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Part Number: [0746961004](#)
Status: **Active**
Overview: [vhdm_hsd](#)
Description: 2.00mm (.079") Pitch 5-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Pin End Version, 40 Circuits, Pin Length 5.15mm (.203")

Documents:

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

Agency Certification

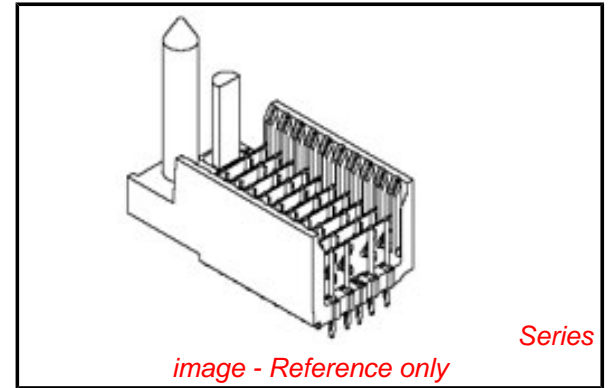
CSA LR19880

General

Product Family Backplane Connectors
 Series [74696](#)
 Application Backplane
 Application Tooling Documents [Tooling Manual](http://www.molex.com/pdm_docs/ats/TM-622010999.pdf)
 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



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

[74696Series](#)

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

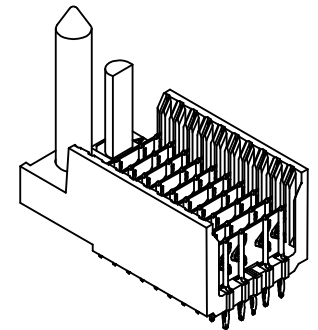
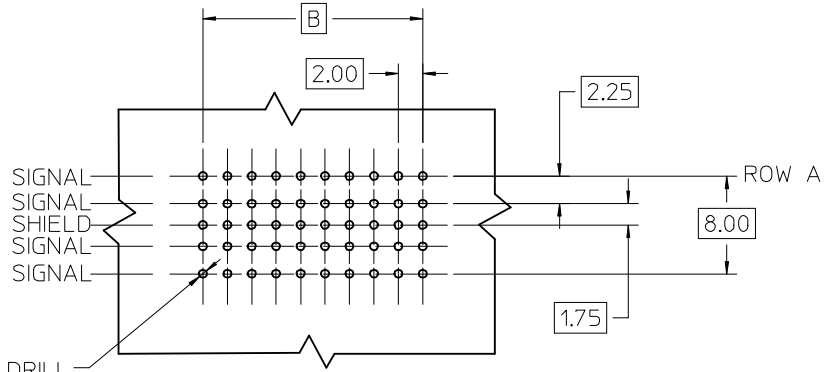
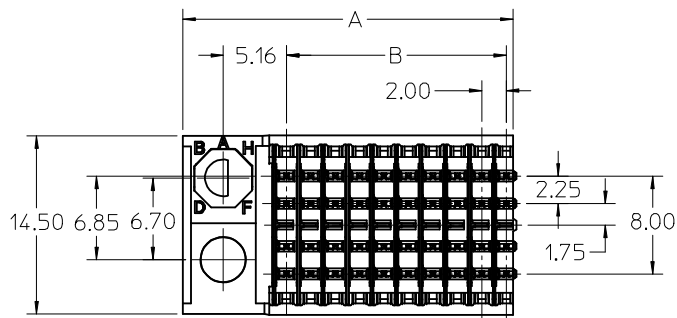
Reference - Drawing Numbers

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

VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 06/08/2010

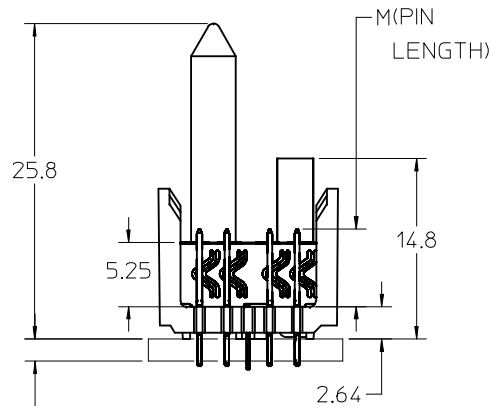
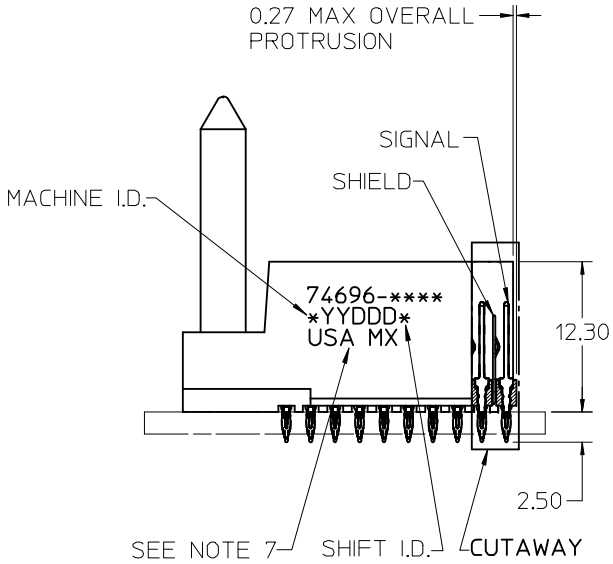
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- Ø 0.66 DRILL
- Ø 0.56 ± 0.05 PTH
- Ø 1.00 PAD
- ⊕ Ø 0.10

**BACKPLANE HOLE PATTERN
RECOMMENDED DIMENSIONS**

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 MATTE TIN 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.
8. PRODUCT COMPLIES WITH COSMETIC SPECIFICATION PS-45499-002.

<p>ADD NOTE 8</p> <p>EC NO: UCP2009-0451 DRWN:BSMART 2008/08/25 CHKD:BBARKER 2008/09/10 APPR:SWILLER 2008/09/11</p>	<p>QUALITY SYMBOLS</p> <p>▽ - 0</p> <p>∇ - 0</p>	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 HSD SALES ASSEMBLY 5 ROW SIGNAL END BACKPLANE		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY MQWANG	DATE 2001/04/17	MOLEX INCORPORATED		
		2 PLACES ± --- ± ---	1 PLACE ± --- ± ---	CHECKED BY NMARTIN	DATE 2001/04/20			
ANGULAR ±1/2°		DRAFT WHERE APPLICABLE		APPROVED BY CBIXLER	DATE 2001/04/20	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74696-002	SHEET NO. 1 OF 3
MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

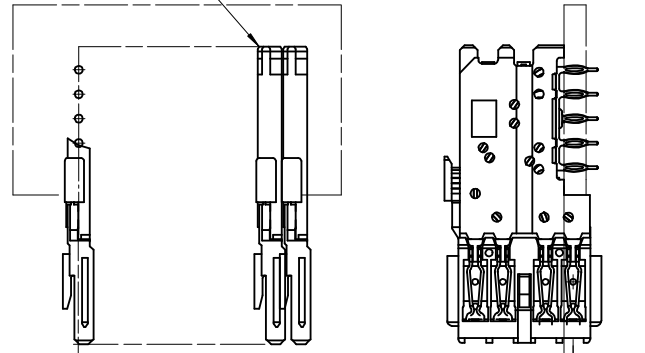
P/N 74696-()	-**0*	-**1*	-**2*	-**3*	-**4*	-**5*	-**6*	-**7*	-**8*
	0	A	B	C	D	E	F	G	H
KEYING PIN ORIENTATION									

74696-***

NUMBER OF COLUMN
5, 10 OR 25
LEADED OR LEAD FREE

CONTACT LOAD (PIN LENGTH)
1 & 6 = 4.75
2 & 7 = 6.25
3 & 8 = 4.25
4 & 9 = 5.15

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) MIN THICKNESS	SnPb(um) THICKNESS
74696-10*1	10	40	10	27.00	18.00	4.75	0.76	0.76-1.52
74696-10*6							1.27	
74696-25*1	25	100	25	57.00	48.00	6.25	0.76	
74696-25*6							1.27	
74696-05*7	5	20	5	17.00	8.00	4.25	1.27	
74696-10*2	10	40	10	27.00	18.00		0.76	
74696-10*7	25	100	25	57.00	48.00	5.15	1.27	
74696-25*2							0.76	
74696-25*7	1.27							
74696-10*3	10	40	10	27.00	18.00	4.25	0.76	
74696-10*8	25	100	25	57.00	48.00		1.27	
74696-25*3						0.76		
74696-25*8	1.27							
74696-10*4	10	40	10	27.00	18.00	5.15	0.76	
74696-10*9	25	100	25	57.00	48.00		1.27	
74696-25*4						0.76		
74696-25*9	1.27							

SEE SHEET 1 EC NO: UCP2009-0451 DRWN:BSMART 2008/08/25 CHKD:BBARKER 2008/09/10 APPR:SWILLER 2008/09/11	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		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ±1/2°	DRAWN BY MQWANG DATE 2001/04/17 CHECKED BY NMARTIN DATE 2001/04/20 APPROVED BY CBIXLER DATE 2001/04/20	HSD SALES ASSEMBLY 5 ROW SIGNAL END BACKPLANE		
	DRAFT WHERE APPLICABLE	MUST REMAIN WITHIN DIMENSIONS	MOLEX INCORPORATED SEE TABLE SD-74696-002			
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		MATERIAL NO.	DOCUMENT NO.	SHEET NO. 2 OF 3

PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A	B	M	Au (um) MIN THICKNESS	Sn (um) THICKNESS
74696-90*1	10	40	10	27.00	18.00	4.75	0.76	0.76-1.52
74696-90*6							1.27	
74696-85*1	25	100	25	57.00	48.00		0.76	
74696-85*6							1.27	
74696-95*7	5	20	5	17.00	8.00	6.25	1.27	
74696-90*2	10	40	10	27.00	18.00		0.76	
74696-90*7							1.27	
74696-85*2	25	100	25	57.00	48.00		0.76	
74696-85*7						1.27		
74696-90*3	10	40	10	27.00	18.00	4.25	0.76	
74696-90*8							1.27	
74696-85*3	25	100	25	57.00	48.00		0.76	
74696-85*8							1.27	
74696-90*4	10	40	10	27.00	18.00	5.15	0.76	
74696-90*9							1.27	
74696-85*4	25	100	25	57.00	48.00		0.76	
74696-85*9							1.27	

LEAD FREE P/N CHART

SEE SHEET 1 EC NO: UCP2009-0451 DR: MWBSMART 2008/08/25 CHKD: BBARKER 2008/09/10 APPR: SMILLER 2008/09/11	QUALITY SYMBOLS  = 0  = 0.07	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE HSD SALES ASSEMBLY 5 ROW SIGNAL END BACKPLANE			
		4 PLACES	± ---	± ---	MQWANG	2001/04/17				
		3 PLACES	± ---	± ---	CHECKED BY	DATE	MOLEX INCORPORATED			
		2 PLACES	± ---	± ---	NMARTIN	2001/04/20				
1 PLACE	± ---	± ---	APPROVED BY	DATE	DOCUMENT NO. SD-74696-002		SHEET NO. 3 OF 3			
ANGULAR ±1/2°		MATERIAL NO.		SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				