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Part Number: [0746951006](#)
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")

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-Lead
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) 50
Plating min: Mating (µm) 1.25
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

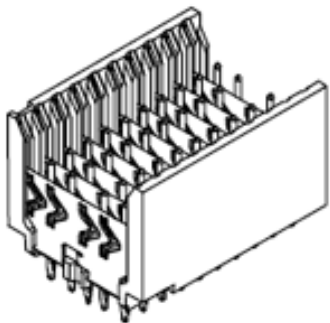


image - Reference only

Series

EU RoHS
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
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® Signal Pin Inserter Repair Tool	0622015700
VHDM® 5 Row and Shield Repair Tool	0622015810
VHDM® 5 Row Shield Extraction Tool	0622016010
VHDM-HSD™ Signal Header, 5 Row by	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

10 Wide, 20.00mm
(.787")

Material Info

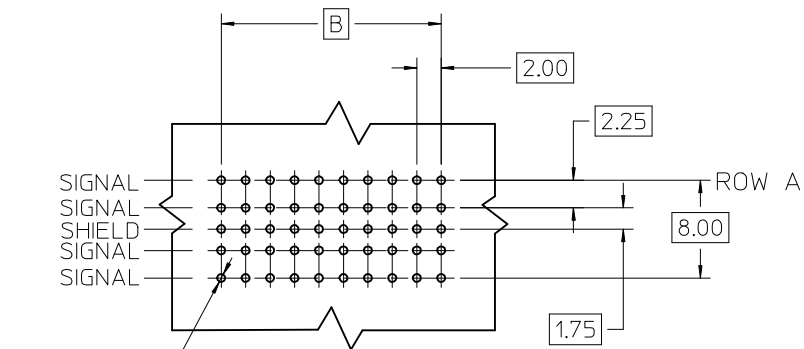
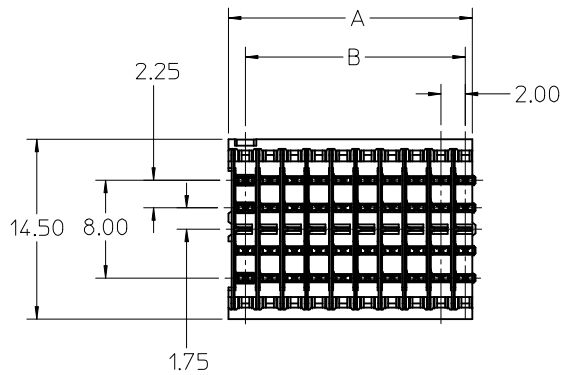
Reference - Drawing Numbers

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

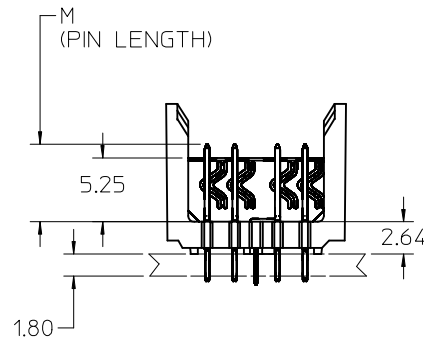
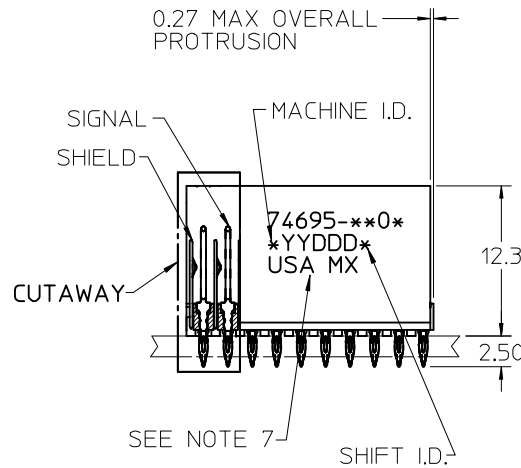
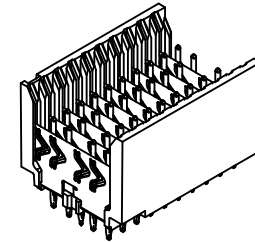
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Ø0.66 DRILL
Ø0.56 ±0.05 PTH
Ø1.00 PAD

⊕ Ø0.10

BACKPLANE HOLE PATTERN
RECOMMENDED DIMENSION



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: UCP2006-4727 DRWN:CTHOMAS 2006/02/16 CHKD:JINGHAM 2006/02/16 APPR:KMULVEY 2006/02/16	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION		REVISE ON CAD ONLY				
					DIMENSION STYLE MM ONLY		TITLE HSD SALES ASSEMBLY 5 ROW OPEN END BACKPLANE						
			mm		INCH		DRAWN BY		DATE				
			4 PLACES ± --- ± ---				MQWANG		2001/04/11				
3 PLACES ± --- ± ---				CHECKED BY		DATE		 MOLEX INCORPORATED					
2 PLACES ± --- ± ---				NMARTIN		2001/04/14							
1 PLACE ± --- ± ---				APPROVED BY		DATE		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
ANGULAR ±1/2°				CBIXLER		2001/04/14		SEE SHT.2&3		SD-74695-002		1 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									
REV				B									

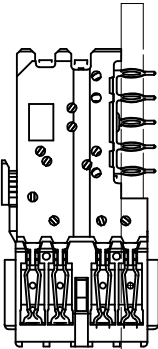
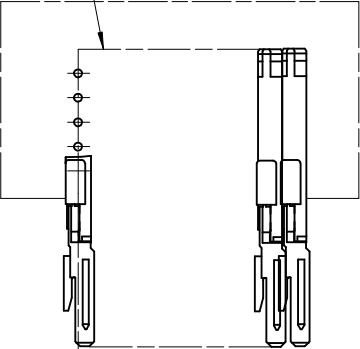
MATERIAL NUMBER ASSIGNMENT

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:KMULVEY 2006/02/16		DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		REVISE ON CAD ONLY			
D	REV		▽-0 ▽C-0			DIMENSION STYLE MM ONLY		TITLE HSD SALES ASSEMBLY 5 ROW OPEN END BACKPLANE					
				4 PLACES	±---	±---	DRAWN BY MQWANG						DATE 2001/04/11
				3 PLACES	±---	±---	CHECKED BY	DATE	MOLEX INCORPORATED				
				2 PLACES	±---	±---	NMARTIN	2001/04/14					
				1 PLACE	±---	±---	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					B						

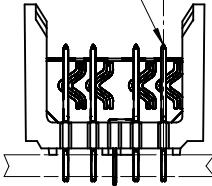
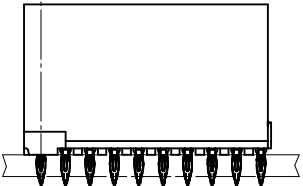
DAUGHTERCARD
CONNECTOR SIDE



0.41
SIGNAL TO
SIGNAL

0.75
TOP
DAUGHTERCARD
PCB TO CENTER
OF ROW A

ROW A



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		
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		
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		
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 PIN	NUMBER OF SHIELD	A	B	M	Au (um) THICKNESS	Sn (um)
74695-9001	10	40	10	20.00	18.00	4.75	0.76	0.76-152
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		
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		
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		
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

DRWN:CTHOMAS

CHKD:JBINGHAM

APPR:KMULVEY

2006/02/16

2006/02/16

2006/02/16

DESCRIPTION

REV

QUALITY SYMBOLS

0

0

GENERAL TOLERANCES (UNLESS SPECIFIED)

mm

INCH

4 PLACES ± --- ± ---

3 PLACES ± --- ± ---

2 PLACES ± --- ± ---

1 PLACE ± --- ± ---

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE

MM ONLY

DRAWN BY

DATE

CHECKED BY

DATE

APPROVED BY

DATE

MATERIAL NO.

SEE TABLES

SIZE

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SCALE

DESIGN UNITS

METRIC

THIRD ANGLE PROJECTION

TITLE

HSD SALES ASSEMBLY

5 ROW OPEN END

BACKPLANE

MOLEX

MOLEX INCORPORATED

DOCUMENT NO.

SD-74695-002

SHEET NO.

3 OF 3