

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0746512503](#)
Status: **Active**
Overview: vhdm_hsd
Description: 2.00mm (.079") Pitch 8-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Shield End Version, 150 Circuits, Pin Length 4.25mm (.167")

Documents:

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

Agency Certification

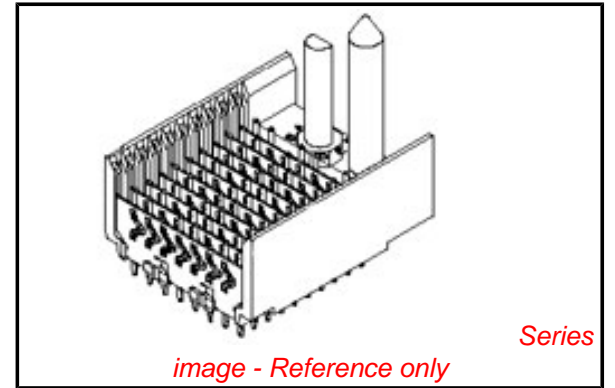
CSA LR19980
 UL E29179

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) 150
 Circuits (maximum) 150
 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 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



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

[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 Inserter Repair Tool | 0622015700 |
| VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 25 Wide, 50.00mm (1.97") | 0622020206 |

| | |
|--------------------------------------|------------------------------|
| Plating min: Termination (μ in) | 30 |
| Plating min: Termination (μ m) | 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

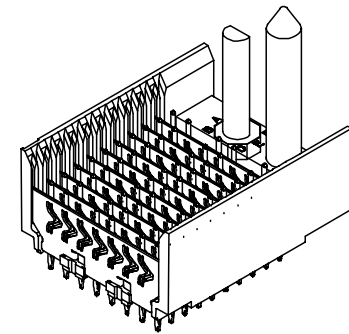
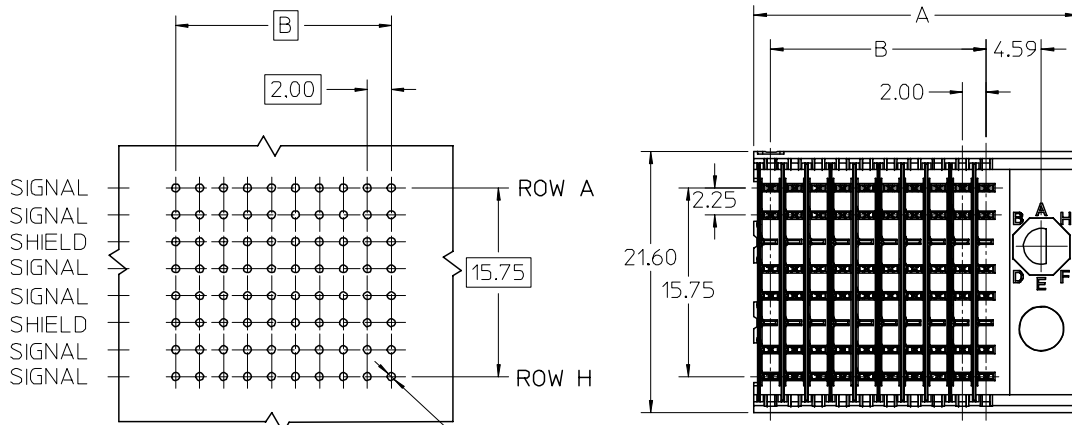
Reference - Drawing Numbers

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

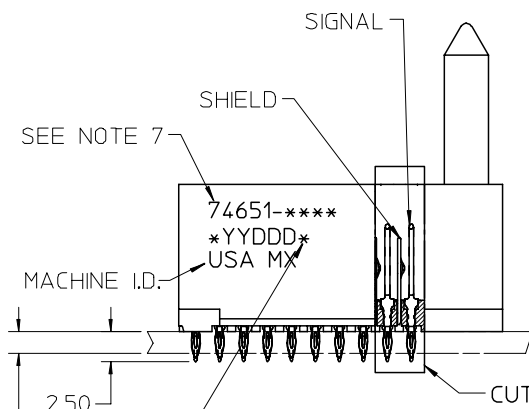
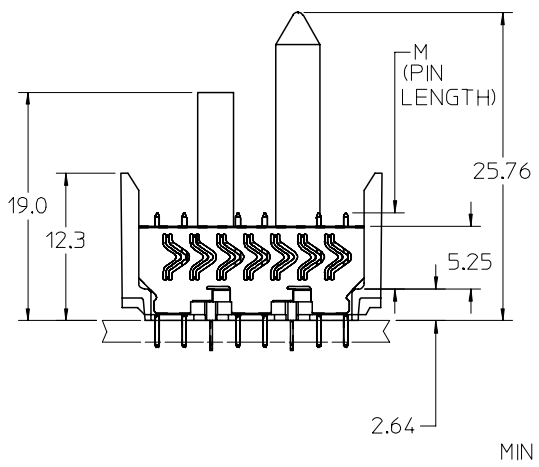
VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/27/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



- NOTES:
- MATERIAL: HOUSING -LIQUID CRYSTAL POLYMER (LCP) GLASS-FILLED. UL 94-0. COLOR BLACK. SIGNAL & SHIELD -HIGH PERFORMANCE COPPER ALLOY.
 - FINISHES:
CONTACT AREA: SELECTIVE GOLD (Au)
PCB TAILS: SELECTIVE TIN/LEAD (Sn/Pb) OR SELECTIVE MATTE TIN (Sn)
NICKEL (Ni) OVERALL.
 - THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-74031-999.
 - FOR MIXED CONTACT MATING LENGTHS CONSULT MOLEX FOR AVAILABILITY.
 - FOR SPECIFIC PART NUMBER AND MATING INFORMATION REFER TO SHEET 2.
 - PACKAGE PER PK-74061-003.
 - 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 ▽ - 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 HSD SALES ASSEMBLY 8 ROW SHIELD END BACKPLANE | | |
| | | 4 PLACES ± --- ± --- | | DRAWN BY DATE MQWANG 2001/03/26 | | MOLEX MOLEX INCORPORATED | | |
| | | 3 PLACES ± --- ± --- | | CHECKED BY DATE JLAURX 2001/04/01 | | MATERIAL NO. | | DOCUMENT NO. SD-74651-002 |
| 2 PLACES ± --- ± --- | | ANGULAR ±1/2° | | APPROVED BY DATE CBIXLER 2001/04/01 | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |
| 1 PLACE ± --- ± --- | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | | | |

10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 74651

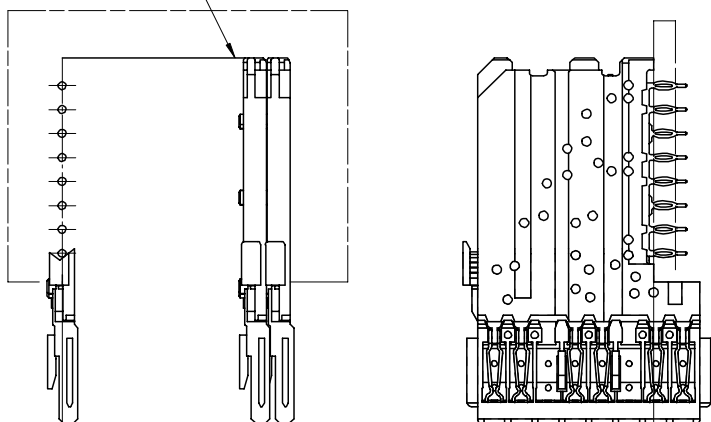
| | | | | | | | | | |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| M/N 74651-() | --*0* | --*1* | --*2* | --*3* | --*4* | --*5* | --*6* | --*7* | --*8* |
| KEYING PIN ORIENTATION | 0 | A | B | C | D | E | F | G | H |

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



| 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 | | 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 | | 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 | | 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 | | 0.76 | |
| 74651-*5*9 | | | | | | | 1.27 | |

0.41
SIGNAL TO SIGNAL

2.45
TOP DAUGHTERCARD
PCB TO CENTER OF
ROW A

ROW A

| | | | | | | |
|---|-----------------|---------------------------------------|-------------------------|---|---|--------------------|
| SEE SHEET 1 EC NO: UCP2006-0051 DRWN: MULVEY 2005/07/13 CHKD: 2005/07/13 APPR: SREED 2005/07/15 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | SCALE 2.5:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY |
| | DESCRIPTION | mm INCH | DIMENSION STYLE MM ONLY | TITLE | HSD SALES ASSEMBLY 8 ROW SHIELD END BACKPLANE | |
| | ▽ 0 | 4 PLACES ± --- ± --- | DRAWN BY DATE | MOLEX INCORPORATED | | |
| | ▽ 0 | 3 PLACES ± --- ± --- | MQWANG 2001/03/26 | MATERIAL NO. DOCUMENT NO. SHEET NO. | | |
| | | 2 PLACES ± --- ± --- | CHECKED BY DATE | SEE TABLE | SD-74651-002 | 2 OF 2 |
| | | 1 PLACE ± --- ± --- | JLAURX 2001/04/01 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |
| | | ANGULAR ±1/2° | APPROVED BY DATE | | | |
| | | DRAFT WHERE APPLICABLE | CBIXLER 2001/04/01 | | | |
| | | MUST REMAIN WITHIN DIMENSIONS | | | | |

8 | 7 | 6 | 5 | 4 | 3 | 2 | 1