

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

**Part Number:** [0746952503](#)  
**Status:** **Active**  
**Overview:** vhdm\_hsd  
**Description:** 2.00mm (.079") Pitch 5-Row VHDM-HSD™ Backplane Header, Open Module, 100 Circuits, Pin Length 4.25mm (.167")

**Documents:**

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

**Agency Certification**

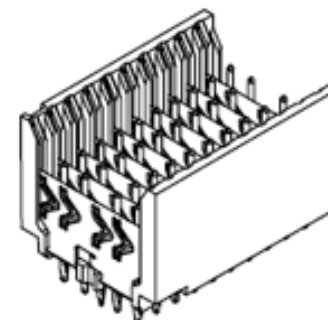
CSA LR19880

**General**

Product Family Backplane Connectors  
 Series [74695](#)  
 Application Backplane  
 Application Tooling Documents [Tooling Manual](http://www.molex.com/pdm_docs/ats/TM-622010999.pdf)  
 Comments Open Header  
 Component Type PCB Header  
 Overview [vhdm\\_hsd](#)  
 Product Name VHDM-HSD™  
 Style N/A

**Physical**

Circuits (Loaded) 100  
 Circuits (maximum) 100  
 Color - Resin Black  
 Durability (mating cycles max) 200  
 First Mate / Last Break No  
 Flammability 94V-0  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Material - Metal High Performance Alloy (HPA)  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin-Lead  
 Material - Resin High Temperature Thermoplastic  
 Number of Columns 25  
 Number of Pairs Open Pin Field  
 Number of Rows 5  
 Orientation Vertical  
 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  
 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  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -55°C to +105°C  
 Termination Interface: Style Through Hole - Compliant Pin



Series

image - Reference only

**EU RoHS**

**RoHS Compliant by Exemption**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Reviewed**

**China RoHS**



Pb

**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**

[74695Series](#)

**Mates With**

[74670 HSD Daughtercard](#)

**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	<a href="#">0622015700</a>
Insertor Repair Tool	
VHDM® 5 Row Pin and Shield Repair Tool	<a href="#">0622015810</a>
VHDM® 5 Row Shield Extraction Tool	<a href="#">0622016010</a>
VHDM-HSD™ Signal Header, 5 Row by	<a href="#">0622020202</a>

25 Wide, 50.00mm  
(1.97")

### Electrical

Current - Maximum per Contact	1A
Data Rate	5.0 Gbps
Shielded	Yes
Voltage - Maximum	120V AC (RMS)/DC

### Material Info

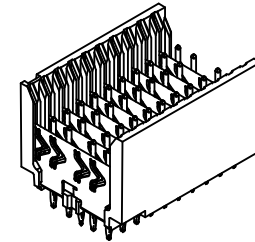
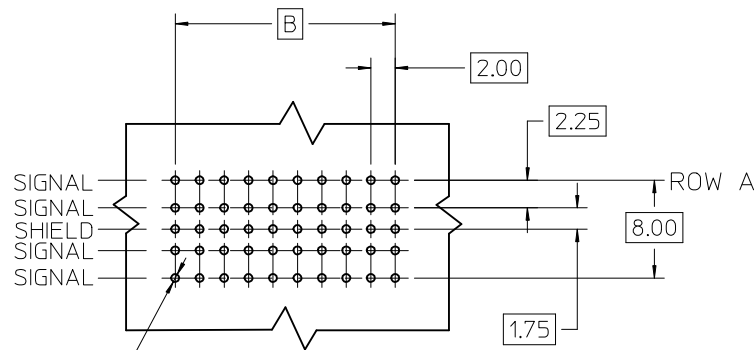
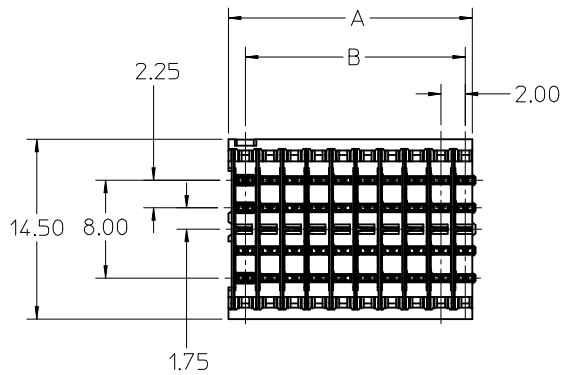
#### Reference - Drawing Numbers

Packaging Specification	PK-74695-003
Sales Drawing	SD-74695-002

VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 06/08/2010

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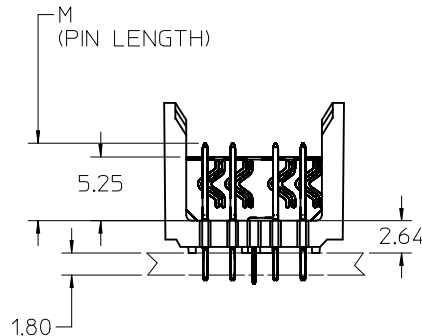
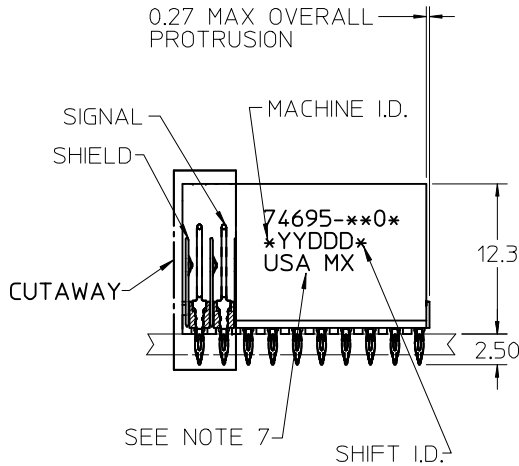


Ø0.66 DRILL  
 Ø0.56 ±0.05 PTH  
 Ø1.00 PAD

⊕ Ø0.10

**BACKPLANE HOLE PATTERN  
 RECOMMENDED DIMENSION**

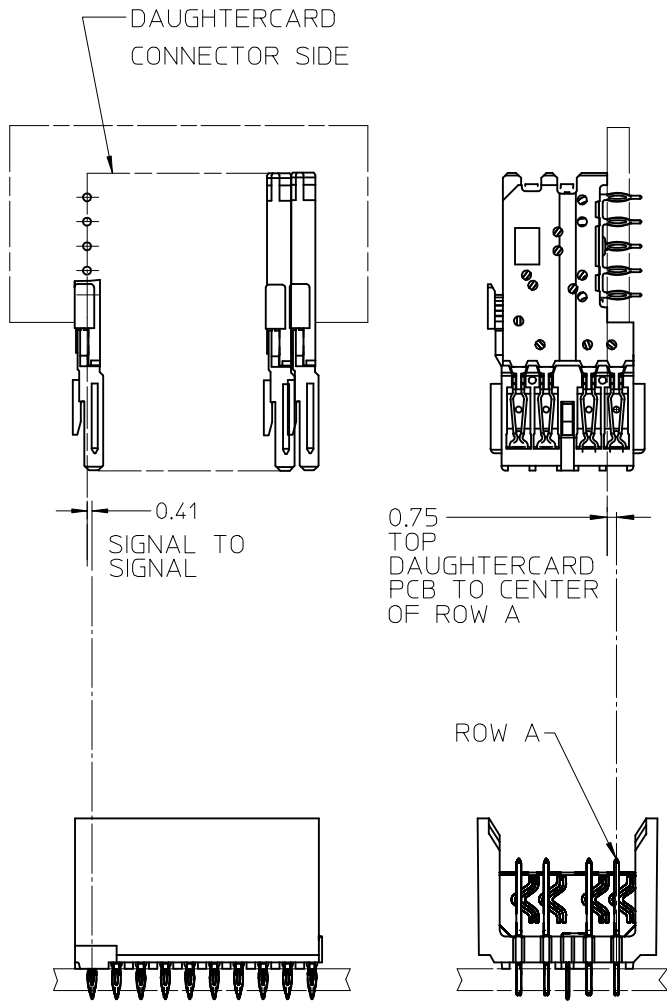
0.27 MAX OVERALL PROTRUSION



**NOTES:**

1. MATERIAL: HOUSING -LIQUID CRYSTAL POLYMER (LCP). GLASS-FILLED. UL 94 V-0. COLOR BLACK. SIGNAL & SHIELD -COPPER ALLOY.
2. FINISHES: SELECTIVE GOLD (Au) ON CONTACT AREA. SELECTIVE TIN/LEAD (Sn/Pb) OR SELECTIVE MATTE TIN (Sn) ON PCB TAILS. NICKEL (Ni) OVERALL.
3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-74031-999.
4. FOR MIXED CONTACT MATING LENGTHS CONSULT MOLEX FOR AVAILABILITY.
5. FOR SPECIFIC PART NUMBER AND MATING INFORMATION REFER TO SHEET 2.
6. PACKAGE PER PK-74695-003.
7. EITHER MARK PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON THE TUBE.

REVISED: ADD LEAD-FREE EC NO: UCP2006-1727 DRWN:CTHOMAS 2006/02/16 CHKD:JBINGHAM 2006/02/16 APPR:KYULVEY 2006/02/16	DESCRIPTION D	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
		▽ -0 ∇ -0	mm      INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2°	DIMENSION STYLE MM ONLY	TITLE HSD SALES ASSEMBLY 5 ROW OPEN END BACKPLANE		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: MQWANG      DATE: 2001/04/11 CHECKED BY: NMARTIN      DATE: 2001/04/14 APPROVED BY: CBIXLER      DATE: 2001/04/14	MOLEX INCORPORATED MATERIAL NO. SEE SHT.2&3      DOCUMENT NO. SD-74695-002      SHEET NO. 1 OF 3			
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



### MATERIAL NUMBER ASSIGNMENT

74695-\*\* \*\* SEE TABLES (SHEET 3)

- NUMBER OF COLUMNS/PLATING
- 10 = 10 COLUMN TIN/LEAD
- 12 = 12 COLUMN TIN/LEAD
- 15 = 15 COLUMN TIN/LEAD
- 25 = 25 COLUMN TIN/LEAD
- 90 = 10 COLUMN MATTE TIN
- 92 = 12 COLUMN MATTE TIN
- 95 = 15 COLUMN MATTE TIN
- 85 = 25 COLUMN MATTE TIN

REVISED: ADD LEAD-FREE EC NO: UCP2006-1727 DRWN:CTHOMAS 2006/02/16 CHKD:JBINGHAM 2006/02/16 APPR:KMYLVEY 2006/02/16	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY		
		▼ - 0  ∇ - 0	mm	INCH	DIMENSION STYLE MM ONLY		TITLE HSD SALES ASSEMBLY 5 ROW OPEN END BACKPLANE			
			4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY MQWANG	DATE 2001/04/11				
			2 PLACES ± --- ± ---	1 PLACE ± --- ± ---	CHECKED BY NMARTIN	DATE 2001/04/14	MOLEX INCORPORATED MATERIAL NO. SEE TABLES DOCUMENT NO. SD-74695-002 SHEET NO. 2 OF 3			
			ANGULAR ±1/2°		APPROVED BY CBIXLER	DATE 2001/04/14				
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								

PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A	B	M	Au (um) THICKNESS	Sn/Pb (um)	
74695-1001	10	40	10	20.00	18.00	4.75	0.76	0.76-1.52	
74695-1006							1.27		
74695-1201	12	48	12	24.00	22.00		0.76		
74695-1206							1.27		
74695-2501	25	100	25	50.00	48.00	0.76			
74695-2506						1.27			
74695-1002	10	40	10	20.00	18.00	0.76	0.76-1.52		
74695-1007						1.27			
74695-1202	12	48	12	24.00	22.00	0.76			
74695-1207						1.27			
74695-2502	25	100	25	50.00	48.00	0.76			
74695-2507						1.27			
74695-1003	10	40	10	20.00	18.00	0.76			0.76-1.52
74695-1008						1.27			
74695-1203	12	48	12	24.00	22.00	0.76			
74695-1208						1.27			
74695-2503	25	100	25	50.00	48.00	0.76			
74695-2508						1.27			
74695-1004	10	40	10	20.00	18.00	0.76		0.76-1.52	
74695-1009						1.27			
74695-1204	12	48	12	24.00	22.00	0.76			
74695-1209						1.27			
74695-2504	25	100	25	50.00	48.00	0.76			
74695-2509						1.27			

TIN/LEAD CHART

PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A	B	M	Au (um) THICKNESS	Sn (um)	
74695-9001	10	40	10	20.00	18.00	4.75	0.76	0.76-1.52	
74695-9006							1.27		
74695-9501	12	48	12	24.00	22.00		0.76		
74695-9506							1.27		
74695-8501	25	100	25	50.00	48.00	0.76			
74695-8506						1.27			
74695-9002	10	40	10	20.00	18.00	0.76	0.76-1.52		
74695-9007						1.27			
74695-9502	12	48	12	24.00	22.00	0.76			
74695-9507						1.27			
74695-8502	25	100	25	50.00	48.00	0.76			
74695-8507						1.27			
74695-9003	10	40	10	20.00	18.00	0.76			0.76-1.52
74695-9008						1.27			
74695-9503	12	48	12	24.00	22.00	0.76			
74695-9508						1.27			
74695-8503	25	100	25	50.00	48.00	0.76			
74695-8508						1.27			
74695-9004	10	40	10	20.00	18.00	0.76		0.76-1.52	
74695-9009						1.27			
74695-9504	12	48	12	24.00	22.00	0.76			
74695-9509						1.27			
74695-8504	25	100	25	50.00	48.00	0.76			
74695-8509						1.27			

LEAD FREE CHART

<b>ADDED SHEET: 3</b> EC NO: UCP2006-1727 DRWNG: THOMAS 2006/02/16 CHKD: JBI NGHAM 2006/02/16 APPR: KMULVEY 2006/02/16	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>METRIC</b>	THIRD ANGLE PROJECTION
		4 PLACES ± --- mm    ± --- INCH	DRAWN BY MQWANG    2001/04/11	TITLE <b>HSD SALES ASSEMBLY          5 ROW OPEN END          BACKPLANE</b>		
		3 PLACES ± --- mm    ± --- INCH	CHECKED BY NMARTIN    2001/04/14	<b>MOLEX INCORPORATED</b>		
		2 PLACES ± --- mm    ± --- INCH	APPROVED BY CBIXLER    2001/04/14	MATERIAL NO. <b>SEE TABLES</b>	DOCUMENT NO. <b>SD-74695-002</b>	
1 PLACE ± --- mm    ± --- INCH	ANGULAR ±1/2°	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE 	SHEET NO. <b>3 OF 3</b>	