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Part Number: [0749811001](#)
Status: **Active**
Overview: [vhdm_hsd](#)
Description: 2.00mm (.079") Pitch 6-Row VHDM-HSD™ Backplane Header, Guide Pin Signal Module, Shield End Version, 40 Circuits, Pin Length 4.75mm (.187")

Documents:

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

Agency Certification

UL E29179

General

| | |
|-------------------------------|---|
| Product Family | Backplane Connectors |
| Series | 74981 |
| 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) | 40 |
| Circuits (maximum) | 40 |
| 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 | 10 |
| Number of Pairs | Open Pin Field |
| Number of Rows | 6 |
| Orientation | Vertical |
| 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 |
| Polarized to PCB | Yes |

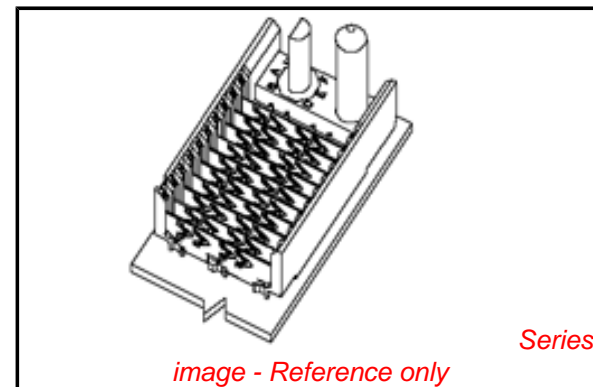


image - Reference only

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

[74981Series](#)

Mates With

[74880 VHDMHSD Daughtercard](#)

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® Signal Pin Inserter Repair Tool | 0622015700 |
| VHDM-HSD™ Signal Header, 6 Row by 10 Wide, 20.00mm (.787") | 0622020216 |

| | |
|--------------------------------|------------------------------|
| 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) | 48 |
| Shielded | No |
| Voltage - Maximum | 120V AC (RMS)/DC |

Material Info

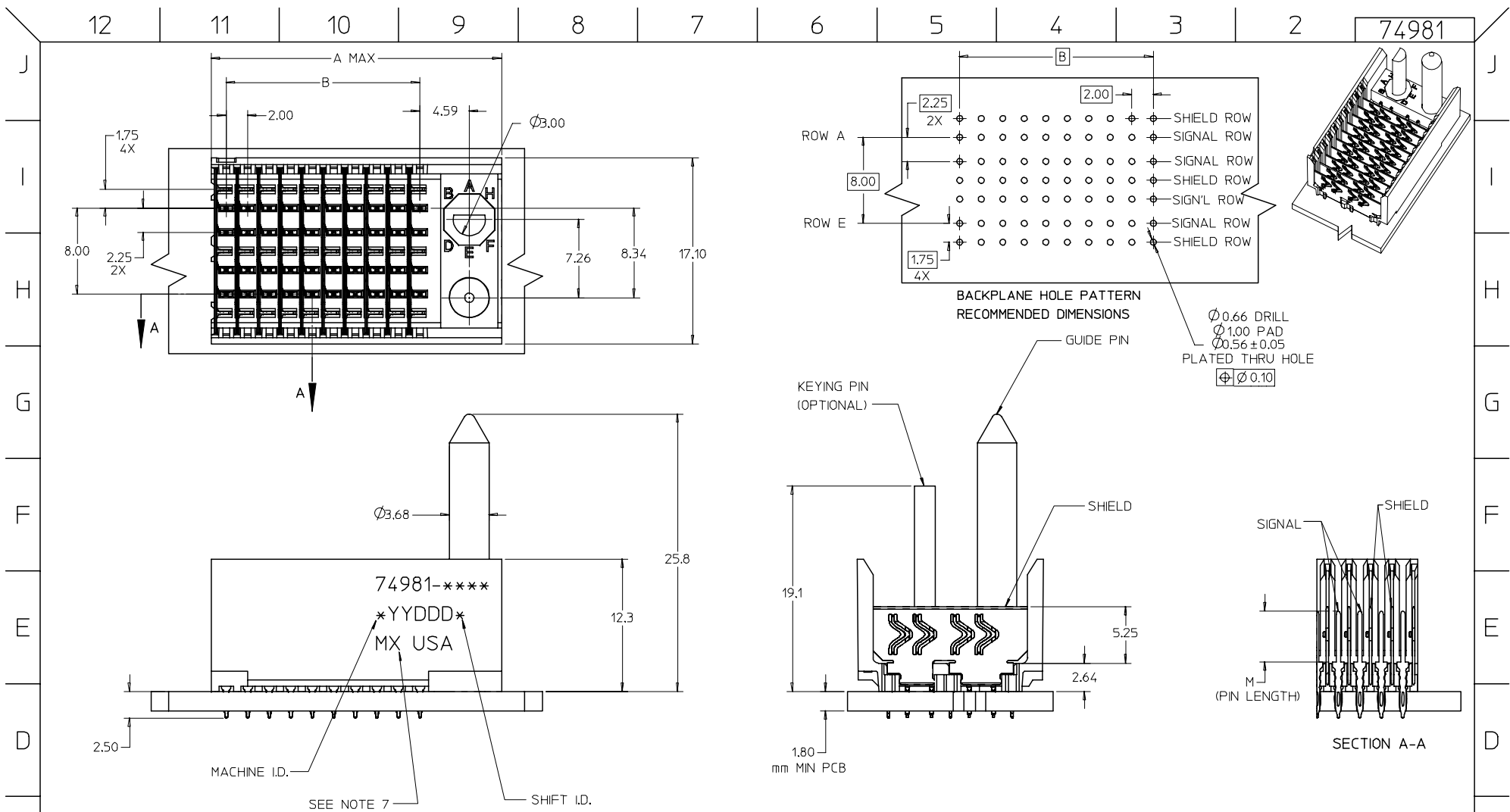
Reference - Drawing Numbers

| | |
|---------------|--------------|
| Sales Drawing | SD-74981-010 |
|---------------|--------------|

VHDM-HSD is a trademark of Amphenol Corporation

This document was generated on 05/28/2010

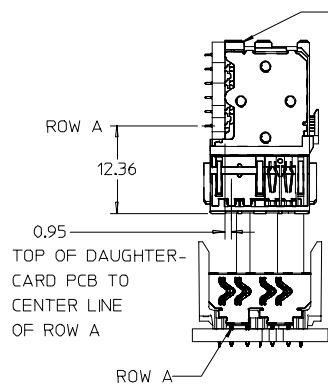
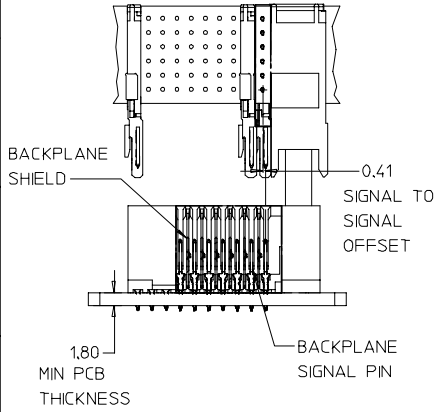
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NOTES:

1. MATERIAL: HOUSING-LIQUID CRYSTAL POLYMER (LCP) GLASS-FILLED. UL 94V-0. COLOR-BLACK. SIGNAL AND 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 LENGTHS - CONSULT MOLEX FOR AVAILABILITY.
5. FOR SPECIFIC PART NUMBER AND MATING INFORMATION REFER TO SHEET 2.
6. PACKAGE PER PK-74058-003.
7. EITHER MARK PART NUMBER AND DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON TUBE.

| | | | | | | | | |
|---|-------------|--------------------------------|---------------------------------------|--|-------------------------|---------------------|-------------------------------------|--------------------|
| ADD LEADFREE PNs EC NO: UCP2006-0067 DRAWN: KMULVEY 2005/07/15 CHKD: 2005/07/18 APPR: SREED 2005/08/11 | DESCRIPTION | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY |
| | | $\nabla = 0$ $\nabla C = 0$ | | | DIMENSION STYLE MM ONLY | | TITLE | |
| | | | | | DRAWN BY DATE | | HSD SALES ASSEMBLY | |
| | | | | | CHECKED BY DATE | | 6 ROW SHIELD END BACKPLANE | |
| | | | ANGULAR $\pm 1^\circ$ | | SREED 2002/09/06 | | MOLEX INCORPORATED | |
| | | | DRAFT WHERE APPLICABLE | | APPROVED BY DATE | | MATERIAL NO. DOCUMENT NO. SHEET NO. | |
| | | | MUST REMAIN WITHIN DIMENSIONS | | CBIXLER 2002/09/06 | | SEE SHEET 2 SD-74981-010 1 OF 2 | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | |



DAUGHTERCARD CONNECTOR SIDE

74981-****

NUMBER OF COLUMNS/PLATING
 10 = 10 COLUMN TIN/LEAD
 25 = 25 COLUMN TIN/LEAD
 90 = 10 COLUMN MATTE TIN
 85 = 25 COLUMN MATTE TIN

SIGNAL PIN LENGTH (mm)
 1 & 6 = 4.75
 2 & 7 = 6.25
 3 & 8 = 4.25
 4 & 9 = 5.15

| P/N 74981-() | ---0* O | ---1* A | ---2* B | ---3* C | ---4* D | ---5* E | ---6* F | ---7* G | ---8* H |
|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| KEYING PIN ORIENTATION | | | | | | | | | |

| PART NUMBER | COLUMN | NUMBER OF SIGNAL PINS | NUMBER OF SHIELDS | A MAX | B | M | Au (µm) MIN THICKNESS | Sn/Pb (µm) THICKNESS |
|-------------|--------|-----------------------|-------------------|-------|-------|------|-----------------------|----------------------|
| 74981-*0*1 | 10 | 40 | 10 | 27.00 | 18.00 | 4.75 | 0.76 | 0.38-152 |
| 74981-*0*6 | | | | | | | 1.27 | |
| 74981-*5*1 | 25 | 100 | 25 | 57.00 | 48.00 | | 0.76 | |
| 74981-*5*6 | | | | | | | 1.27 | |
| 74981-*0*2 | 10 | 40 | 10 | 27.00 | 18.00 | 6.25 | 0.76 | |
| 74981-*0*7 | | | | | | | 1.27 | |
| 74981-*5*2 | 25 | 100 | 25 | 57.00 | 48.00 | | 0.76 | |
| 74981-*5*7 | | | | | | | 1.27 | |
| 74981-*0*3 | 10 | 40 | 10 | 27.00 | 18.00 | 4.25 | 0.76 | |
| 74981-*0*8 | | | | | | | 1.27 | |
| 74981-*5*3 | 25 | 100 | 25 | 57.00 | 48.00 | | 0.76 | |
| 74981-*5*8 | | | | | | | 1.27 | |
| 74981-*0*4 | 10 | 40 | 10 | 27.00 | 18.00 | 5.15 | 0.76 | |
| 74981-*0*9 | | | | | | | 1.27 | |
| 74981-*5*4 | 25 | 100 | 25 | 57.00 | 48.00 | | 0.76 | |
| 74981-*5*9 | | | | | | | 1.27 | |

| SEE SHT 1 EC NO: UCP2006-0067 DRAWN: KMULVEY 2005/07/15 CHKD: 2005/07/18 APPR: SREED 2005/08/11 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | SCALE 4:1 | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION | REVISE ON CAD ONLY | | | | | | | | | | | | | | | |
|---|--|---|---------------------------|------------------------------|------------------------|--------------------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|-------------------------|-------|---|--|
| | ▽ = 0 ◻ = 0 | <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> ANGULAR ± 1 ° | | mm | INCH | 4 PLACES | ± --- | ± --- | 3 PLACES | ± --- | ± --- | 2 PLACES | ± --- | ± --- | 1 PLACE | ± --- | ± --- | DIMENSION STYLE MM ONLY | TITLE | HSD SALES ASSEMBLY 6 ROW SHIELD END BACKPLANE | |
| | | mm | INCH | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± --- | ± --- | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± --- | ± --- | | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DRAWN BY DATE NMARTIN 2002/09/06 CHECKED BY DATE SREED 2002/09/06 APPROVED BY DATE CBIXLER 2002/09/06 | DIMENSION STYLE MM ONLY TITLE MOLEX INCORPORATED | MATERIAL NO. SEE TABLE | DOCUMENT NO. SD-74981-010 | SHEET NO. 2 OF 2 | | | | | | | | | | | | | | | | |
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