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Part Number: [0746971003](#)
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 4.25mm (.167")

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

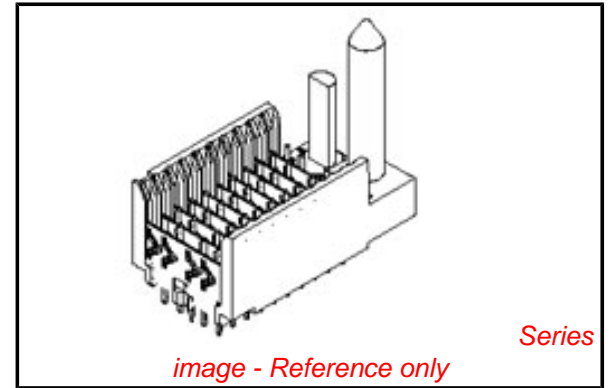


image - Reference only

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 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

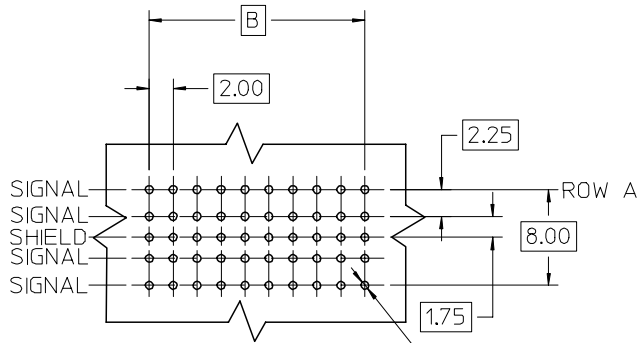
Reference - Drawing Numbers

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

VHDM-HSD is a trademark of Amphenol Corporation

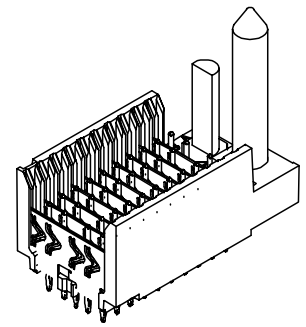
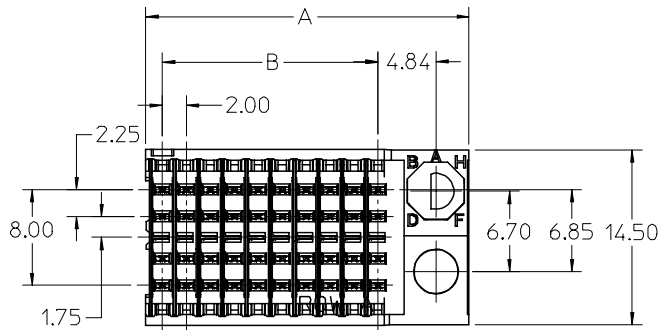
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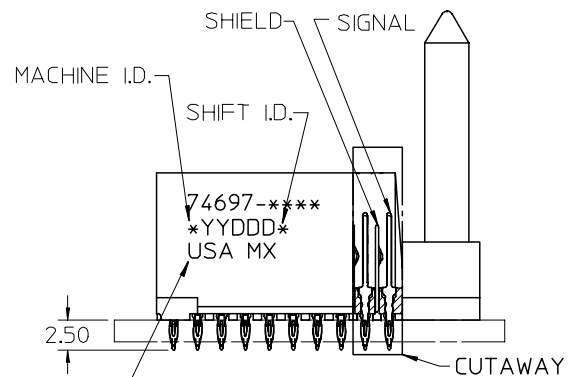
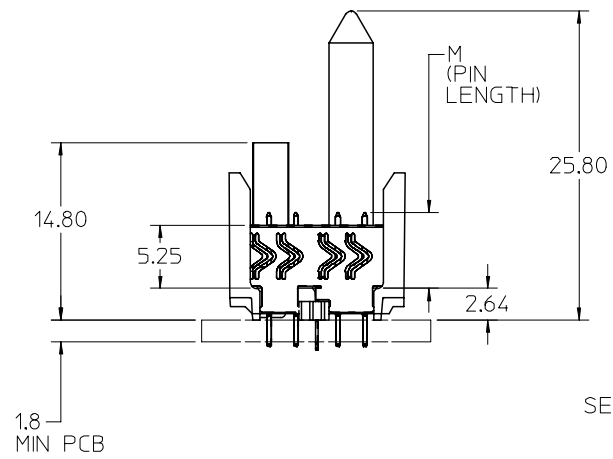
BACKPLANE HOLE PATTERN
RECOMMENDED DIMENSION

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



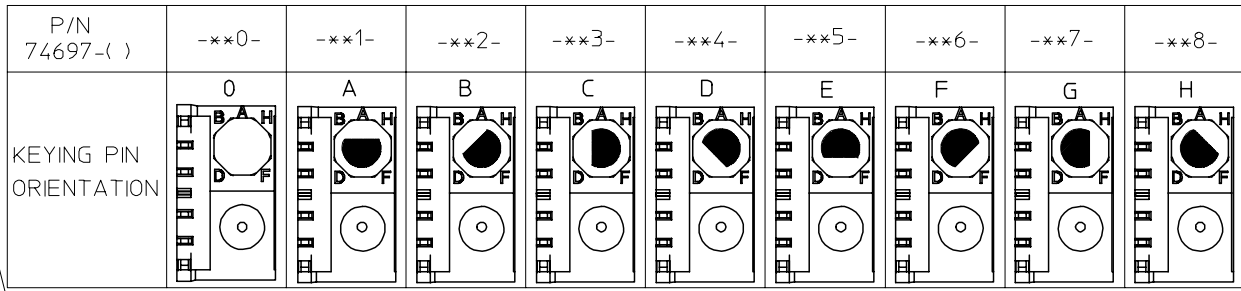
NOTES:

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.

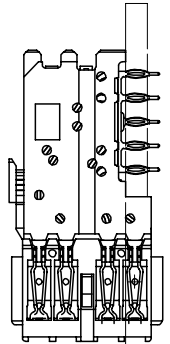
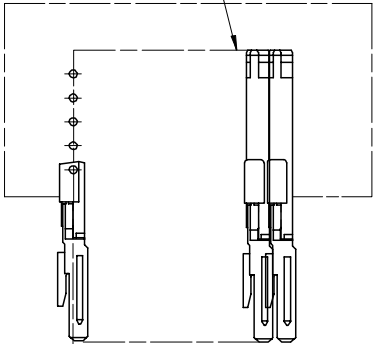


SEE NOTE 7

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	
				DIMENSION STYLE MM ONLY		TITLE HSD SALES ASSEMBLY 5 ROW SHIELD END BACKPLANE		
		4 PLACES ± --- ± ---		DRAWN BY DATE MQWANG 2001/04/17		MATERIAL NO. MOLEX INCORPORATED		
		3 PLACES ± --- ± ---		CHECKED BY DATE NMARTIN 2001/04/20		DOCUMENT NO. SD-74697-002		
2 PLACES ± --- ± ---		APPROVED BY DATE CBIXLER 2001/04/20		SHEET NO. 1 OF 3				
1 PLACE ± --- ± ---		ANGULAR ±1/2°		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						



DAUGHTERCARD
CONNECTOR SIDE



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	

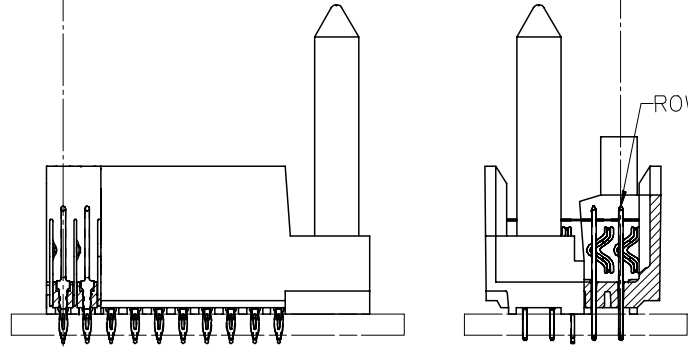
0.41

SIGNAL TO
SIGNAL

0.75

TOP
DAUGHTERCARD
PCB TO CENTER
OF ROW A

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 ▽ - 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 SHIELD END BACKPLANE			
		ANGULAR ±1/2°	DRAWN BY MQWANG	DATE 2001/04/17	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CHECKED BY NMARTIN	DATE 2001/04/20	MATERIAL NO. SEE TABLES	DOCUMENT NO. SD-74697-002	SHEET NO. 2 OF 3

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	6.25	0.76	
74697-10*7							1.27	
74697-25*2	25	100	25	57.00	48.00	6.25	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	4.25	0.76	
74697-25*8							1.27	
74697-10*4	10	40	10	27.00	18.00	5.15	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	6.25	0.76	
74697-90*7							1.27	
74697-85*2	25	100	25	57.00	48.00	6.25	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	4.25	0.76	
74697-85*8							1.27	
74697-90*4	10	40	10	27.00	18.00	5.15	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
	▽=0 ▽=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2°	MM ONLY	2.5:1	METRIC	☉ □ THIRD ANGLE PROJECTION
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: MQWANG CHECKED BY: NMARTIN APPROVED BY: CBIXLER MATERIAL NO.	DATE: 2001/04/17 DATE: 2001/04/20 DATE: 2001/04/20	HSD SALES ASSEMBLY 5 ROW SHIELD END BACKPLANE	
		SEE TABLES	MOLEX INCORPORATED DOCUMENT NO. SD-74697-002		SHEET NO. 3 OF 3	