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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

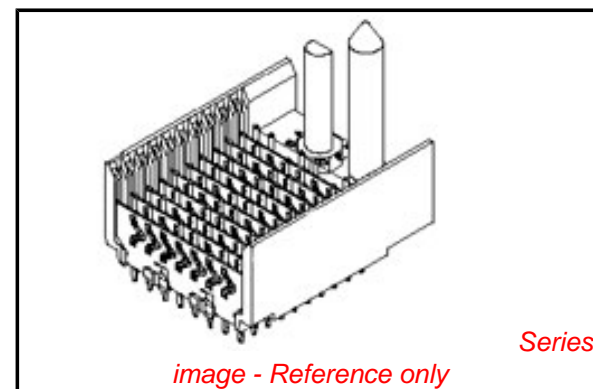
CSA LR19980
 UL E29179

General

Product Family Backplane Connectors
 Series [74651](#)
 Application Backplane
 Application Tooling Documents [Tooling Manual](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

Not Reviewed

China RoHS



Pb

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.

Global

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

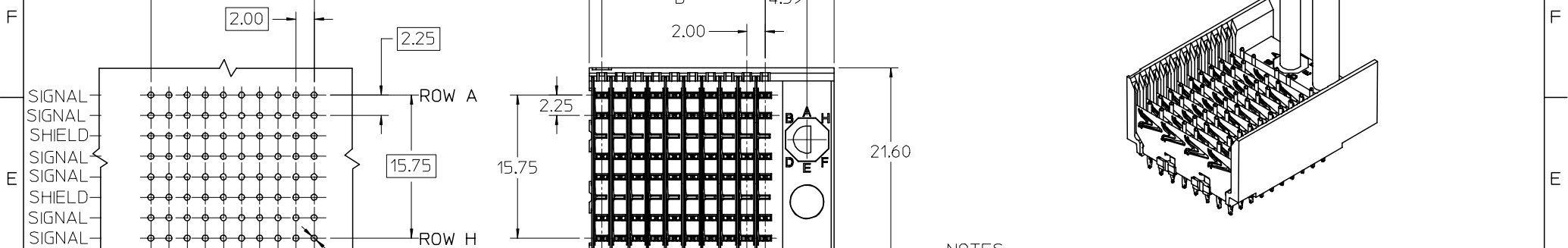
Reference - Drawing Numbers

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

VHDM-HSD is a trademark of Amphenol Corporation

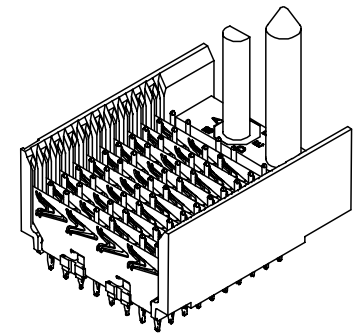
This document was generated on 05/27/2010

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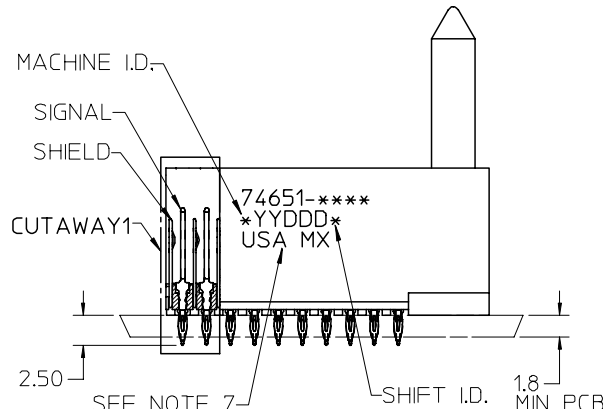
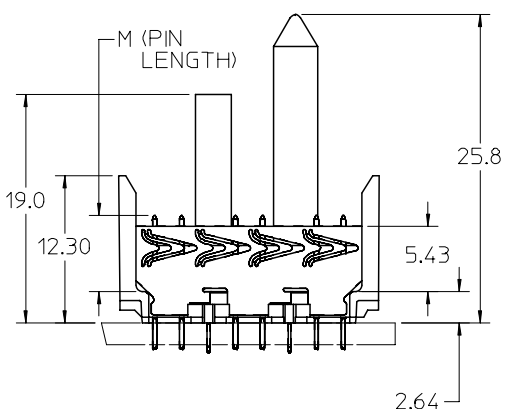


BACKPLANE HOLE PATTERN
RECOMMENDED DIMENSION

- Ø0.66 DRILL
- Ø0.56 ±0.05 PTH
- Ø1.00 PAD
- ±0.10

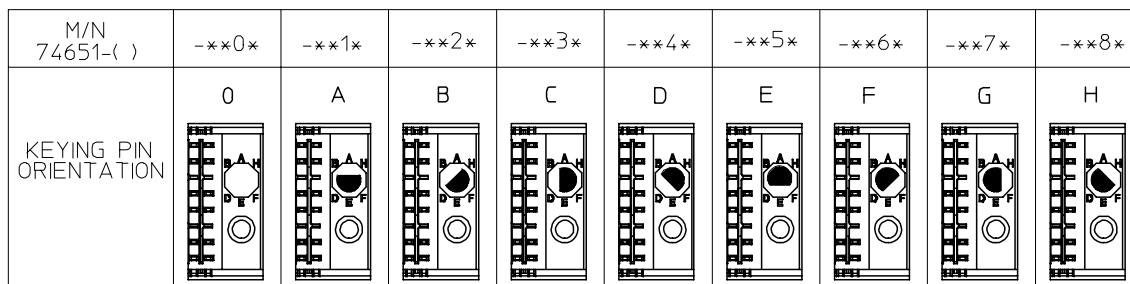


- NOTES:
- MATERIAL: HOUSING -LIQUID CRYSTAL POLYMER (LCP)
GLASS-FILLED. UL 94-0. COLOR BLACK. SIGNAL & SHIELD -HIGH PERFORMANCE COPPER ALLOY.
 - FINISHES:
CONTACT AREA: SELECTIVE GOLD (Au)
PCB TAILS: SELECTIVE TIN/LEAD (Sn/Pb)
OR SELECTIVE MATTE TIN (Sn)
NICKEL (Ni) OVERALL.
 - THIS PART CONFORMS TO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



REVISED - PLATING NOTE EC NO: UCP2006-0051 DRWN:K MULVEY 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			
				DRAWN BY DATE		HSD SALES ASSEMBLY 8 ROW ADVANCED MATE SHIELD END BACKPLANE			
				CHECKED BY DATE					
		APPROVED BY DATE		MATERIAL NO.		DOCUMENT NO.			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		2001/05/27		SD-74651-003			
				SHEET NO. 1 OF 2 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

10 9 8 7 6 5 4 3 2 74651



74651-***

NUMBER OF COLUMNS/ PLATING CONTACT LOAD (PIN LENGTH)

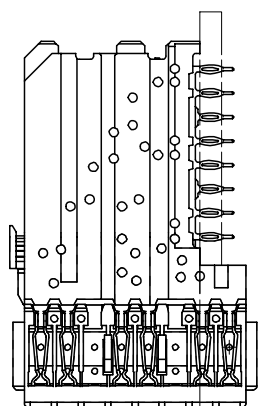
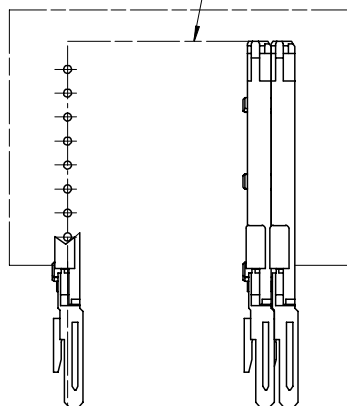
11 = 10 COLUMN TIN/LEAD 1 & 6 = 4.75

26 = 25 COLUMN TIN/LEAD 2 & 7 = 6.25

91 = 10 COLUMN MATTE TIN 3 & 8 = 4.25

86 = 25 COLUMN MATTE TIN 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	25	150	25	57.00	48.00		1.27	
74651-*6*1	10	60	10	27.00	18.00	6.25	0.76	
74651-*6*6	25	150	25	57.00	48.00		1.27	
74651-*1*2	10	60	10	27.00	18.00	4.25	0.76	
74651-*1*7	25	150	25	57.00	48.00		1.27	
74651-*6*2	10	60	10	27.00	18.00	5.15	0.76	
74651-*6*7	25	150	25	57.00	48.00		1.27	
74651-*1*3	10	60	10	27.00	18.00	4.75	0.76	
74651-*1*8	25	150	25	57.00	48.00		1.27	
74651-*6*3	10	60	10	27.00	18.00	6.25	0.76	
74651-*6*8	25	150	25	57.00	48.00		1.27	
74651-*1*4	10	60	10	27.00	18.00	5.15	0.76	
74651-*1*9	25	150	25	57.00	48.00		1.27	
74651-*6*4	10	60	10	27.00	18.00	4.75	0.76	
74651-*6*9	25	150	25	57.00	48.00		1.27	

0.41 SIGNAL TO SIGNAL

2.45 TOP DAUGHTERCARD PCB TO CENTER OF ROW A

ROW A

SEE SHEET 1	QUALITY SYMBOLS	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 ADVANCED MATE SHIELD END BACKPLANE		
EC NO: UCP2006-0051 DRWN: KMULVEY 2005/07/13 CHKD: 2005/07/13 APPR: SREED 2005/07/15	DESCRIPTION	4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY DATE MQWANG 2001/05/22	CHECKED BY DATE JLAURX 2001/05/25	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74651-003
		2 PLACES ± --- ± ---	1 PLACE ± --- ± ---	APPROVED BY DATE CBIXLER 2001/05/27	SHEET NO. 2 OF 2		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ±1/2°		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

8 7 6 5 4 3 2 1