

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0746961013](#)
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 4.25mm (.167")

Documents:

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

Agency Certification

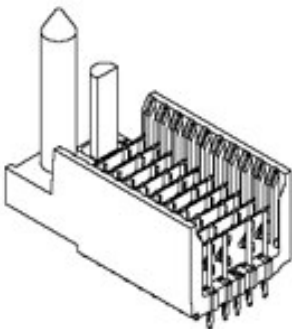
CSA LR19880

General

Product Family Backplane Connectors
Series [74696](#)
Application Backplane
Application Tooling Documents Tooling Manual
Comments Keying Position A
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 Yes
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



Series

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

[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

Electrical

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

10 Wide, 20.00mm
(.787")

Material Info

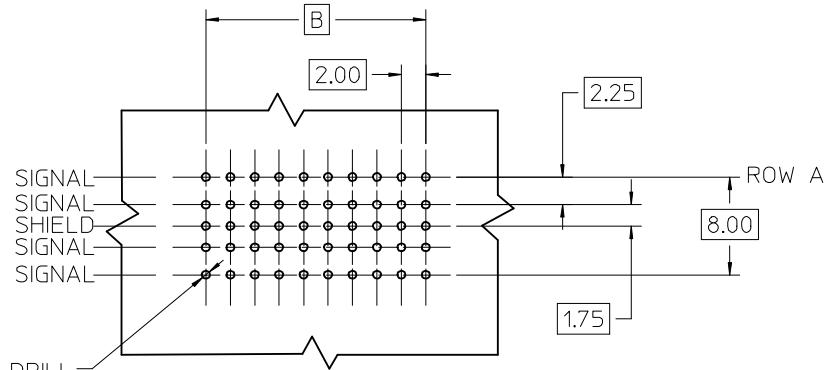
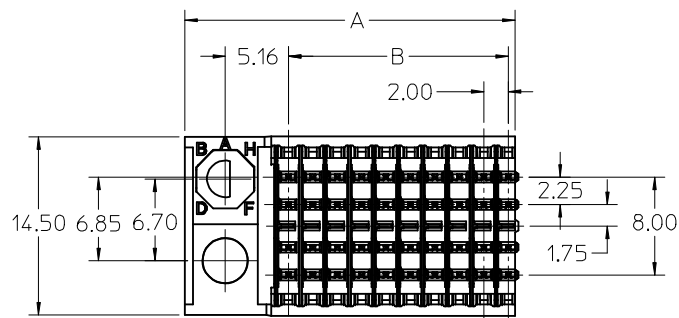
Reference - Drawing Numbers

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

VHDM-HSD is a trademark of Amphenol Corporation

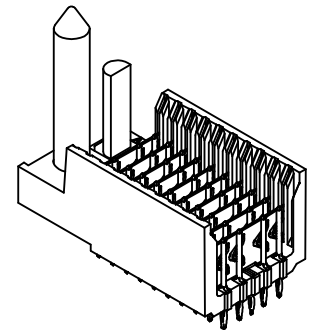
This document was generated on 06/08/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

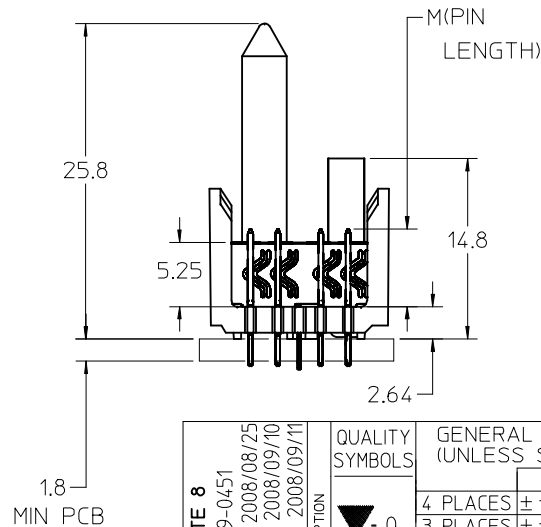
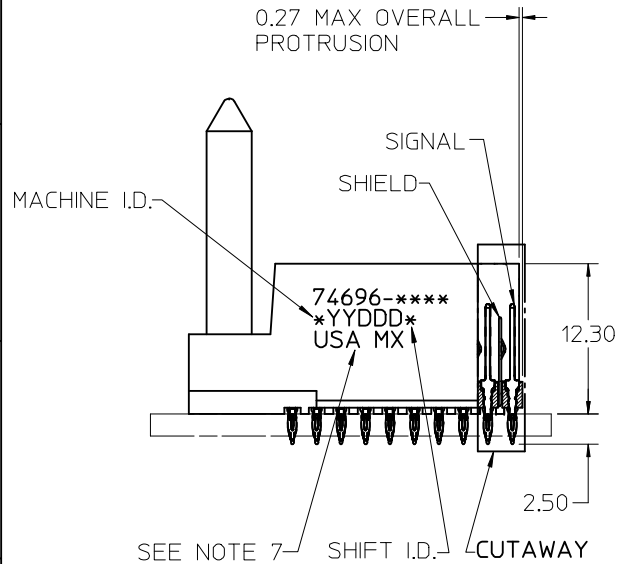


$\varnothing 0.66$ DRILL
 $\varnothing 0.56 \pm 0.05$ PTH
 $\varnothing 1.00$ PAD
 $\varnothing \varnothing 0.10$

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.

ADD NOTE 8 EC NO: UCP2009-0451 DRWN:BSMART 2008/08/25 CHKD:BBARKER 2008/09/10 APPR:SMILLER 2008/09/11	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION REVISE ON CAD ONLY	HSD SALES ASSEMBLY 5 ROW SIGNAL END BACKPLANE MOLEX INCORPORATED SEE TABLE SD-74696-002 1 OF 3					
					DIMENSION STYLE MM ONLY						TITLE		
					DRAWN BY MQWANG						DATE 2001/04/17		
					CHECKED BY NMARTIN						DATE 2001/04/20		
					APPROVED BY CBIXLER						DATE 2001/04/20		
					MATERIAL NO.						DOCUMENT NO.	SHEET NO.	
REV			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					

10 9 8 7 6 5 4 3 2 74696

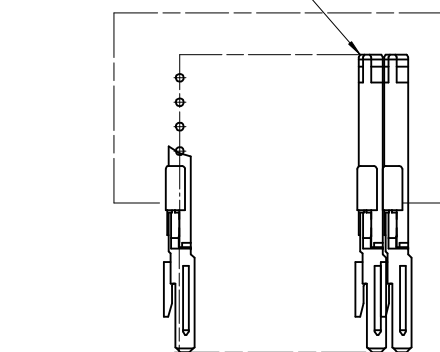
P/N 74696-()	-**0*	-**1*	-**2*	-**3*	-**4*	-**5*	-**6*	-**7*	-**8*
	0	A	B	C	D	E	F	G	H
KEYING PIN ORIENTATION									

74696-***

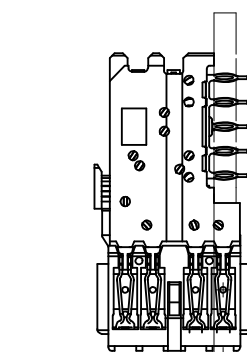
NUMBER OF
COLUMN
5, 10 OR 25
LEADED OR LEAD FREE

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		0.76	
74696-25*6							1.27	
74696-05*7	5	20	5	17.00	8.00	6.25	1.27	
74696-10*2	10	40	10	27.00	18.00		0.76	
74696-10*7							1.27	
74696-25*2	25	100	25	57.00	48.00		0.76	
74696-25*7							1.27	
74696-10*3	10	40	10	27.00	18.00	4.25	0.76	
74696-10*8							1.27	
74696-25*3	25	100	25	57.00	48.00		0.76	
74696-25*8							1.27	
74696-10*4	10	40	10	27.00	18.00	5.15	0.76	
74696-10*9							1.27	
74696-25*4	25	100	25	57.00	48.00		0.76	
74696-25*9							1.27	

SEE SHEET 1 EC NO: UCP2009-0451 IDRW:BSMART 2008/08/25 CHKD:BBARKER 2008/09/10 APPR:SWILLER 2008/09/11	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	SCALE 2.5:1 DESIGN UNITS METRIC DIMENSION STYLE MM ONLY	THIRD ANGLE PROJECTION REVISE ON CAD ONLY	HSD SALES ASSEMBLY 5 ROW SIGNAL END BACKPLANE MOLEX INCORPORATED	MATERIAL NO. DOCUMENT NO. SHEET NO.

10 9 8 7 6 5 4 3 2 1

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