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Part Number: [0746959001](#)
Status: **Active**
Overview: [vhdm_hsd](#)
Description: 2.00mm (.079") Pitch 5-Row VHDM-HSD™ Backplane Header, Open Module, 40 Circuits, Pin Length 4.75mm (.187"), Lead Free

Documents:

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

Agency Certification

CSA LR19980

General

Product Family	Backplane Connectors
Series	74695
Application	Backplane
Application Tooling Documents	Tooling Manual
Comments	Open Header
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	No
Keying to Mating Part	None
Material - Metal	High Performance Alloy (HPA)
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Columns	10
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

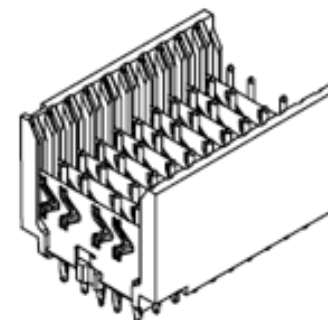


image - Reference only

Series

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
 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

HSD Daughtercards [74680](#) , [74686](#)

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® 5 Row Pin and Shield Repair Tool	0622015810
VHDM® 5 Row Shield Extraction Tool	0622016010
VHDM-HSD™ Signal Header, 5 Row by 10 Wide, 20.00mm (.787")	0622020201

Electrical

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

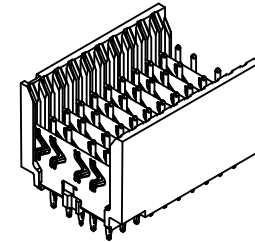
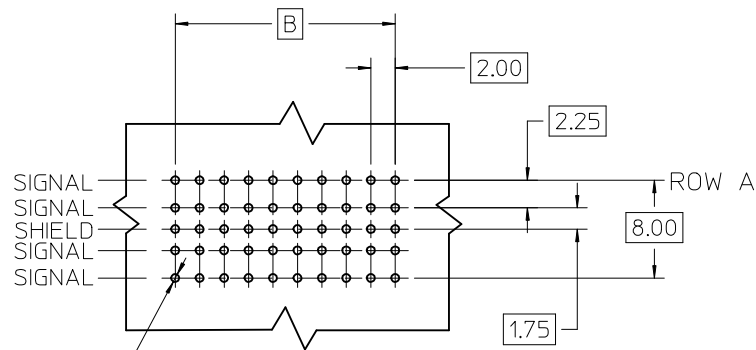
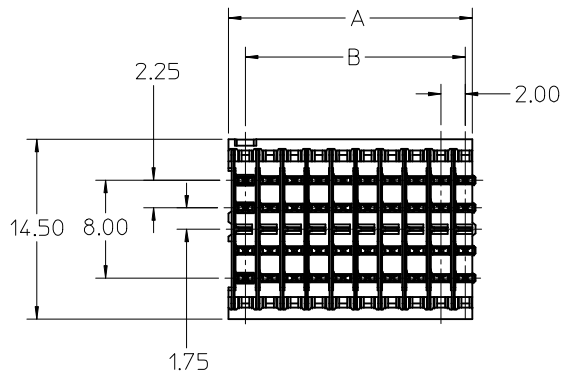
Material Info**Reference - Drawing Numbers**

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

VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/27/2010

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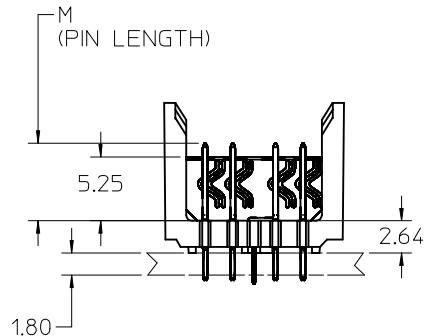
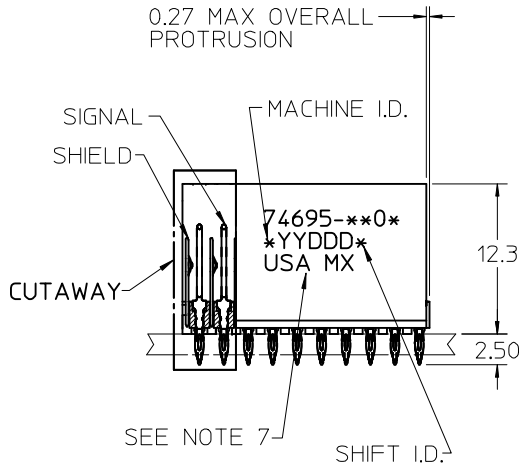


Ø0.66 DRILL
 Ø0.56 ±0.05 PTH
 Ø1.00 PAD

⊕ Ø0.10

BACKPLANE HOLE PATTERN
 RECOMMENDED DIMENSION

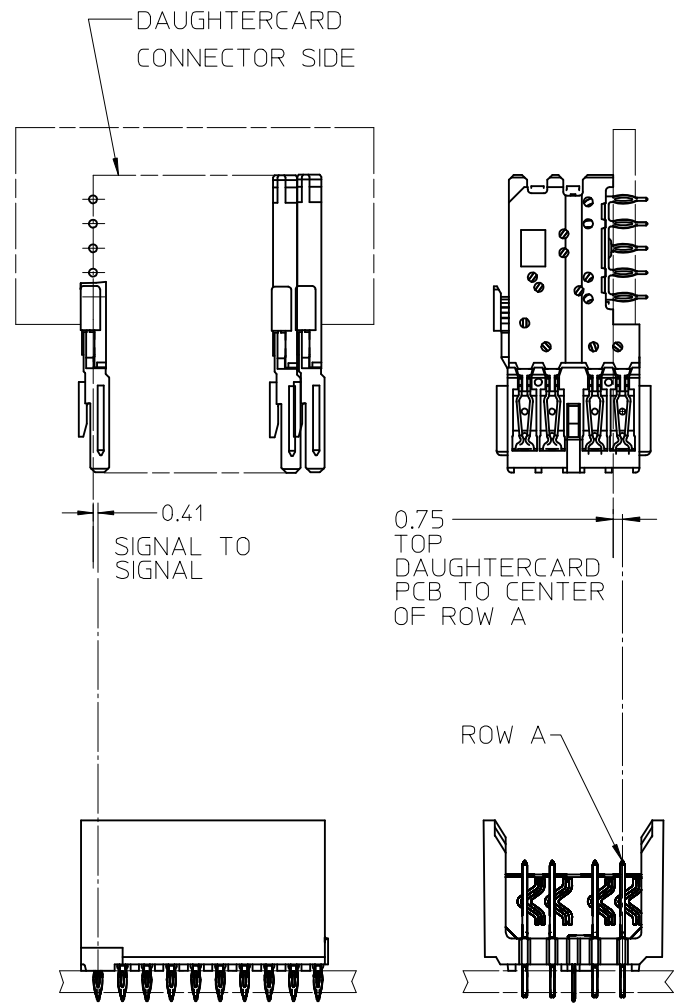
0.27 MAX OVERALL PROTRUSION



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	QUALITY SYMBOLS ▽ -0 ∇ -0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	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	MOLEX INCORPORATED		
				CHECKED BY NMARTIN	DATE 2001/04/14	MATERIAL NO. SEE SHT.2&3	DOCUMENT NO. SD-74695-002	SHEET NO. 1 OF 3



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	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	± ---	± ---	DRAWN BY MQWANG	DATE 2001/04/11	MOLEX INCORPORATED MATERIAL NO. SEE TABLES DOCUMENT NO. SD-74695-002 SHEET NO. 2 OF 3	
		3 PLACES	± ---	± ---	CHECKED BY NMARTIN	DATE 2001/04/14		
		2 PLACES	± ---	± ---	APPROVED BY CBIXLER		DATE 2001/04/14	
1 PLACE	± ---	± ---	ANGULAR ±1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
REV	DESCRIPTION			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	6.25		
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			4.25
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	5.15		
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	6.25		
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			4.25
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	5.15		
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

ADDED SHEET: 3 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 MM ONLY	SCALE METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- mm 3 PLACES ± --- INCH	DRAWN BY MQWANG DATE 2001/04/11	CHECKED BY NMARTIN DATE 2001/04/14	TITLE HSD SALES ASSEMBLY 5 ROW OPEN END BACKPLANE	
		2 PLACES ± --- mm 1 PLACE ± --- INCH	APPROVED BY CBIXLER DATE 2001/04/14	MOLEX INCORPORATED		
		ANGULAR ±1/2°	MATERIAL NO. SEE TABLES	DOCUMENT NO. SD-74695-002	SHEET NO. 3 OF 3	
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				