

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0746951101](#)  
**Status:** **Active**  
**Overview:** vhdm\_hsd  
**Description:** 2.00mm (.079") Pitch 5-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Open End Version, Advanced Mate Shield, 40 Circuits, Pin Length 4.75mm (.187")

**Documents:**

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

**Agency Certification**

CSA LR19880

**General**

Product Family Backplane Connectors  
 Series [74695](#)  
 Application Backplane  
 Application Tooling Documents [http://www.molex.com/pdm\\_docs/ats/TM-622010999.pdf](http://www.molex.com/pdm_docs/ats/TM-622010999.pdf)>Tooling Manual</a>  
 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) 30  
 Plating min: Mating (µm) 0.75  
 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

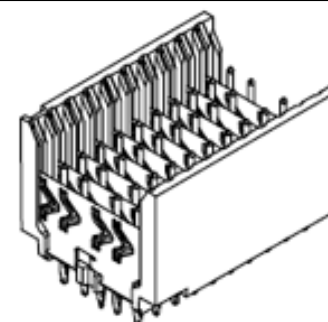


image - Reference only

Series

**EU RoHS**

**RoHS Compliant by Exemption**

**REACH SVHC**

**Contains SVHC: No**

**Halogen-Free**

**Status**

**Not Reviewed**

**China RoHS**



Pb

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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**

[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® 5 Row Pin and Shield Repair Tool	<a href="#">0622015810</a>
VHDM® 5 Row Shield Extraction Tool	<a href="#">0622016010</a>
VHDM-HSD™ Signal Header, 5 Row by 10 Wide, 20.00mm (.787")	<a href="#">0622020201</a>

**Electrical**

Current - Maximum per Contact	1A
Data Rate	5.0 Gbps
Shielded	Yes
Voltage - Maximum	120V AC (RMS)/DC

**Material Info****Reference - Drawing Numbers**

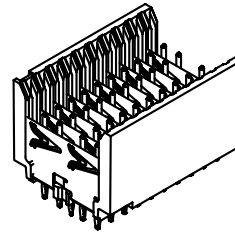
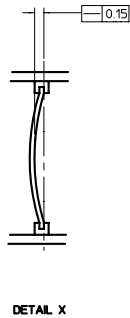
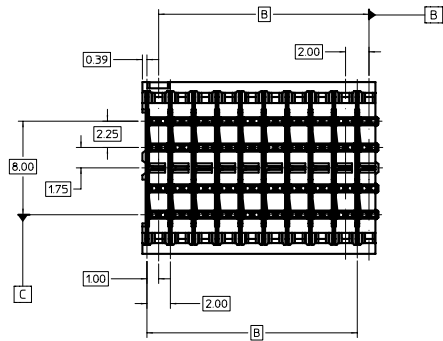
Packaging Specification	PK-74695-003
Sales Drawing	E-74695-002, SD-74695-003

VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 06/08/2010

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20 19 18 17 16 15 14 13 12 11 74695 9 8 7 6 5 4 3 2 1



74695-\*\*0\*

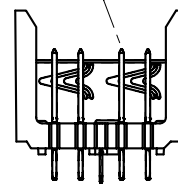
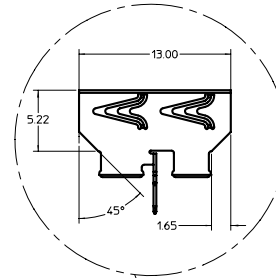
COLUMN CODE  
11 OR 26

PIN HEIGHT  
1 & 6 = 4.75  
2 & 7 = 6.25  
3 & 8 = 4.25  
4 & 9 = 5.15

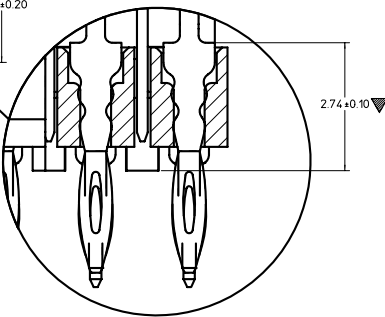
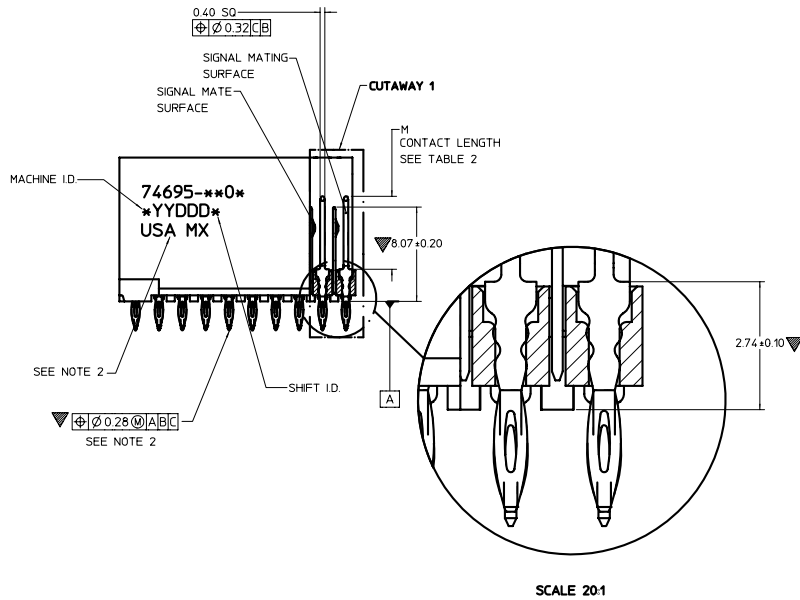
MODULE CODE  
0 = OPEN

ASSEMBLY M/N	B	TOTAL NUMBER OF SIGNAL CONTACT	TOTAL NUMBER OF GROUND SHIELD
74695-110*	18.00	40	10
74695-260*	48.00	100	25

PLATING PER	ASSEMBLY M/N	HOUSING	SIGNAL CONTACT		SHIELD CONTACT
			M/N	LENGTH M	
30 GOLD	74695-110*	74689-0010	74054-+527	**1-4	74688-6527
	74695-260*	74689-0025		1=4.75 2=6.25	
50 GOLD	74695-110*	74689-0010	74354-+922	3=4.25 4=5.15	74688-6922
	74695-260*	74689-0025			



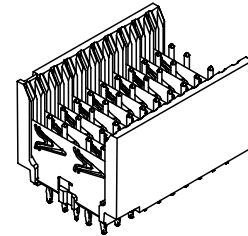
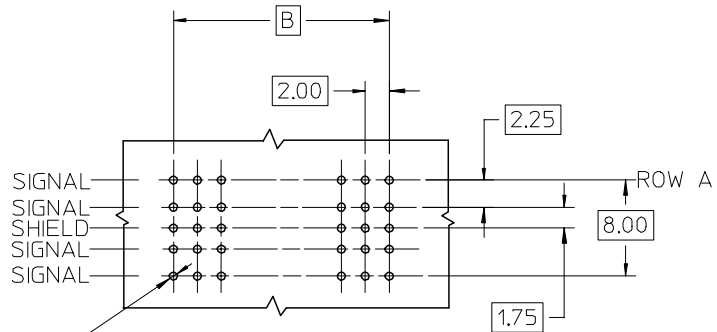
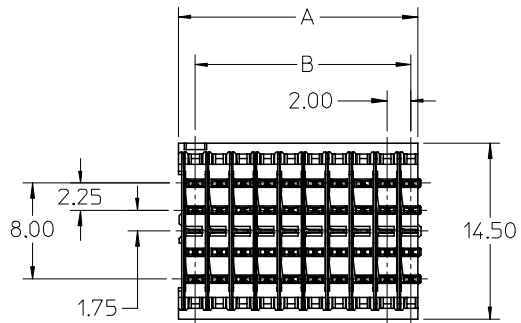
- NOTES:
1. SHIELDS SHALL BE STRAIGHT WITH MAXIMUM ALLOWABLE BOW OF 0.15 ON EITHER SIDE. SEE DETAIL X.
  2. TAIL SIDE POSITION TOLERANCE TO BE INSPECTED USING GAGE 74047-0046.
  3. PACKAGE PER PK-74695-003.
  4. EITHER MARK PARTS WITH PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON THE TUBE
  5. MATING SIDE POSITION TOLERANCE OF SIGNAL PINS AND STRAIGHTNESS TOLERANCE OF SHIELD TO BE INSPECTED USING GAGE 74047-0043.



SCALE 20:1

EC NO: UDT2002-0291 DRAWN: MOWANG 2001/09/12 CHKD: NMARTIN 2001/09/12 APPR: CBIXLER 2001/09/13	QUALITY SYMBOLS -5 -0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
		4 PLACES ±	3 PLACES ±	2 PLACES ±0.05	1 PLACE ±0.13	DIMENSION STYLE MM ONLY	
DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	ANGULAR ±1/2°		APPROVED BY CBIXLER	DATE 2001/08/02	MATERIAL NO	DOCUMENT NO E-74695-002
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO 1 OF 1		MOLEX MOLEX INCORPORATED	

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

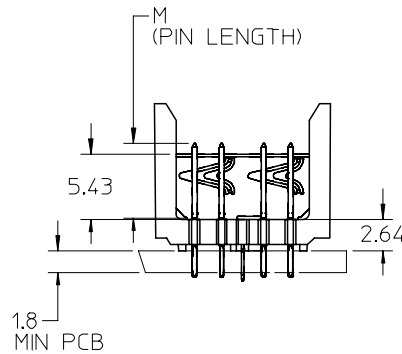
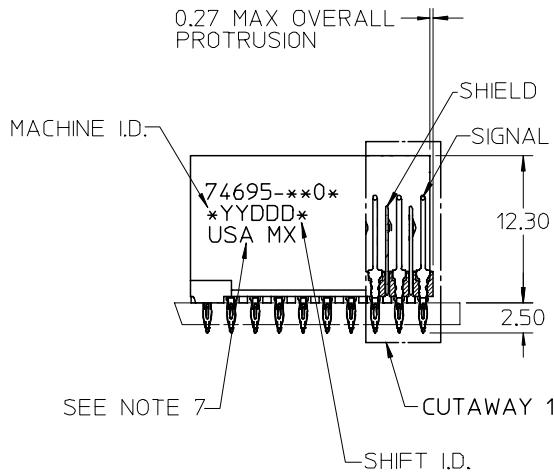


$\varnothing 0.66$  DRILL  
 $\varnothing 0.56 \pm 0.05$  PTH  
 $\varnothing 1.00$  PAD  
 $\varnothing 0.10$

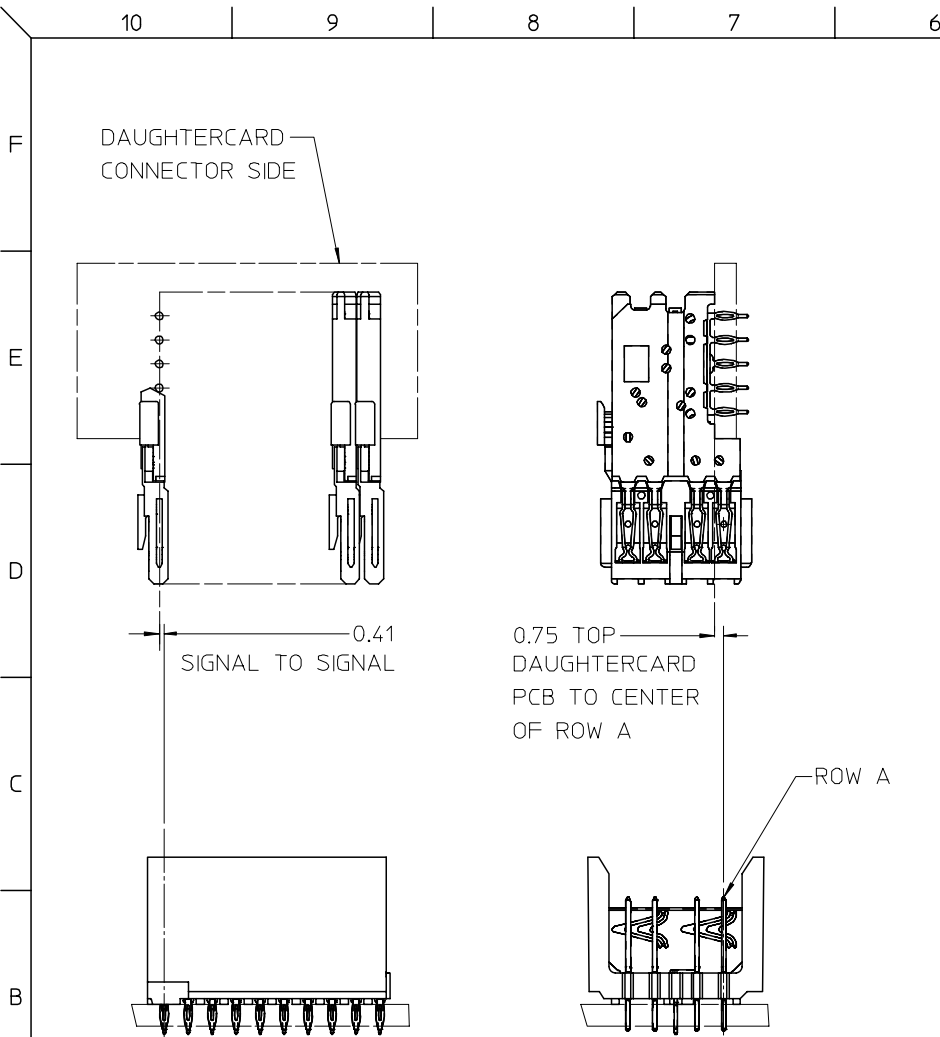
BACKPLANE HOLE PATTERN  
RECOMMENDED DIMENSION

NOTES:

- MATERIAL: HOUSING -LIQUID CRYSTAL POLYMER (LCP). GLASS-FILLED. UL94 V-0. COLOR: BLACK. SIGNAL & SHIELD -COPPER ALLOY.
- FINISHES: SELECTIVE GOLD (Au) ON CONTACT AREA, SELECTIVE TIN/LEAD (Sn/Pb) ON TAILS, NICKEL (Ni) OVERALL.
- THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-74031-999.
- FOR MIXED CONTACT MATING LENGTHS CONSULT MOLEX FOR AVAILABILITY.
- FOR SPECIFIC PART NUMBER AND MATING INFORMATION REFER TO SHEET 2.
- PACKAGE PER PK-74695-003.
- EITHER MARK PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON THE TUBE.



REVISED - PLATING NOTE EC NO: UCP2005-2161 DRWN: BINGHAM 2005/04/07 CHKD: 2005/04/07 APPR: CBXLER 2005/04/08	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY															
	DESCRIPTION ▼ = 0 ▽ = 0	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± ---	± ---	1 PLACE	± ---	± ---	DIMENSION STYLE MM ONLY	TITLE		
			mm	INCH																	
		4 PLACES	± ---	± ---																	
3 PLACES	± ---	± ---																			
2 PLACES	± ---	± ---																			
1 PLACE	± ---	± ---																			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: MQWANG CHECKED BY: NMARTIN APPROVED BY: CBXLER	DATE: 2001/10/04 DATE: 2001/10/05 DATE: 2001/10/08	HSD SALES ASSEMBLY 5 ROW ADVANCED MATE OPEN END BACKPLANE MOLEX INCORPORATED																		
SHEET NO. 1 OF 2 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MATERIAL NO. SEE SHEET 2 DOCUMENT NO. SD-74695-003	SHEET NO. 1 OF 2																			



74695									
PART NUMBER	COLUMN	NUMBER OF SIGNALS	NUMBER OF SHIELDS	A	B	M	Au (um) THICKNESS	Sn (um) THICKNESS	
74695-1101	10	40	10	20.00	18.00	4.75	0.76	0.76-1.52	
74695-1106							1.27		
74695-2601	25	100	25	50.00	48.00	6.25	0.76		
74695-2606							1.27		
74695-1102	10	40	10	20.00	18.00	4.25	0.76		
74695-1107							1.27		
74695-2602	25	100	25	50.00	48.00	5.15	0.76		
74695-2607							1.27		
74695-1103	10	40	10	20.00	18.00	4.25	0.76		
74695-1108							1.27		
74695-2603	25	100	25	50.00	48.00	5.15	0.76		
74695-2608							1.27		
74695-1104	10	40	10	20.00	18.00	4.25	0.76		
74695-1109							1.27		
74695-2604	25	100	25	50.00	48.00	4.75	0.76		
74695-2609							1.27		

SEE SHEET 1 EC NO: UCP2005-2161 DRWN: JBINGHAM 2005/04/07 CHKD: 2005/04/07 APPR: CBIXLER 2005/04/08	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY		
	▼ = 0 ▽ = 0 ANGLAR ±1/2°	mm	INCH	DIMENSION STYLE MM ONLY		TITLE			
		4 PLACES	± ---	± ---	DRAWN BY DATE		HSD SALES ASSEMBLY 5 ROW ADVANCED MATE OPEN END BACKPLANE		
		3 PLACES	± ---	± ---	MQWANG 2001/10/04				
2 PLACES	± ---	± ---	CHECKED BY DATE		MOLEX INCORPORATED				
1 PLACE	± ---	± ---	NMARTIN 2001/10/05					APPROVED BY DATE MATERIAL NO. DOCUMENT NO. SHEET NO. CBIXLER 2001/10/08 SEE TABLE SD-74695-003 2 OF 2	
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								