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Part Number: [0746501001](#)
Status: **Active**
Overview: [vhdm_hsd](#)
Description: 2.00mm (.079") Pitch 8-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Pin End Version, 60 Circuits, Pin Length 4.75mm (.187")

Documents:

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

Agency Certification

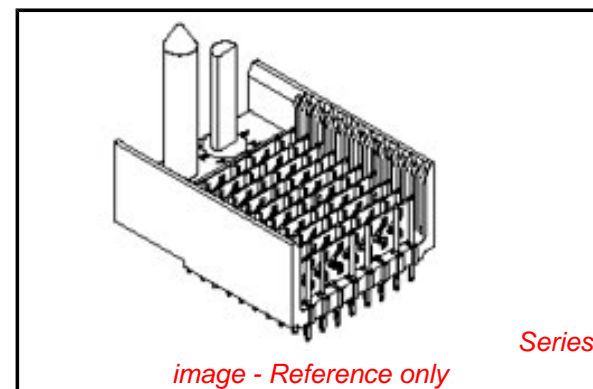
CSA LR19980
 UL E29179

General

Product Family Backplane Connectors
 Series [74650](#)
 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) 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



EU RoHS

RoHS Compliant by Exemption
REACH SVHC
Contains SVHC: No
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 Inserter Repair Tool	0622015700
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	250V

Material Info

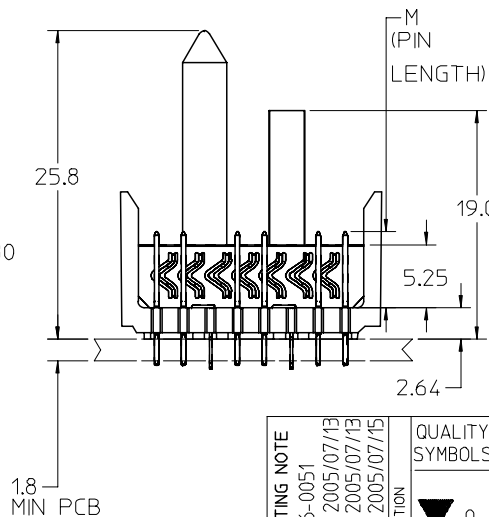
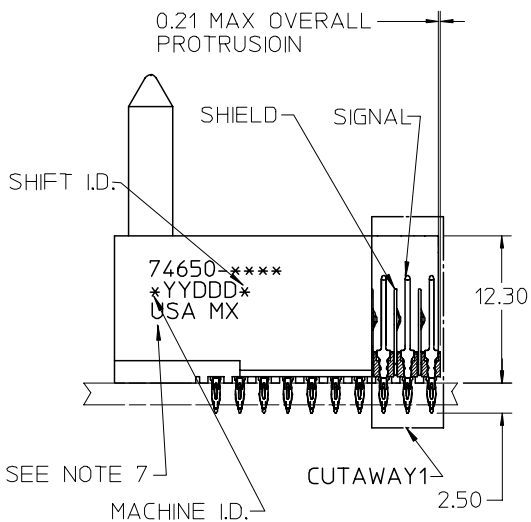
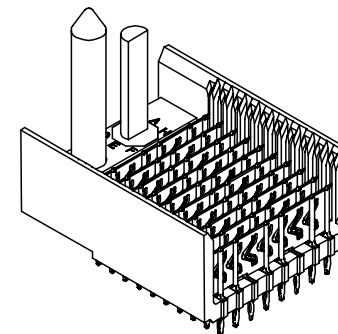
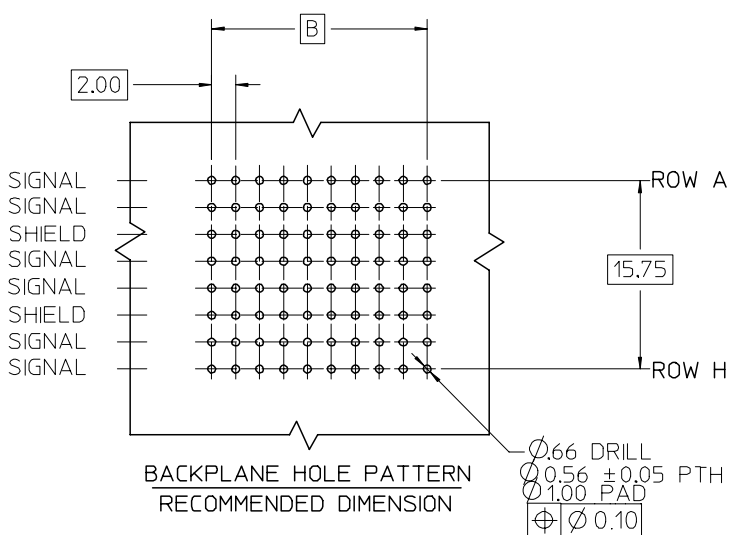
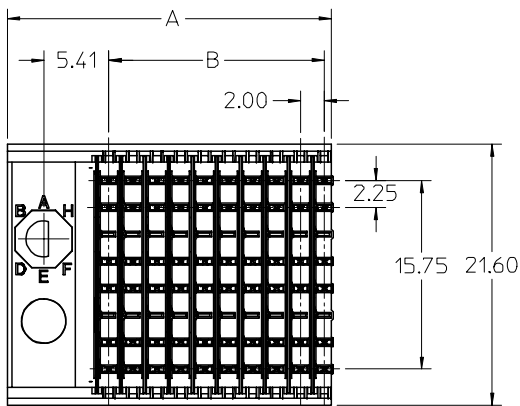
Reference - Drawing Numbers

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

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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	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY	
				DIMENSION STYLE MM ONLY		TITLE HSD SALES ASSEMBLY 8 ROW SIGNAL END BACKPLANE		
		4 PLACES ± --- ± ---		DRAWN BY DATE MQWANG 2001/03/22		MATERIAL NO. DOCUMENT NO. SHEET NO. SEE SHEET 2 SD-74650-002 1 OF 2		
		3 PLACES ± --- ± ---		CHECKED BY DATE JLAURX 2001/03/27				
2 PLACES ± --- ± ---		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				
1 PLACE ± --- ± ---		ANGULAR ±1/2°						

10 9 8 7 6 5 4 3 2 74650

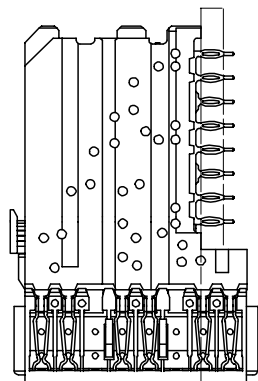
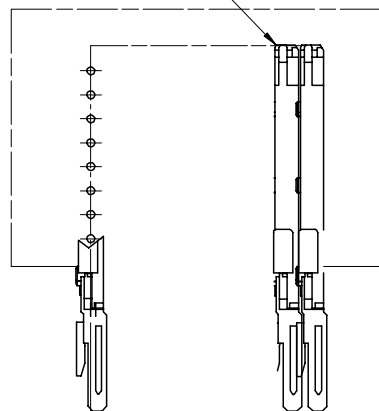
M/N 74650-()	-**0*	-**1*	-**2*	-**3*	-**4*	-**5*	-**6*	-**7*	-**8*
KEYING PIN ORIENTATION	0	A	B	C	D	E	F	G	H

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

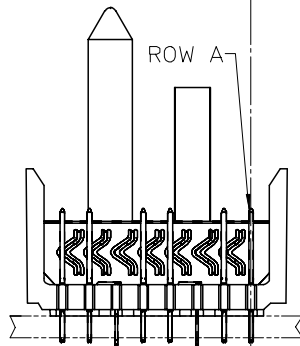
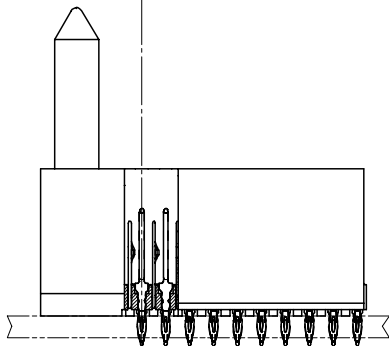


PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A MAX	B	M	Au (um) MIN THICKNESS	Sn/Pb (um) THICKNESS
74650-*0*1	10	60	10	27.00	18.00	4.75	0.76	0.76-1.52
74650-*0*6							1.27	
74650-*5*1	25	150	25	57.00	48.00	6.25	0.76	
74650-*5*6							1.27	
74650-*0*2	10	60	10	27.00	18.00	4.25	0.76	
74650-*0*7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

0.41
SIGNAL TO SIGNAL

2.45
TOP DAUGHTERCARD
PCB TO CENTER OF
ROW A

ROW A



SEE SHEET 1 EC NO: UCP2006-0051 DRW:KML/VEY 2005/07/13 CHKD: 2005/07/13 APPR: SPEED 2005/07/15	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
	DESCRIPTION	mm INCH	DIMENSION STYLE MM ONLY	TITLE	HSD SALES ASSEMBLY 8 ROW SIGNAL END BACKPLANE	
D	ANGULAR ±1/2°	4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE MQWANG 2001/03/22	CHECKED BY DATE JLAURX 2001/03/27	MOLEX INCORPORATED	
REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY DATE CBIXLER 2001/03/27	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74650-002	SHEET NO. 2 OF 2