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Part Number: [0746511002](#)
Status: **Active**
Overview: [vhdm__hsd](#)
Description: 2.00mm (.079") Pitch 8-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Shield End Version, 60 Circuits, Pin Length 6.25mm (.246")

Documents:

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

Agency Certification

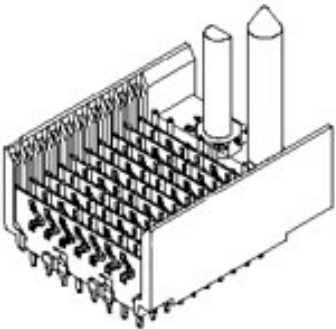
CSA LR19980
UL E29179

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
Plating min: Mating (µm) 0.75



Series

image - Reference only

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

[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® 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: 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

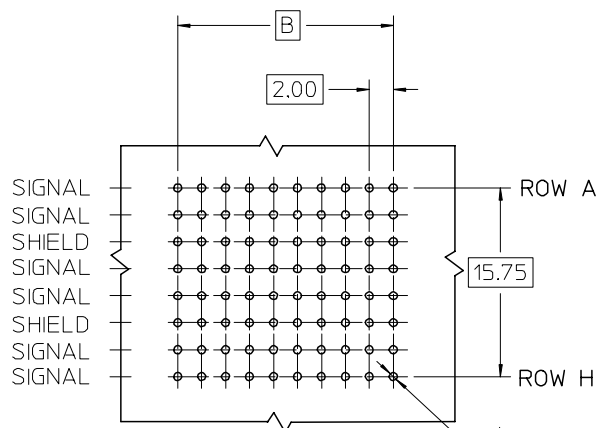
Material Info

Reference - Drawing Numbers

Packaging Specification	PK-74061-003
Sales Drawing	SD-74651-002

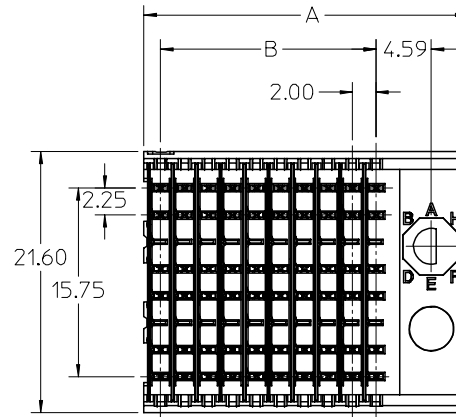
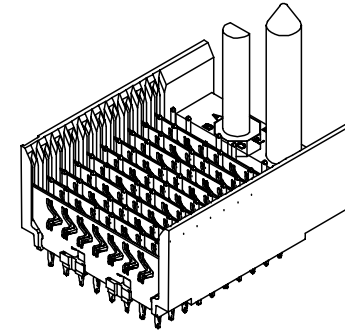
VHDM-HSD is a trademark of Amphenol Corporation

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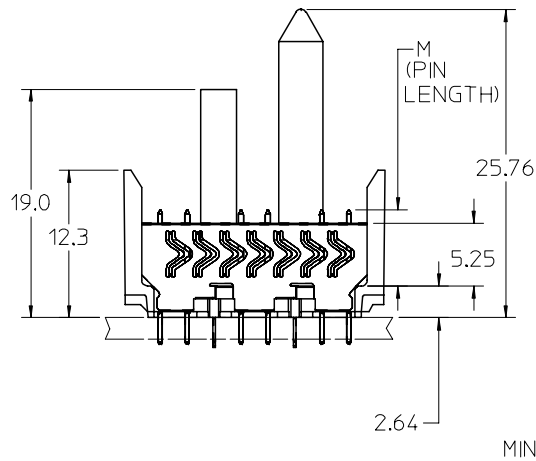
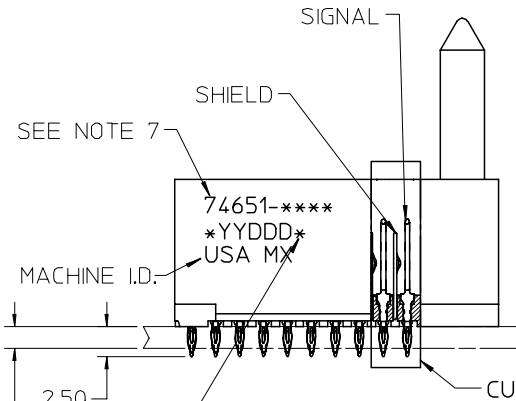
BACKPLANE HOLE PATTERN
RECOMMENDED DIMENSION

Ø0.66 DRILL
Ø0.56 ±0.05 PTH
Ø1.00 PAD
Ø0.10



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 <div>▽ = 0</div> <div>▽ = 0</div>	DESCRIPTION	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 SHIELD END BACKPLANE					
					DRAWN BY MQWANG		DATE 2001/03/26		 MOLEX INCORPORATED			
					CHECKED BY JLAURX		DATE 2001/04/01					
<div>D</div> <div>REV</div>			ANGULAR ±1/2°		APPROVED BY CBIXLER		DATE 2001/04/01		MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE SHEET 2		SD-74651-002		1 OF 2	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												B

10 9 8 7 6 5 4 3 2 74651

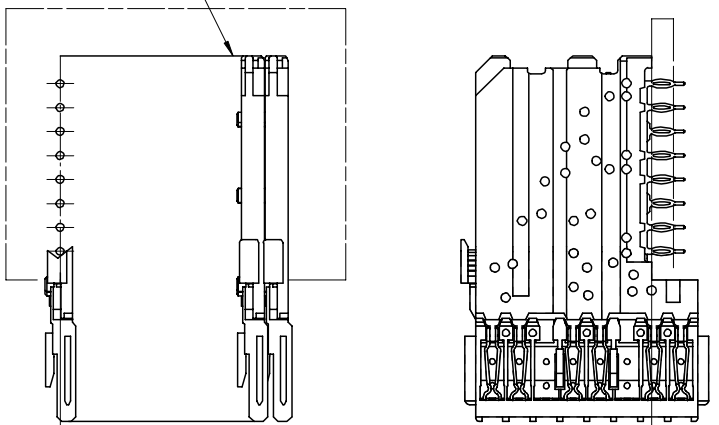
M/N 74651-()	-**0*	-**1*	-**2*	-**3*	-**4*	-**5*	-**6*	-**7*	-**8*
KEYING PIN ORIENTATION	0	A	B	C	D	E	F	G	H

74651-***

NUMBER OF COLUMNS/
PLATING
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

ROW A

PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A	B	M	Au (um) MIN THICKNESS	Sn (um) THICKNESS
74651-*0*1	10	60	10	27.00	18.00	4.75	0.76	0.76-1.52
74651-*0*6							1.27	
74651-*5*1	25	150	25	57.00	48.00	4.75	0.76	
74651-*5*6							1.27	
74651-*0*2	10	60	10	27.00	18.00	6.25	0.76	
74651-*0*7							1.27	
74651-*5*2	25	150	25	57.00	48.00	6.25	0.76	
74651-*5*7							1.27	
74651-*0*3	10	60	10	27.00	18.00	4.25	0.76	
74651-*0*8							1.27	
74651-*5*3	25	150	25	57.00	48.00	4.25	0.76	
74651-*5*8							1.27	
74651-*0*4	10	60	10	27.00	18.00	5.15	0.76	
74651-*0*9							1.27	
74651-*5*4	25	150	25	57.00	48.00	5.15	0.76	
74651-*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	DESCRIPTION
	0.0
	0.0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm
	INCH
4 PLACES	± ---
3 PLACES	± ---
2 PLACES	± ---
1 PLACE	± ---
ANGULAR ±1/2°	
DRAFT WHERE APPLICABLE	
MUST REMAIN WITHIN DIMENSIONS	

SCALE 2.5:1	DESIGN UNITS METRIC
DIMENSION STYLE MM ONLY	
DRAWN BY MQWANG	DATE 2001/03/26
CHECKED BY JLAURX	DATE 2001/04/01
APPROVED BY CBIXLER	DATE 2001/04/01

THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
TITLE HSD SALES ASSEMBLY 8 ROW SHIELD END BACKPLANE	
MOLEX INCORPORATED	
MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74651-002
SHEET NO. 2 OF 2	

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