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Part Number: [0746491004](#)
Status: **Active**
Overview: [vhdm_hsd](#)
Description: 2.00mm (.079") Pitch 8-Row VHDM-HSD™ Backplane Header, Open Module, 80 Circuits, Pin Length 5.15mm (.203")

Documents:

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

Agency Certification

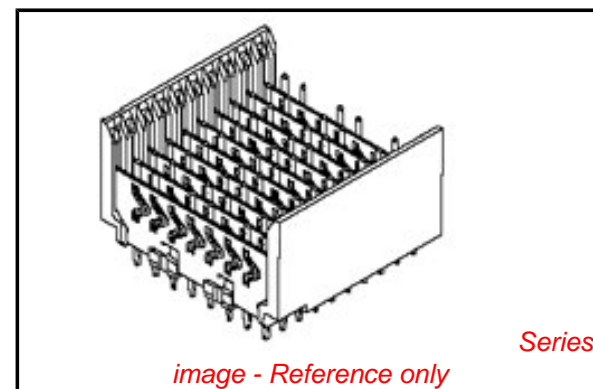
CSA LR19980
 UL E29179

General

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

Physical

Circuits (Loaded) 80
 Circuits (maximum) 80
 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 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
 Plating min: Termination (µin) 30



EU RoHS

RoHS Compliant by Exemption
REACH SVHC
Contains SVHC: No
Halogen-Free
Status

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 Module for Advanced Mate Signal Header, 8 Row by 10 Wide, 20.00mm (.787")	0622020205

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

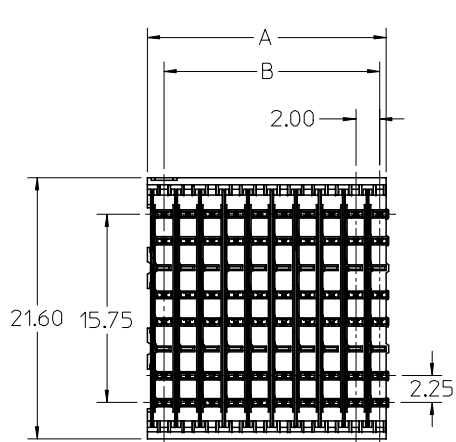
Reference - Drawing Numbers

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

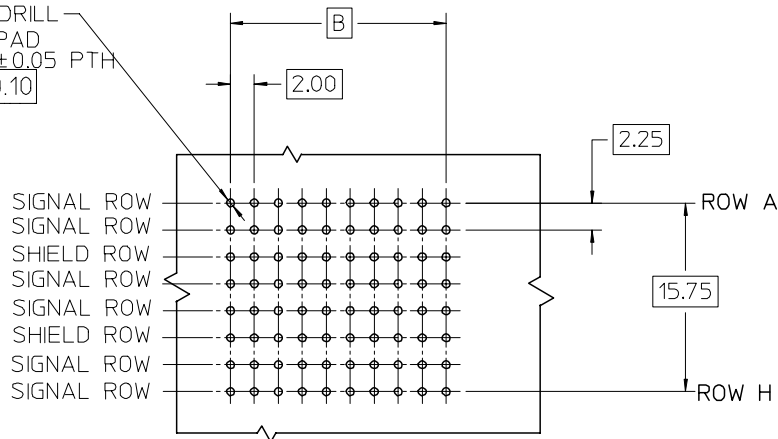
VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/27/2010

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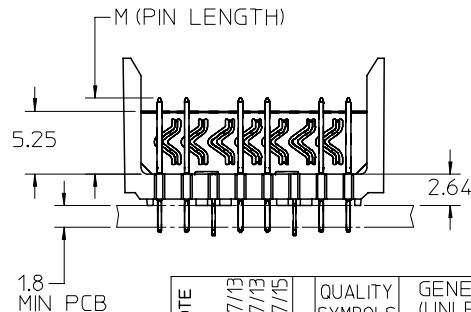
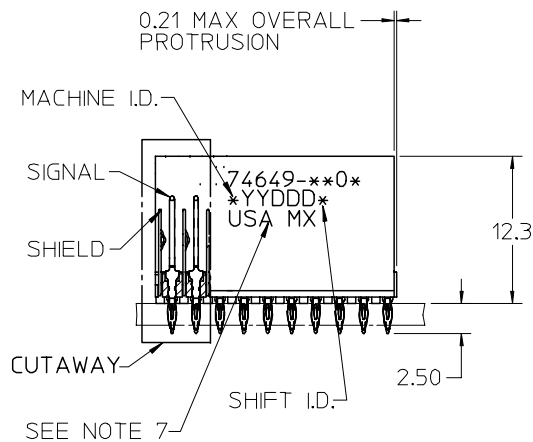
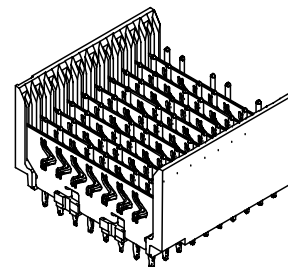
$\varnothing 0.66$ DRILL
 $\varnothing 1.00$ PAD
 $\varnothing 0.56 \pm 0.05$ PTH
 $\varnothing 0.10$



**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: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		
			mm	INCH	DIMENSION STYLE MM ONLY		TITLE		
		4 PLACES	± ---	± ---	DRAWN BY	DATE	HSD SALES ASSEMBLY 8 ROW OPEN END BACKPLANE		
		3 PLACES	± ---	± ---	MQWANG	2001/01/22			
2 PLACES	± ---	± ---	CHECKED BY	DATE	MOLEX INCORPORATED				
1 PLACE	± ---	± ---	JLAURX	2001/01/23					
		ANGULAR ±1/2°	DRAFT WHERE APPLICABLE		APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.
		MUST REMAIN WITHIN DIMENSIONS			CBIXLER	2001/01/24	SEE SHEET 2	SD-74649-002	1 OF 2
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

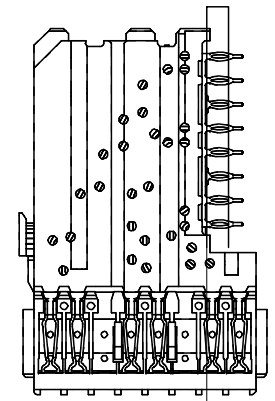
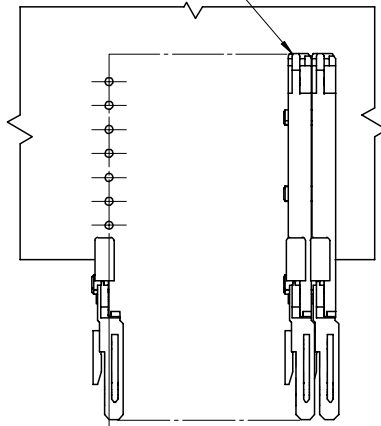
MATERIAL NUMBER ASSIGNMENT

74649-XXYY

SEE TABLE

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

DAUGHTERCARD
CONNECTOR SIDE



0.41
SIGNAL TO
SIGNAL

2.45
TOP DAUGHTERCARD PCB
TO CENTER LINE 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
74649-*001	10	60	10	20.00	18.00	4.75	0.76	0.76-152
74649-*006							1.27	
74649-*501	25	150	25	50.00	48.00		0.76	
74649-*506							1.27	
74649-*002	10	60	10	20.00	18.00	6.25	0.76	
74649-*007							1.27	
74649-*502	25	150	25	50.00	48.00		0.76	
74649-*507							1.27	
74649-*003	10	60	10	20.00	18.00	4.25	0.76	
74649-*008							1.27	
74649-*503	25	150	25	50.00	48.00		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		0.76	
74649-*509							1.27	

SEE SHEET 1
EC NO: UCP2006-0051
DRW: KMULVEY 2005/07/13
CHKD: 2005/07/13
APPR: SREED 2005/07/15

QUALITY SYMBOLS	DESCRIPTION
▽=0	
▽=0	

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

SCALE	DESIGN UNITS
2.5:1	METRIC
DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
MQWANG	2001/01/22
CHECKED BY	DATE
JLAURX	2001/01/23
APPROVED BY	DATE
CBIXLER	2001/01/24

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