

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0746509004](#)
Status: **Active**
Overview: [vhdm__hsd](#)
Description: 2.00mm (.079") Pitch 8-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Signal Pin End Version, Advanced Mate Shield, 60 Circuits, Pin Length 5.15mm (.203")

Documents:

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Product Specification PS-74031-999 \(PDF\)](#)

Agency Certification

CSA LR19980

General

Product Family Backplane Connectors
Series [74650](#)
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 Yes
Material - Metal Copper-Nickel-Silicon, High Performance Alloy (HPA), Stainless Steel
Material - Plating Mating Gold
Material - Plating Termination Tin
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

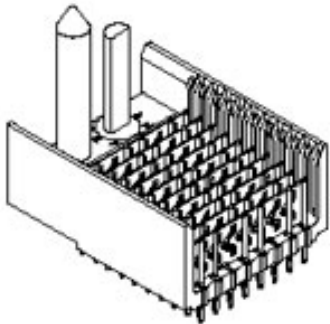


image - Reference only

Series

EU RoHS

**ELV and RoHS
Compliant**

REACH SVHC

Not Reviewed

Halogen-Free

Status

Halogen-Free

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

[74650Series](#)

Mates With

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

Use With

Daughtercard Modules

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	0622015700
Insertor Repair Tool	
VHDM® Insertion	0622020205
Module for Advanced Mate Signal Header, 8 Row by 10 Wide, 20.00mm (.787")	

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	250V

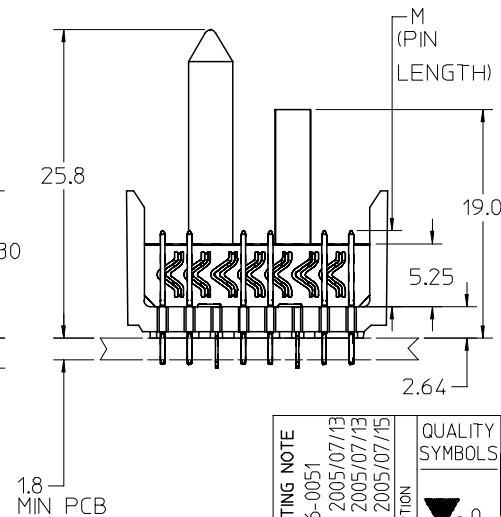
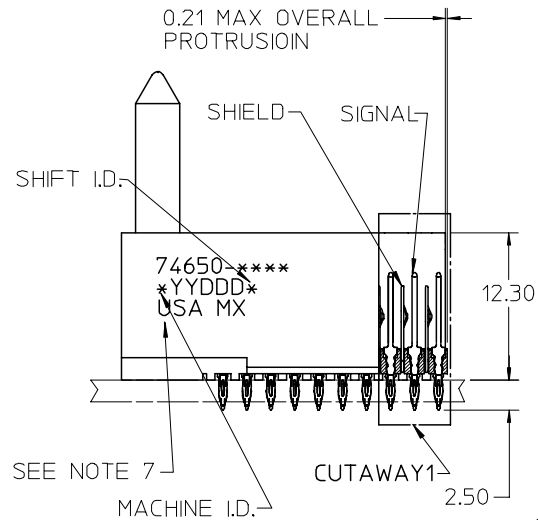
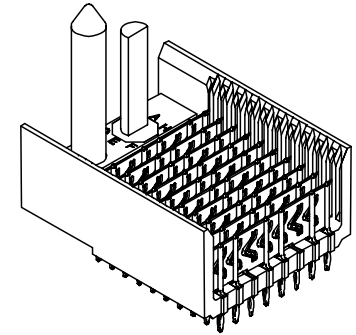
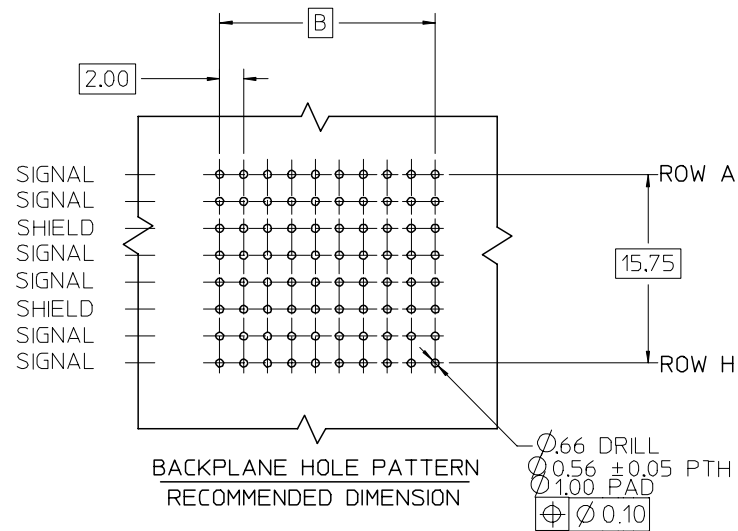
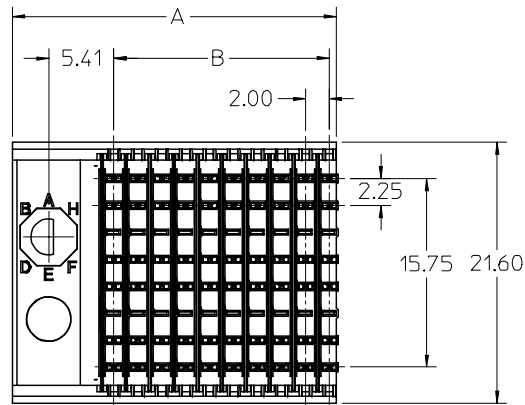
Material Info

Reference - Drawing Numbers

Packaging Specification	PK-74061-003
Product Specification	PS-74031-999
Sales Drawing	SD-74650-002

VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/27/2010
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



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	QUALITY SYMBOLS ▽ = 0 ◁ = 0	DESCRIPTION REV	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 8 ROW SIGNAL END BACKPLANE			
			4 PLACES	± ---	± ---	DRAWN BY MQWANG				DATE 2001/03/22	
			3 PLACES	± ---	± ---	CHECKED BY JLAURX		DATE 2001/03/27	MOLEX INCORPORATED		
			2 PLACES	± ---	± ---	APPROVED BY DATE		MATERIAL NO.			DOCUMENT NO.
			1 PLACE	± ---	± ---	CBIXLER 2001/03/27		SEE SHEET 2		SD-74650-002	
			ANGULAR ±1/2°		DRAFT WHERE APPLICABLE			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		MUST REMAIN WITHIN DIMENSIONS									

10 9 8 7 6 5 4 3 2 74650

M/N 74650-()	-**0*	-**1*	-**2*	-**3*	-**4*	-**5*	-**6*	-**7*	-**8*
KEYING PIN ORIENTATION	0	A	B	C	D	E	F	G	H

74650-***

NUMBER OF COLUMNS/
PLATING

10=10 COLUMN TIN/LEAD

25=25 COLUMN TIN/LEAD

90=10 COLUMN MATTE TIN

85=25 COLUMN MATTE TIN

CONTACT LOAD
(PIN LENGTH)

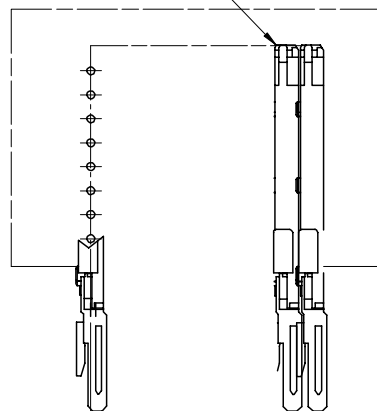
1 & 6 = 4.75

2 & 7 = 6.25

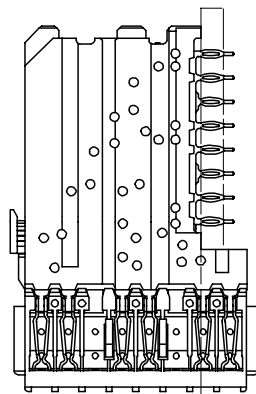
3 & 8 = 4.25

4 & 9 = 5.15

DAUGHTERCARD
CONNECTOR SIDE

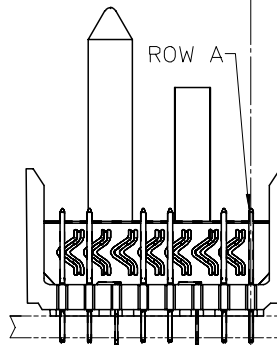
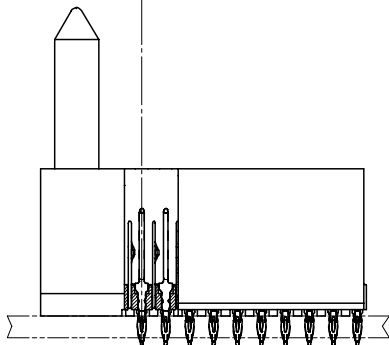


0.41
SIGNAL TO SIGNAL



2.45
TOP DAUGHTERCARD
PCB TO CENTER OF
ROW A

PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A MAX	B	M	Au (um) MIN THICKNESS	Sn/Pb (um) THICKNESS
74650-*0*1	10	60	10	27.00	18.00	4.75	0.76	0.76-1.52
74650-*0*6							1.27	
74650-*5*1	25	150	25	57.00	48.00	4.75	0.76	
74650-*5*6							1.27	
74650-*0*2	10	60	10	27.00	18.00	6.25	0.76	
74650-*0*7							1.27	
74650-*5*2	25	150	25	57.00	48.00	6.25	0.76	
74650-*5*7							1.27	
74650-*0*3	10	60	10	27.00	18.00	4.25	0.76	
74650-*0*8							1.27	
74650-*5*3	25	150	25	57.00	48.00	4.25	0.76	
74650-*5*8							1.27	
74650-*0*4	10	60	10	27.00	18.00	5.15	0.76	
74650-*0*9							1.27	
74650-*5*4	25	150	25	57.00	48.00	5.15	0.76	
74650-*5*9							1.27	



SEE SHEET 1 EC NO: UCP2006-0051 DRWN: KMULVEY 2005/07/13 CHKD: 2005/07/13 APPR: SREED 2005/07/15	QUALITY SYMBOLS ▽ 0 ▽ 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 2.5:1	DESIGN UNITS METRIC		THIRD ANGLE PROJECTION	REVISE ON CAD ONLY		
D	REV	DESCRIPTION	mm		INCH		DIMENSION STYLE		TITLE
			4 PLACES ± --- ± ---		MM ONLY		HSD SALES ASSEMBLY		
			3 PLACES ± --- ± ---		DRAWN BY DATE		8 ROW SIGNAL END		
			2 PLACES ± --- ± ---		MQWANG 2001/03/22		BACKPLANE		
			1 PLACE ± --- ± ---		CHECKED BY DATE				
ANGULAR ±1/2°		JLAURX 2001/03/27		MOLEX MOLEX INCORPORATED					
DRAFT WHERE APPLICABLE		APPROVED BY DATE		MATERIAL NO.		DOCUMENT NO.		SHEET NO. 2 OF 2	
MUST REMAIN WITHIN DIMENSIONS		CBIXLER 2001/03/27		SEE TABLE		SD-74650-002			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									