

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0746491007](#)
Status: **Active**
Overview: [vhdm_hsd](#)
Description: 2.00mm (.079") Pitch 8-Row VHDM-HSD™ Backplane Header, Open Module, 80 Circuits, Pin Length 6.25mm (.246")

Documents:

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

Agency Certification

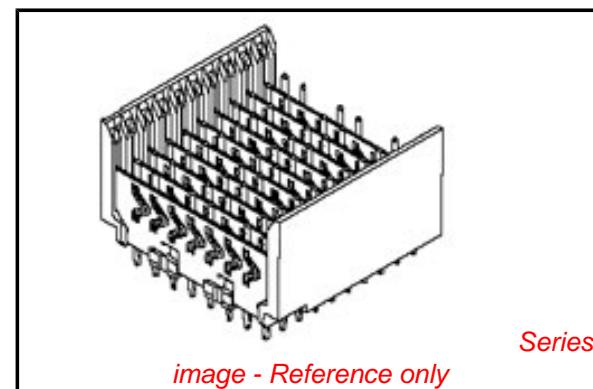
CSA LR19980
 UL E29179

General

Product Family Backplane Connectors
 Series [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) 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) 50
 Plating min: Mating (µm) 1.25
 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 | 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

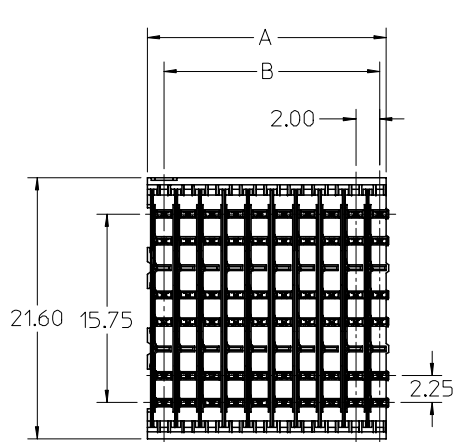
Reference - Drawing Numbers

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

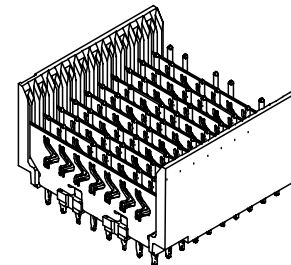
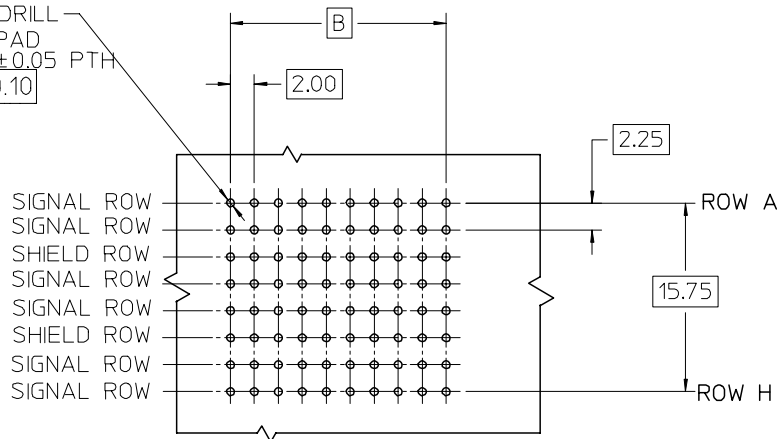
VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/27/2010

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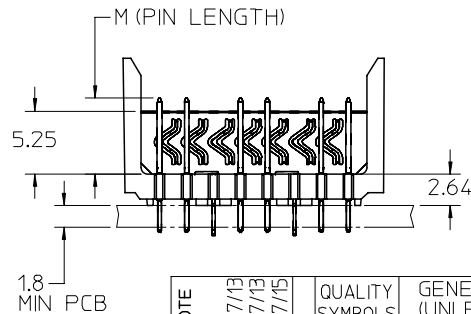
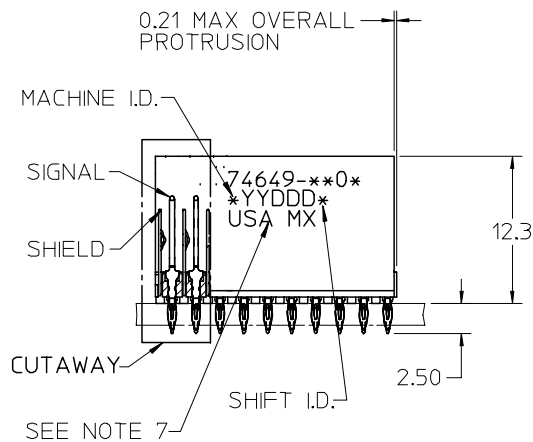
$\varnothing 0.66$ DRILL
 $\varnothing 1.00$ PAD
 $\varnothing 0.56 \pm 0.05$ PTH
 $\varnothing 0.10$



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

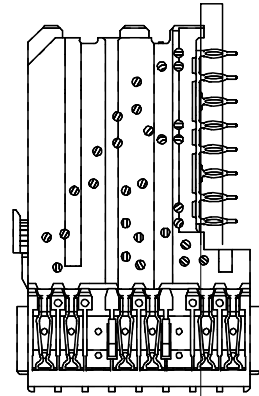
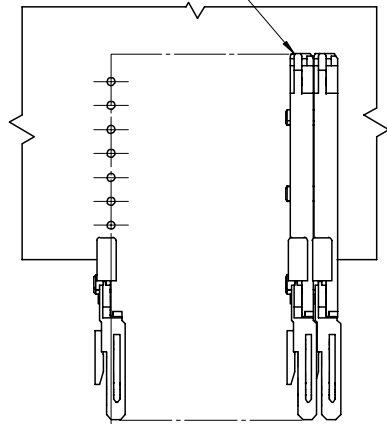
MATERIAL NUMBER ASSIGNMENT

74649-XXYY

SEE TABLE

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

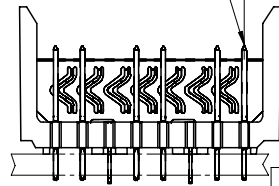
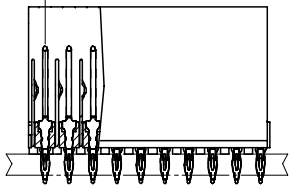
DAUGHTERCARD
CONNECTOR SIDE



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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 ▽ = 0 ▽ = 0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | SCALE 2.5:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY | | | | | | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------|--------------------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|-------------------------|--|---------------------------------------------------|--|--|
| | | <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table> | | | mm | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± --- | ± --- | 1 PLACE | ± --- | ± --- | DIMENSION STYLE MM ONLY | | TITLE HSD SALES ASSEMBLY 8 ROW OPEN END BACKPLANE | | |
| | | | mm | INCH | | | | | | | | | | | | | | | | | | | |
| | | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± --- | ± --- | | | | | | | | | | | | | | | | | | | | | |
| ANGULAR ±1/2° | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | DRAWN BY: MQWANG DATE: 2001/01/22 CHECKED BY: JLAURX DATE: 2001/01/23 | MOLEX INCORPORATED MATERIAL NO. SEE TABLE DOCUMENT NO. SD-74649-002 SHEET NO. 2 OF 2 | | | | | | | | | | | | | | | | | | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | | | | | |