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Part Number: [0746511104](#)
Status: **Active**
Overview: [vhdm__hsd](#)
Description: 2.00mm (.079") Pitch 8-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Shield Pin End Version, Advanced Mate Shield, 60 Circuits, Pin Length 5.15mm (.203")

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

Agency Certification

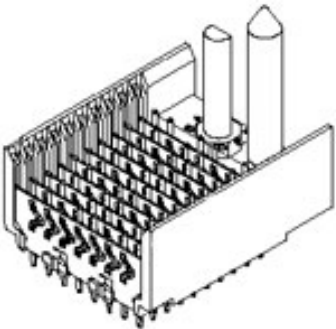
CSA LR19980
UL E29179

General

Product Family Backplane Connectors
Series [74651](#)
Application Backplane
Application Tooling Documents Tooling Manual
Comments No Keying Position
Component Type PCB Header
Overview [vhdm__hsd](#)
Product Name VHDM-HSD™
Style N/A

Physical

Circuits (Loaded) 60
Circuits (maximum) 60
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 Copper-Nickel-Silicon, 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 8
Orientation Vertical
PC Tail Length (in) 0.098 In
PC Tail Length (mm) 2.50 mm
PCB Locator No
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
Pitch - Term. Interface (in) 0.079 In
Pitch - Term. Interface (mm) 2.00 mm
Plating min: Mating (µin) 30



Series

image - Reference only

EU RoHS
RoHS Compliant by Exemption
REACH SVHC
Contains SVHC: No
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
[74651Series](#)

Mates With
HSD Daughtercards [74680](#) , [74686](#)

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.

Description	Product #
VHDM® Insertion Module for Advanced Mate Signal Header, 8 Row by 10 Wide, 20.00mm (.787")	0622020205

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

Electrical

Current - Maximum per Contact	1A
Data Rate	5.0 Gbps
Real Signals (per 25mm)	72
Shield Type	Ground Plane Shield
Shielded	Yes
Voltage - Maximum	120V AC (RMS)/DC

Material Info

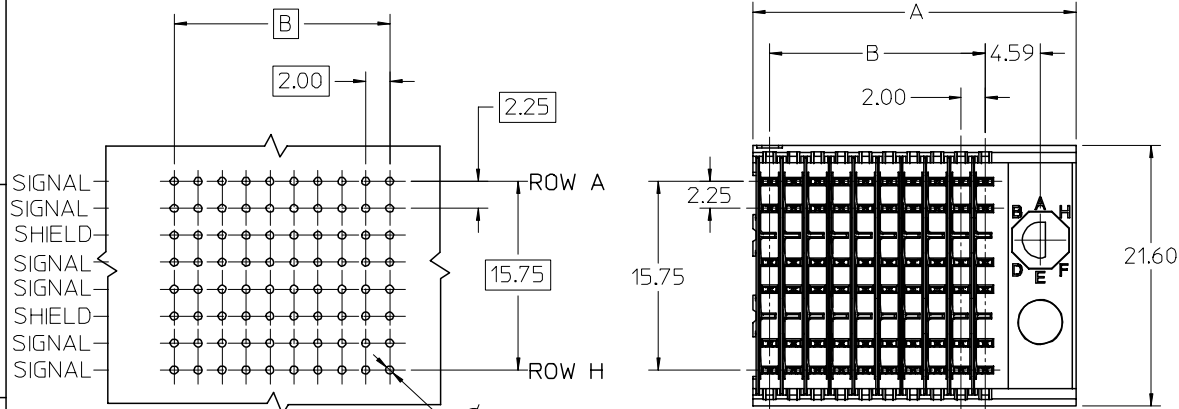
Reference - Drawing Numbers

Packaging Specification	PK-74061-003
Sales Drawing	SD-74651-003

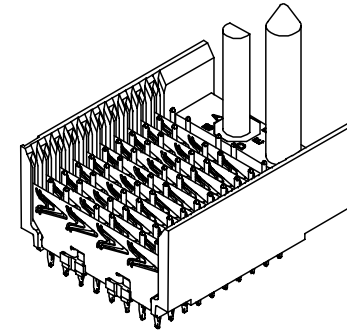
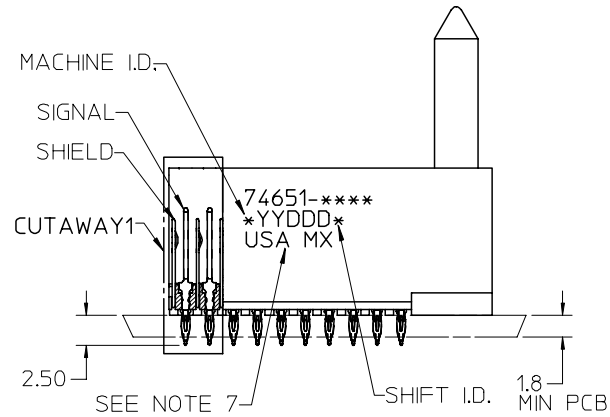
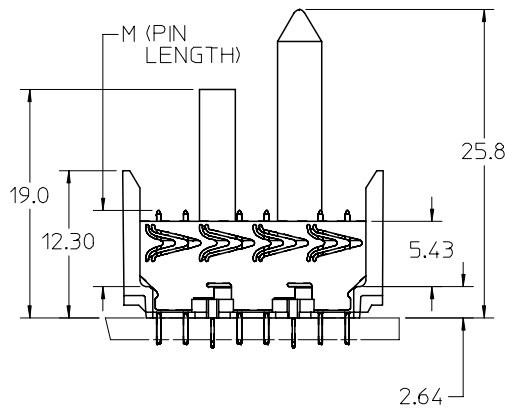
VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/27/2010

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BACKPLANE HOLE PATTERN
RECOMMENDED DIMENSION



NOTES:

1. MATERIAL: HOUSING -LIQUID CRYSTAL POLYMER (LCP)
GLASS-FILLED. UL 94-0. COLOR BLACK. SIGNAL & SHIELD -HIGH PERFORMANCE COPPER ALLOY.
2. FINISHES:
CONTACT AREA: SELECTIVE GOLD (Au)
PCB TAILS: SELECTIVE TIN/LEAD (Sn/Pb)
OR SELECTIVE MATTE TIN (Sn)
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-74061-003.
7. EITHER MARK PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON THE TUBE.

REVISED - PLATING NOTE EC NO: UCP2006-0051 DRWN: KMULVEY 2005/07/13 CHKD: 2005/07/13 APPR: SREED 2005/07/15	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		REVISE ON CAD ONLY					
		▽ - 0 ▽ - 0			DIMENSION STYLE MM ONLY		TITLE HSD SALES ASSEMBLY 8 ROW ADVANCED MATE SHIELD END BACKPLANE							
			4 PLACES ± --- ± ---		DRAWN BY MQWANG							DATE 2001/05/22		
			3 PLACES ± --- ± ---		CHECKED BY JLAURX							DATE 2001/05/25		
			2 PLACES ± --- ± ---		APPROVED BY CBIXLER		DATE 2001/05/27		MATERIAL NO. SEE SHEET 2		DOCUMENT NO. SD-74651-003		SHEET NO. 1 OF 2	
			1 PLACE ± --- ± ---		ANGULAR ±1/2°		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		B					
		DRAFT WHERE APPLICABLE		MUST REMAIN WITHIN DIMENSIONS										

10 9 8 7 6 5 4 3 2 74651

F
E
D
C
B
A

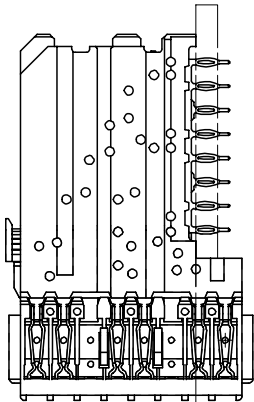
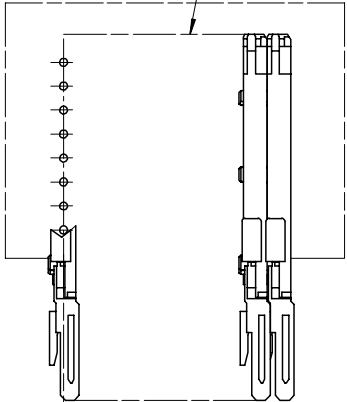
M/N 74651-()	-**0*	-**1*	-**2*	-**3*	-**4*	-**5*	-**6*	-**7*	-**8*
KEYING PIN ORIENTATION	0	A	B	C	D	E	F	G	H

74651-****

NUMBER OF COLUMNS/
PLATING
11 = 10 COLUMN TIN/LEAD
26 = 25 COLUMN TIN/LEAD
91 = 10 COLUMN MATTE TIN
86 = 25 COLUMN MATTE TIN

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

DAUGHTERCARD
CONNECTOR SIDE

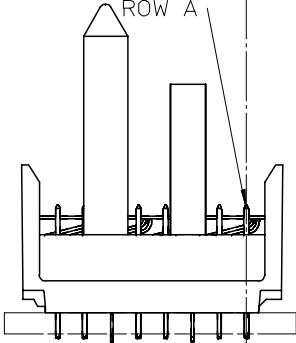
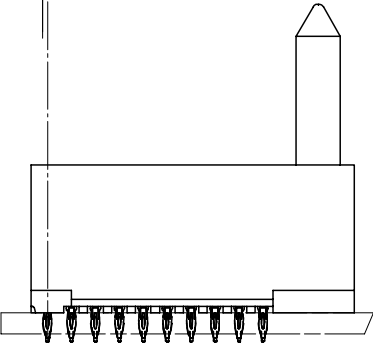


PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A	B	M	Au (um) MIN THICKNESS	Sn (um) THICKNESS
74651-*1*1	10	60	10	27.00	18.00	4.75	0.76	0.76-1.52
74651-*1*6							1.27	
74651-*6*1	25	150	25	57.00	48.00		0.76	
74651-*6*6							1.27	
74651-*1*2	10	60	10	27.00	18.00	6.25	0.76	
74651-*1*7							1.27	
74651-*6*2	25	150	25	57.00	48.00		0.76	
74651-*6*7							1.27	
74651-*1*3	10	60	10	27.00	18.00	4.25	0.76	
74651-*1*8							1.27	
74651-*6*3	25	150	25	57.00	48.00		0.76	
74651-*6*8							1.27	
74651-*1*4	10	60	10	27.00	18.00	5.15	0.76	
74651-*1*9							1.27	
74651-*6*4	25	150	25	57.00	48.00		0.76	
74651-*6*9							1.27	

0.41
SIGNAL TO SIGNAL

2.45
TOP DAUGHTERCARD
PCB TO CENTER
OF ROW A

ROW A



SEE SHEET 1 EC NO: UCP2006-0051 DRWN: KMULVEY 2005/07/13 CHKD: 2005/07/13 APPR: SPEED 2005/07/15	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		REVISE ON CAD ONLY		
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			4 PLACES	± ---	± ---	DRAWN BY					
			3 PLACES	± ---	± ---	MQWANG		2001/05/22			
			2 PLACES	± ---	± ---	CHECKED BY		DATE			
1 PLACE	± ---	± ---	JLAURX		2001/05/25		MOLEX MOLEX INCORPORATED				
ANGULAR ±1/2°											
DRAFT WHERE APPLICABLE					APPROVED BY		DATE		MATERIAL NO.		
					CBIXLER		2001/05/27		DOCUMENT NO.		
									SEE TABLE		
									SD-74651-003		
									SHEET NO.		
									2 OF 2		
									B		
									</		

8 7 6 5 4 3 2 1