
Overview	<a href="#">vhdm_hsd</a>
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
Polarized to PCB	Yes

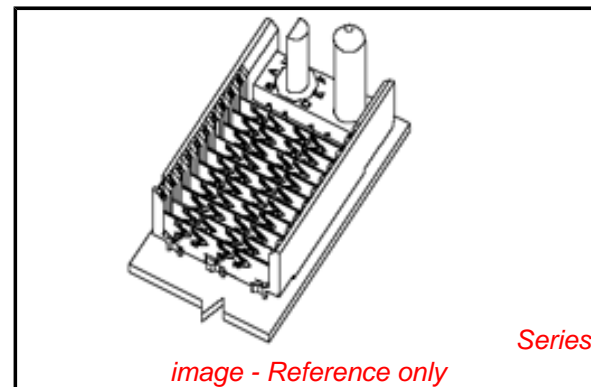


image - Reference only

**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>

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**

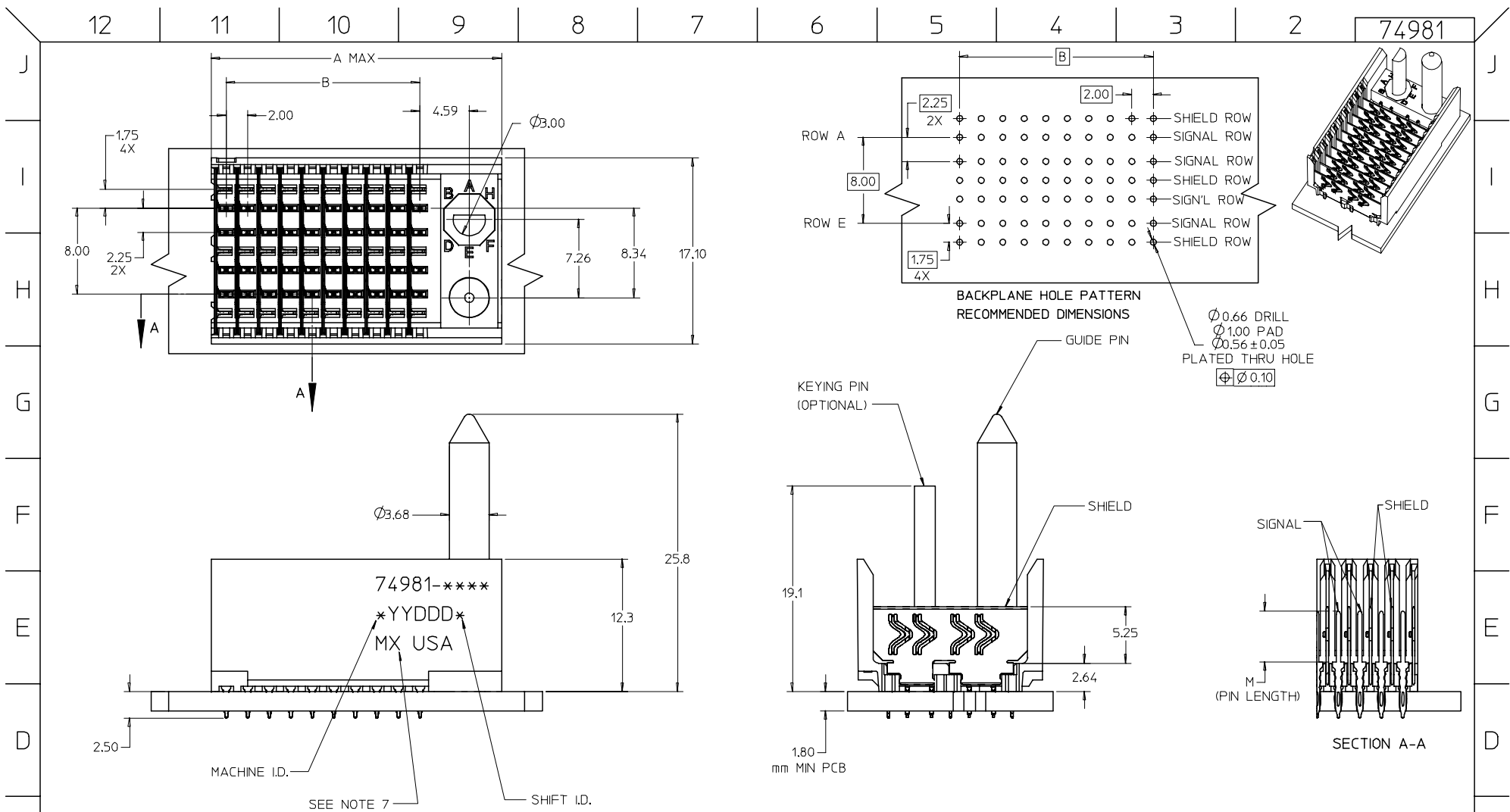
#### **Reference - Drawing Numbers**

Sales Drawing	SD-74981-010
---------------	--------------

VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/28/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



NOTES:

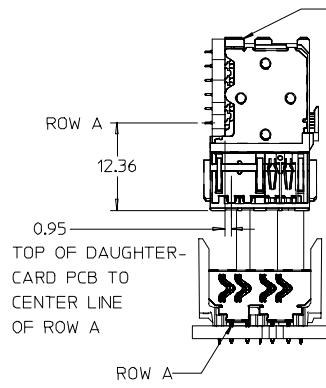
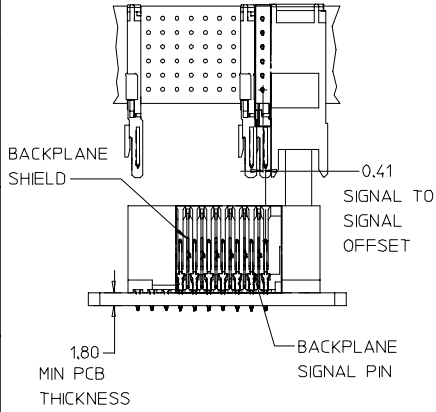
1. MATERIAL: HOUSING-LIQUID CRYSTAL POLYMER (LCP) GLASS-FILLED. UL 94V-0. COLOR-BLACK. SIGNAL AND SHIELD - HIGH PERFORMANCE COPPER ALLOY.
2. FINISHES:  
 CONTACT AREA: SELECTIVE GOLD (Au)  
 PCB TAILS: SELECTIVE TIN/LEAD (Sn/Pb) OR SELECTIVE MATTE TIN (Sn) NICKEL (Ni) OVERALL.
3. THIS PART CONFORMS TO 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 DRWN: 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
		$\nabla = 0$ $\sphericalangle = 0$			DIMENSION STYLE MM ONLY		TITLE	
					DRAWN BY DATE		HSD SALES ASSEMBLY	
					CHECKED BY DATE		6 ROW SHIELD END BACKPLANE	
			ANGULAR $\pm 1^\circ$		SREED 2002/09/06		MOLEX INCORPORATED	
			DRAFT WHERE APPLICABLE		APPROVED BY DATE		MATERIAL NO.	DOCUMENT NO.
			MUST REMAIN WITHIN DIMENSIONS		CBIXLER 2002/09/06		SEE SHEET 2	SD-74981-010
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							SHEET NO.	1 OF 2

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

J  
I  
H  
G  
F  
E  
D  
C  
B  
A

J  
I  
H  
G  
F  
E  
D  
C  
B  
A



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* 0	---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	DIMENSION STYLE MM ONLY	4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE NMARTIN 2002/09/06	TITLE HSD SALES ASSEMBLY 6 ROW SHIELD END BACKPLANE		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY DATE SREED 2002/09/06	MOLEX INCORPORATED			SHEET NO. 2 OF 2	
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			APPROVED BY DATE CBIXLER 2002/09/06	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74981-010	

11 10 9 8 7 6 5 4 3 2 1