

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0746492503](#)
Status: **Active**
Overview: vhdm_hsd
Description: 2.00mm (.079") Pitch 8-Row VHDM-HSD™ Backplane Header, Open Module, 150 Circuits, Pin Length 4.25mm (.167")

Documents:

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

Agency Certification

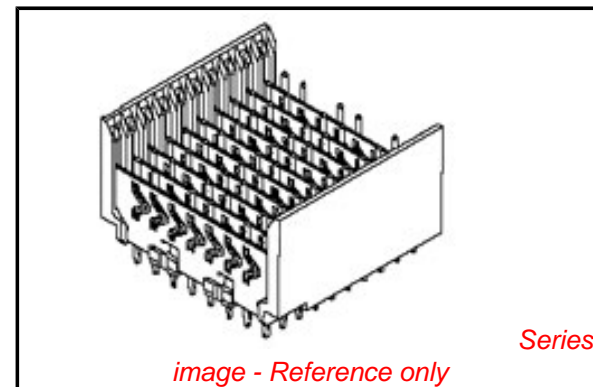
CSA LR19980

General

| | |
|-------------------------------|---|
| Product Family | Backplane Connectors |
| Series | 74649 |
| Application | Backplane |
| Application Tooling Documents | 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) | 30 |
| Plating min: Mating (µm) | 0.75 |
| Plating min: Termination (µin) | 30 |
| Plating min: Termination (µm) | 0.75 |



EU RoHS

RoHS Compliant by Exemption
REACH SVHC
 Not Reviewed
Halogen-Free
Status
Not Reviewed

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, 6 Row by 25 Wide, 50.00mm (1.97") | 0622020206 |

| | |
|--------------------------------|------------------------------|
| 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

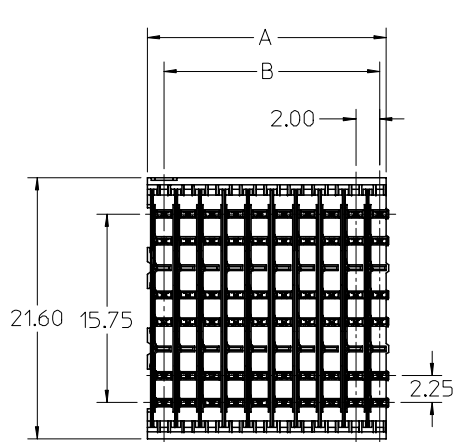
Reference - Drawing Numbers

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

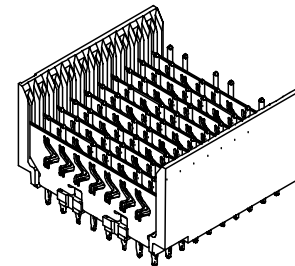
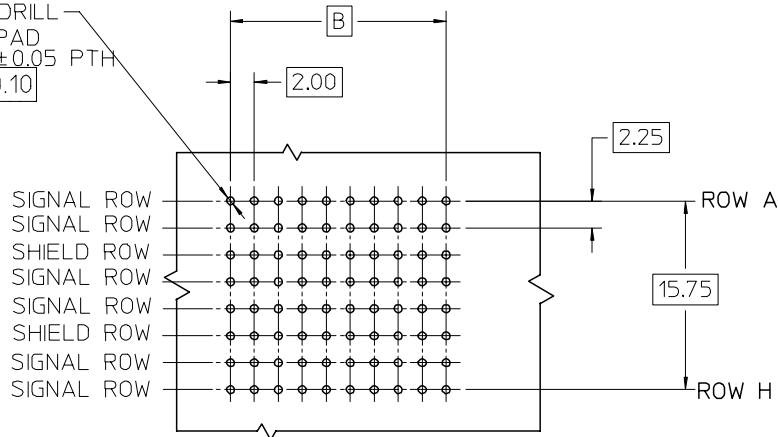
VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/27/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



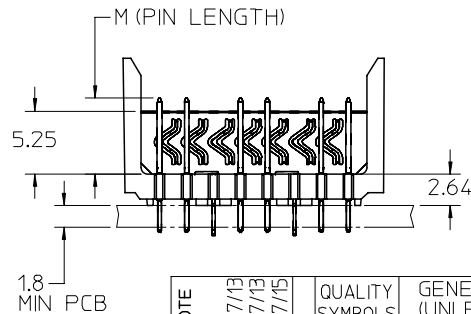
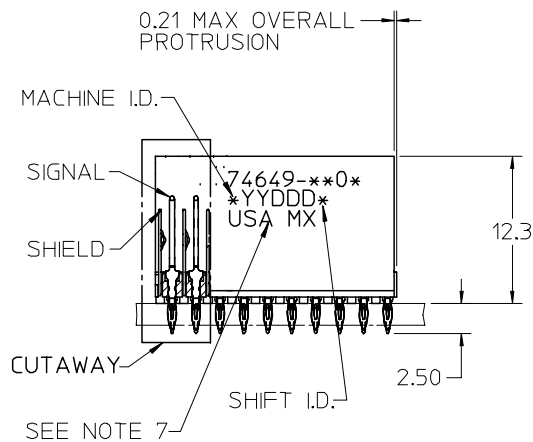
$\varnothing 0.66$ DRILL
 $\varnothing 1.00$ PAD
 $\varnothing 0.56 \pm 0.05$ PTH
 $\varnothing 0.10$



**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 DRW: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 | | |
| | | 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- | | DRAWN BY DATE MQWANG 2001/01/22 CHECKED BY DATE JLAURX 2001/01/23 | | HSD SALES ASSEMBLY 8 ROW OPEN END BACKPLANE | | |
| | | 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 | | | | | | | | |

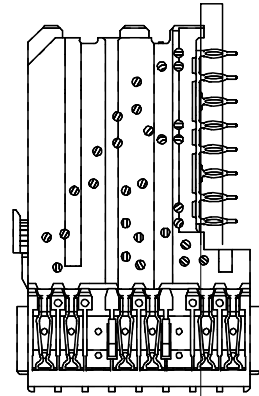
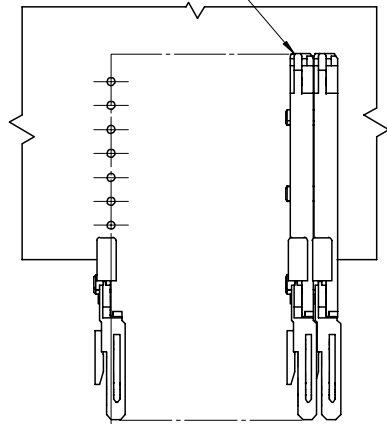
MATERIAL NUMBER ASSIGNMENT

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 | | 4.25 | | 0.76 |
| 74649-*507 | | | | | | | | | 1.27 |
| 74649-*003 | 10 | 60 | 10 | 20.00 | 18.00 | 5.15 | 0.76 | | |
| 74649-*008 | | | | | | | 1.27 | | |
| 74649-*503 | 25 | 150 | 25 | 50.00 | 48.00 | | 4.25 | | 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 | |

SEE SHEET 1

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

| REV | DESCRIPTION |
|-----|-----------------|
| 0 | QUALITY SYMBOLS |
| 0 | ▲ |
| 0 | ▽ |

| GENERAL TOLERANCES (UNLESS SPECIFIED) | |
|---------------------------------------|--------|
| | mm |
| 4 PLACES | ± 0.15 |
| 3 PLACES | ± 0.25 |
| 2 PLACES | ± 0.38 |
| 1 PLACE | ± 0.51 |
| 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 |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | |