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Part Number: [0746971002](#)
Status: **Active**
Overview: vhdm_hsd
Description: 2.00mm (.079") Pitch 5-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Shield End Version, 40 Circuits, Pin Length 6.25mm (.246")

Documents:

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

Agency Certification

CSA LR19980

General

Product Family Backplane Connectors
 Series [74697](#)
 Application Backplane
 Application Tooling Documents http://www.molex.com/pdm_docs/ats/TM-622010999.pdf>Tooling Manual
 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 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 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
 Stackable Yes
 Surface Mount Compatible (SMC) Yes
 Temperature Range - Operating -55°C to +105°C
 Termination Interface: Style Through Hole - Compliant Pin

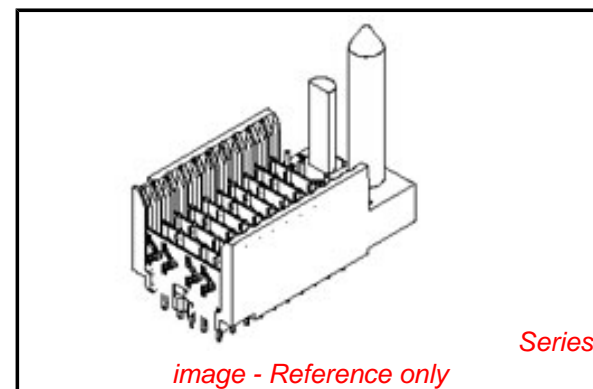


image - Reference only

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
 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

[74697Series](#)

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 Inserter Repair Tool	0622015700
VHDM® 5 Row Pin and Shield Repair Tool	0622015810
VHDM® 5 Row Shield Extraction Tool	0622016010
VHDM-HSD™ Signal Header, 5 Row by	0622020201

10 Wide, 20.00mm
(.787")

Electrical

Current - Maximum per Contact	1A
Data Rate	5.0 Gbps
Real Signals (per 25mm)	48
Voltage - Maximum	120V AC (RMS)/DC

Material Info

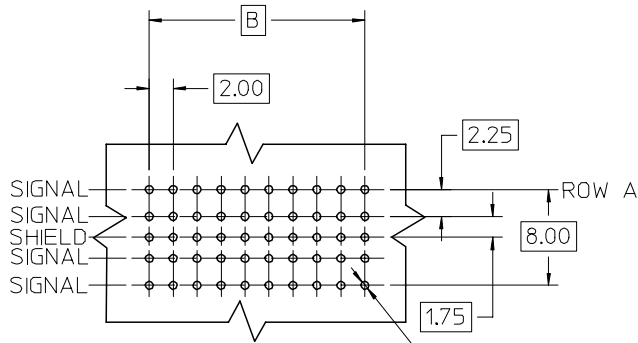
Reference - Drawing Numbers

Packaging Specification	PK-74696-003
Sales Drawing	SD-74697-002

VHDM-HSD is a trademark of Amphenol Corporation

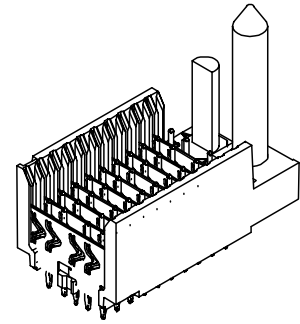
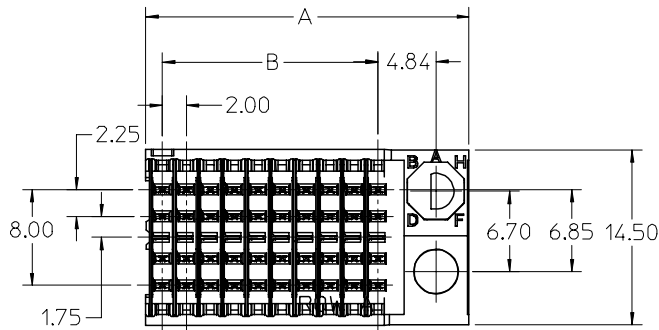
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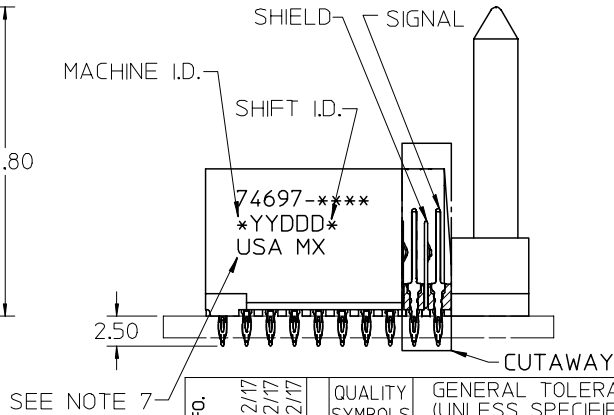
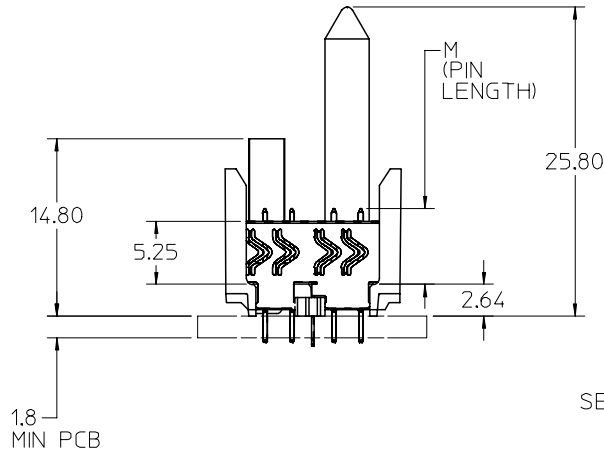
BACKPLANE HOLE PATTERN
RECOMMENDED DIMENSION

- Ø0.66 DRILL
- Ø0.56 ±0.05 PTH
- Ø1.00 PAD
- ⊕ Ø0.10



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-74696-003.
7. EITHER MARK PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON THE TUBE.

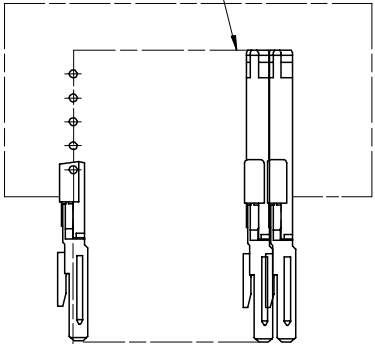


SEE NOTE 7

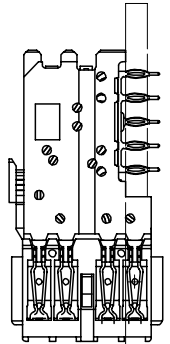
ADDED LEAD-FREE INFO. EC NO: UCP2006-1744 DRWN:CTHOMAS 2006/02/17 CHKD:JBINGHAM 2006/02/17 APPR:KMULVEY 2006/02/17	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY		
			mm	INCH	DIMENSION STYLE MM ONLY		TITLE		
		4 PLACES	±---	±---	DRAWN BY	DATE	HSD SALES ASSEMBLY 5 ROW SHIELD END BACKPLANE		
		3 PLACES	±---	±---	MQWANG	2001/04/17			
2 PLACES	±---	±---	CHECKED BY	DATE	MOLEX INCORPORATED				
1 PLACE	±---	±---	NMARTIN	2001/04/20					
		ANGULAR ±1/2°	DRAFT WHERE APPLICABLE		APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
		MUST REMAIN WITHIN DIMENSIONS			CBIXLER	2001/04/20	SEE SHT.2&3	SD-74697-002	1 OF 3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

P/N 74697-()	-**0-	-**1-	-**2-	-**3-	-**4-	-**5-	-**6-	-**7-	-**8-
KEYING PIN ORIENTATION	0	A	B	C	D	E	F	G	H

DAUGHTERCARD
CONNECTOR SIDE



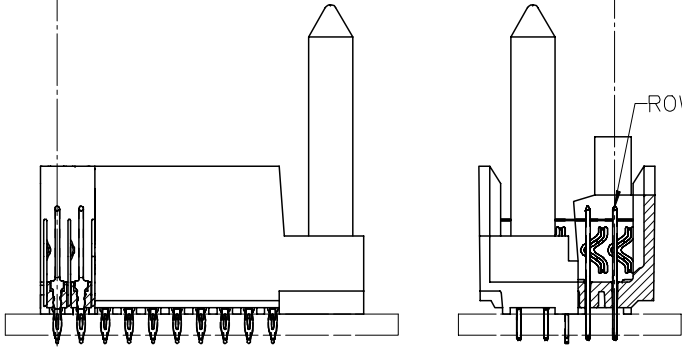
0.41
SIGNAL TO
SIGNAL



0.75
TOP
DAUGHTERCARD
PCB TO CENTER
OF ROW A

74697-****

NUMBER OF COLUMNS/PLATING	CONTACT LOAD (PIN LENGTH)
05 = 05 COLUMN TIN/LEAD	1 & 6 = 4.75
10 = 10 COLUMN TIN/LEAD	2 & 7 = 6.25
25 = 25 COLUMN TIN/LEAD	3 & 8 = 4.25
95 = 05 COLUMN MATTE TIN	4 & 9 = 5.15
90 = 10 COLUMN MATTE TIN	
85 = 25 COLUMN MATTE TIN	



ROW A

ADDED LEAD-FREE INFO. EC NO: UCP2006-1744 DRWN:CTHOMAS 2006/02/17 CHKD:JBINGHAM 2006/02/17 APPR:KMULVEY 2006/02/17	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY	
	DESCRIPTION ▽ - 0 ▽ - 0	mm	INCH	DIMENSION STYLE MM ONLY		TITLE HSD SALES ASSEMBLY 5 ROW SHIELD END BACKPLANE		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY MQWANG	DATE 2001/04/17	MATERIAL NO. MOLEX INCORPORATED		
		2 PLACES ± --- ± ---	1 PLACE ± --- ± ---	CHECKED BY NMARTIN	DATE 2001/04/20	DOCUMENT NO. SD-74697-002	SHEET NO. 2 OF 3	
REV	ANGULAR ±1/2°		APPROVED BY CBIXLER		DATE 2001/04/20	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
DRAFT WHERE APPLICABLE		MUST REMAIN WITHIN DIMENSIONS						

PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A	B	M	Au (um) MIN THICKNESS	Sn/Pb (um) THICKNESS
74697-10*1	10	40	10	27.00	18.00	4.75	0.76	0.76-1.52
74697-10*6							1.27	
74697-25*1	25	100	25	57.00	48.00	6.25	0.76	
74697-25*6							1.27	
74697-05*7	5	20	5	17.00	8.00	6.25	1.27	
74697-10*2	10	40	10	27.00	18.00	4.25	0.76	
74697-10*7							1.27	
74697-25*2	25	100	25	57.00	48.00	5.15	0.76	
74697-25*7							1.27	
74697-10*3	10	40	10	27.00	18.00	4.25	0.76	
74697-10*8							1.27	
74697-25*3	25	100	25	57.00	48.00	5.15	0.76	
74697-25*8							1.27	
74697-10*4	10	40	10	27.00	18.00	4.25	0.76	
74697-10*9							1.27	
74697-25*4	25	100	25	57.00	48.00	5.15	0.76	
74697-25*9							1.27	

PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A	B	M	Au (um) MIN THICKNESS	Sn (um) THICKNESS
74697-90*1	10	40	10	27.00	18.00	4.75	0.76	0.76-1.52
74697-90*6							1.27	
74697-85*1	25	100	25	57.00	48.00	6.25	0.76	
74697-85*6							1.27	
74697-95*7	5	20	5	17.00	8.00	6.25	1.27	
74697-90*2	10	40	10	27.00	18.00	4.25	0.76	
74697-90*7							1.27	
74697-85*2	25	100	25	57.00	48.00	5.15	0.76	
74697-85*7							1.27	
74697-90*3	10	40	10	27.00	18.00	4.25	0.76	
74697-90*8							1.27	
74697-85*3	25	100	25	57.00	48.00	5.15	0.76	
74697-85*8							1.27	
74697-90*4	10	40	10	27.00	18.00	4.25	0.76	
74697-90*9							1.27	
74697-85*4	25	100	25	57.00	48.00	5.15	0.76	
74697-85*9							1.27	

TIN/LEAD P/N CHART

LEAD FREE P/N CHART

ADDED SHEET:3 EC NO: UCP2006-1744 DRAWN: THOMAS 2006/02/17 CHKD: BINGHAM 2006/02/17 APPR: KULLVEY 2006/02/17 REV:	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla=0$ $\nabla=0$	mm INCH	MM ONLY	2.5:1	METRIC		
		4 PLACES ± --- ± ---	DRAWN BY	DATE	TITLE		
		3 PLACES ± --- ± ---	MQWANG	2001/04/17	HSD SALES ASSEMBLY		
	2 PLACES ± --- ± ---	CHECKED BY	DATE	5 ROW SHIELD END			
	1 PLACE ± --- ± ---	NMARTIN	2001/04/20	BACKPLANE			
	ANGULAR ±1/2°	APPROVED BY	DATE	MOLEX INCORPORATED			
		CBIXLER	2001/04/20	DOCUMENT NO.			
		MATERIAL NO.		SD-74697-002			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLES		SHEET NO.	
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		3 OF 3	