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Part Number: [0746492507](#)
Status: **Active**
Overview: [vhdm__hsd](#)
Description: 2.00mm (.079") Pitch 8-Row VHDM-HSD™ Backplane Header, Open Module, 150 Circuits, Pin Length 6.25mm (.246")

Documents:

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

Agency Certification

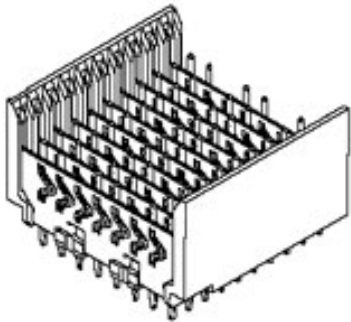
CSA LR19980

General

Product Family	Backplane Connectors
Series	74649
Application	Backplane
Application Tooling Documents	http://www.molex.com/pdm_docs/ats/TM-622010999.pdf >Tooling Manual
Comments	Open Header
Component Type	PCB Header
Overview	vhdm__hsd
Product Name	VHDM-HSD™
Style	N/A

Physical

Circuits (Loaded)	150
Circuits (maximum)	150
Color - Resin	Black
Durability (mating cycles max)	200
First Mate / Last Break	No
Flammability	94V-0
Guide to Mating Part	No
Keying to Mating Part	None
Material - Metal	Copper-Nickel-Silicon, High Performance Alloy (HPA)
Material - Plating Mating	Gold
Material - Plating Termination	Tin-Lead
Material - Resin	High Temperature Thermoplastic
Number of Columns	25
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)	50
Plating min: Mating (µm)	1.25
Plating min: Termination (µin)	30
Plating min: Termination (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

[74649Series](#)

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® Insertion	0622020206
Module for Advanced	
Mate Signal Header,	
6 Row by 25 Wide,	
50.00mm (1.97")	

Polarized to PCB	No
Stackable	No
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	3A
Data Rate	5.0 Gbps
Real Signals (per 25mm)	100
Shield Type	Ground Plane Shield
Shielded	Yes
Voltage - Maximum	250V

Material Info

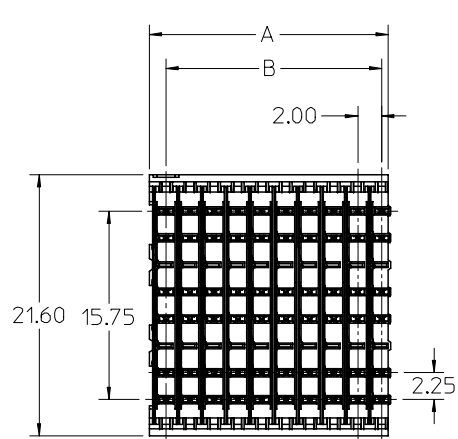
Reference - Drawing Numbers

Packaging Specification	PK-74060-003
Sales Drawing	SD-74649-002

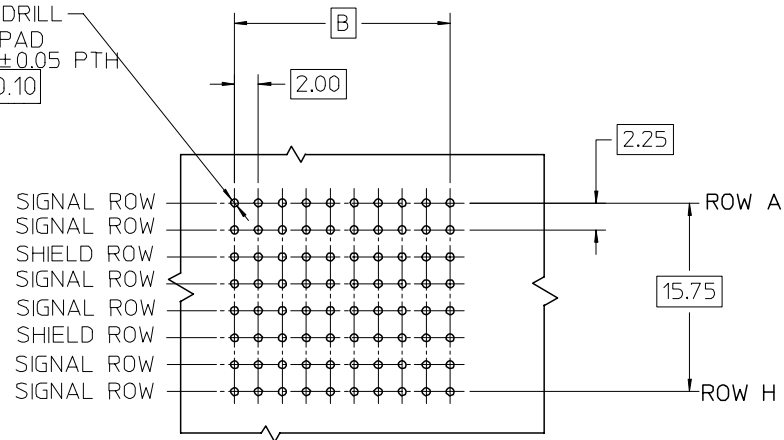
VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/27/2010

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$\varnothing 0.66$ DRILL
 $\varnothing 1.00$ PAD
 $\varnothing 0.56 \pm 0.05$ PTH
 $\varnothing 0.10$



BACKPLANE HOLE PATTERN RECOMMENDED DIMENSION

NOTES:

1. MATERIAL:

HOUSING -LIQUID CRYSTAL POLYMER (LCP), GLASS-FILLED, UL 94V-0, COLOR BLACK.
SIGNAL PIN & 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.

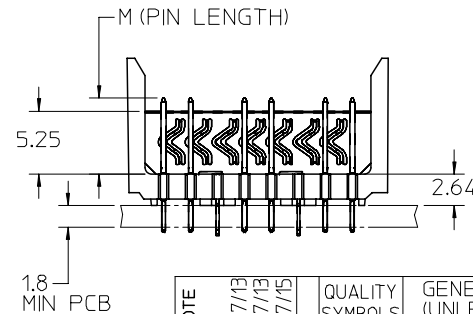
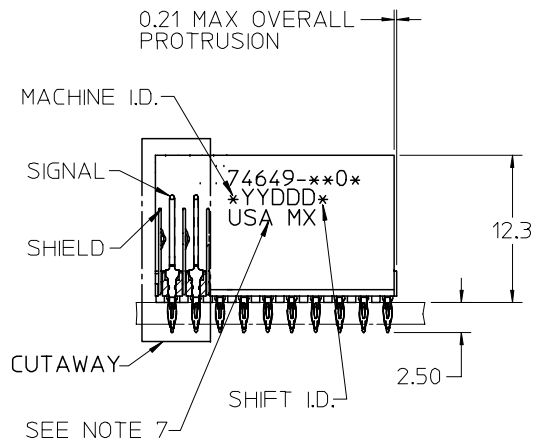
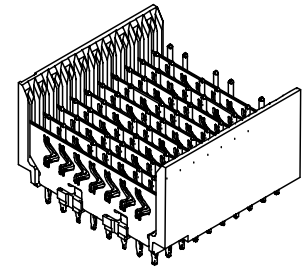
3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-74031-999.

4. FOR MIXED CONTACT MATING LENGTHS CONSULT MOLEX FOR AVAILABILITY.

5. FOR SPECIFIC PART NUMBERS AND MATING INFORMATION REFER TO SHEET 2.

6. PACKAGE PER PK-74060-003.

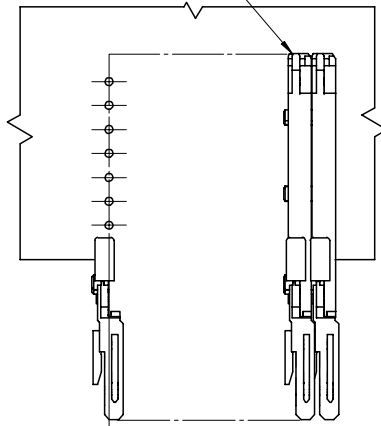
7. EITHER MARK PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON THE TUBE.



REVISED - PLATING NOTE EC NO: UCP2006-0051 DRWN:KMULVEY 2005/07/13 CHKD: 2005/07/13 APPR: SREED 2005/07/15	DESCRIPTION	QUALITY SYMBOLS ▽ = 0 ▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE 2.5:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	REVISE ON CAD ONLY		
D	REV				DIMENSION STYLE MM ONLY		TITLE HSD SALES ASSEMBLY 8 ROW OPEN END BACKPLANE			
			4 PLACES	± ---	± ---	DRAWN BY			DATE	
			3 PLACES	± ---	± ---	MQWANG			2001/01/22	
			2 PLACES	± ---	± ---	CHECKED BY			DATE	
			1 PLACE	± ---	± ---	JLAURX			2001/01/23	
		ANGULAR ±1/2°		APPROVED BY		DATE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
		DRAFT WHERE APPLICABLE		CBIXLER		2001/01/24	SEE SHEET 2	SD-74649-002	1 OF 2	
		MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						B

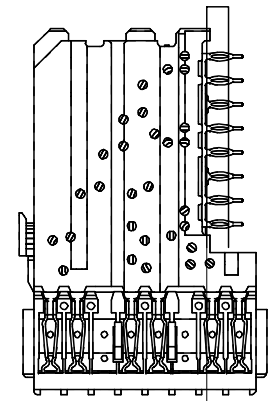
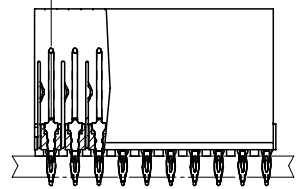
F
E
D
C
B
A

DAUGHTERCARD
CONNECTOR SIDE

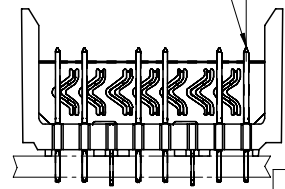


0.41
SIGNAL TO
SIGNAL

2.45
TOP DAUGHTERCARD PCB
TO CENTER LINE OF ROW A



ROW A



MATERIAL NUMBER ASSIGNMENT

74649-XXYY

SEE TABLE

- 10 = 10 COLUMN TIN/LEAD
- 25 = 25 COLUMN TIN/LEAD
- 90 = 10 COLUMN MATTE TIN
- 85 = 25 COLUMN MATTE TIN

PART NUMBER	COLUMN	NUMBER OF SIGNAL PINS	NUMBER OF SHIELDS	A	B	M	Au (um) MIN THICKNESS	Sn (um) THICKNESS
74649-*001	10	60	10	20.00	18.00	4.75	0.76	0.76-1.52
74649-*006							1.27	
74649-*501	25	150	25	50.00	48.00	6.25	0.76	
74649-*506							1.27	
74649-*002	10	60	10	20.00	18.00	4.25	0.76	
74649-*007							1.27	
74649-*502	25	150	25	50.00	48.00	5.15	0.76	
74649-*507							1.27	
74649-*003	10	60	10	20.00	18.00	4.75	0.76	
74649-*008							1.27	
74649-*503	25	150	25	50.00	48.00	6.25	0.76	
74649-*508							1.27	
74649-*004	10	60	10	20.00	18.00	5.15	0.76	
74649-*009							1.27	
74649-*504	25	150	25	50.00	48.00	4.25	0.76	
74649-*509							1.27	

A

SEE SHEET 1
EC NO: UCP2006-0051
DRAWN: K MULVEY 2005/07/13
CHKD: 2005/07/13
APPR: S REED 2005/07/15

QUALITY SYMBOLS
▽ = 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 DATE
MOWANG 2001/01/22
CHECKED BY DATE
JLAURX 2001/01/23
APPROVED BY DATE
CBIXLER 2001/01/24

THIRD ANGLE PROJECTION
TITLE
HSD SALES ASSEMBLY
8 ROW OPEN END
BACKPLANE
MOLEX INCORPORATED
MATERIAL NO. SEE TABLE
DOCUMENT NO. SD-74649-002
SHEET NO. 2 OF 2

REVISE ON CAD ONLY
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

F
E
D
C
B
A