

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: **0740592503**
Status: **Active**
Overview: [vhdm](#)
Description: 2.00mm (.079") Pitch VHDM® Board-to-Board Backplane Header, Vertical, 6-Row, Guide Pin Signal Module, Shield End Version, Pin End Version, 150 Circuits, Pin Length 4.25mm (.167")

Documents:

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

General

| | |
|-------------------------------|---|
| Product Family | Backplane Connectors |
| Series | 74059 |
| Application | Backplane |
| Application Tooling Documents | http://www.molex.com/pdm_docs/ats/TM-622010999.pdf >Tooling Manual |
| Comments | No Keying Position |
| Component Type | PCB Header |
| Overview | vhdm |
| Product Name | VHDM® |
| Style | N/A |

Physical

| | |
|--------------------------------|---|
| Circuits (Loaded) | 150 |
| Circuits (maximum) | 150 |
| Color - Resin | Black |
| Durability (mating cycles max) | 200 |
| First Mate / Last Break | No |
| Guide to Mating Part | Yes |
| Keying to Mating Part | None |
| Material - Metal | Beryllium Copper, High Performance Alloy (HPA), Stainless Steel |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin-Lead |
| Material - Resin | High Temperature Thermoplastic |
| Number of Columns | N/A |
| Number of Pairs | Open Pin Field |
| Number of Rows | 6 |
| 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) | 0.039 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 |
| Stackable | No |

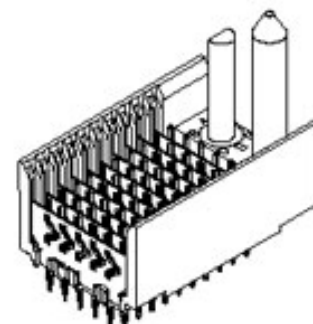


image - Reference only

Series

EU RoHS

Not RoHS Compliant
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

[74059Series](#)

Mates With

[74030 VHDM® Board-to-Board Daughtercard Receptacle](#)

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 # |
|--|----------------------------|
| Flat Rock Tooling for Pneumatic Press | 0622013700 |
| VHDM® Signal Pin Inserter Repair Tool | 0622015700 |
| VHDM® 6 Row Pin and Shield Repair Tool | 0622015800 |
| VHDM® 6 Row Shield Extraction Tool | 0622016000 |

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 3.125 Gbps
Real Signals (per 25mm) 75
Shield Type Ground Plane Shield
Shielded Yes
Voltage - Maximum 120V AC (RMS)/DC

Material Info

Reference - Drawing Numbers

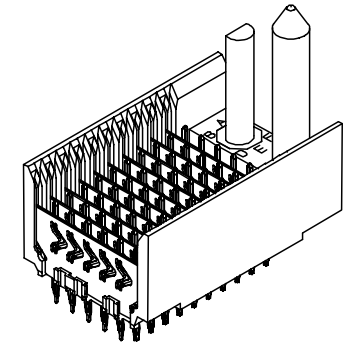
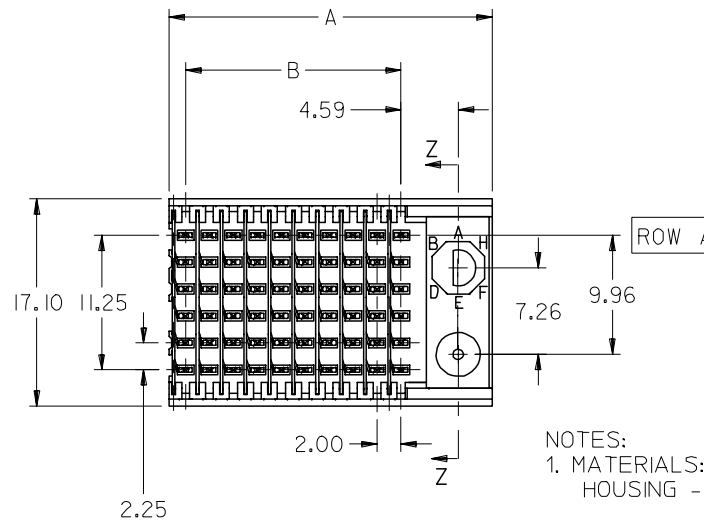
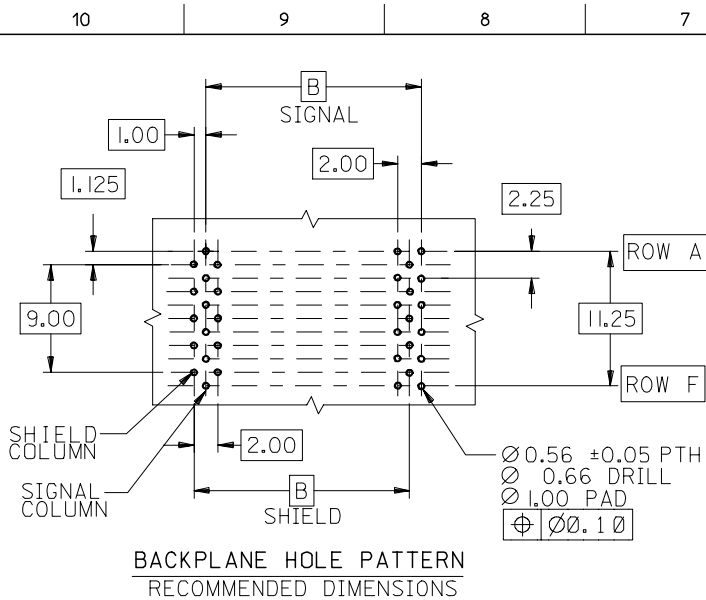
Sales Drawing SD-74059-002

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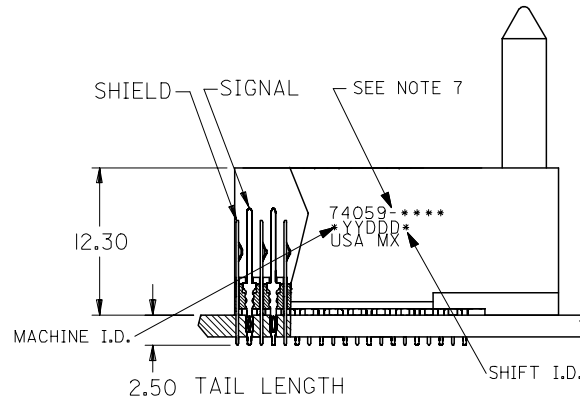
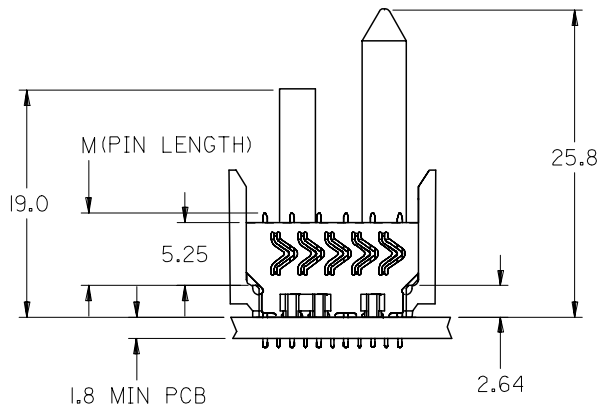
VHDM® Insertion 0622020204
Module for Advanced
Mate Signal Header,
6 Row by 25 Wide,
50.00mm (1.97")
VHDM® Insertion 0622020208
Module for Standard
Shield Signal
Header, 6 Row by
25 Wide, 50.00mm
(1.97")

This document was generated on 05/19/2010

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- NOTES:
- MATERIALS:
HOUSING - LIQUID CRYSTAL POLYMER (LCP),
GLASS-FILLED, UL 94V-0, COLOR: BLACK
SIGNAL PIN & SHIELD - 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 LENGTHS CONSULT MOLEX FOR AVAILABILITY
 - FOR SPECIFIC MATERIAL NUMBERS & MATING INFORMATION REFER TO SHEET 2 AND 3
 - PACKAGE PER PK-74058-003
 - EITHER MARK PART WITH PART NUMBER & DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON THE TUBE.



| | | | | | | | | | |
|---|-------------------------------|--|---|-----------------|--------------|--|------------------------|--|--|
| ADDED TOLERANCE EC NO: UCP2006-2669 DRW: JONIAK 2006/06/02 CHKD: JONIAK 2006/06/02 APPR: CBIXLER 2006/06/09 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | | |
| | | | | MM ONLY | 2.5:1 | METRIC | | | |
| | | | | DRAWN BY | DATE | TITLE | | | |
| | | | | DATE | DATE | VHM 6 ROW SHIELD END BACKPLANE SALES DRAWING | | | |
| REV M | DESCRIPTION | 4 PLACES | ± --- | ± --- | MWANG | 1998/11/09 | MOLEX INCORPORATED | | |
| | | 3 PLACES | ± --- | ± --- | CHECKED BY | DATE | | | |
| | | 2 PLACES | ± 0.15 | ± --- | JLAURX | 1998/11/09 | | | |
| | | 1 PLACE | ± 0.25 | ± --- | APPROVED BY | DATE | | | |
| | | | ANGULAR ±1/2° | | CBIXLER | 1998/11/19 | | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. | DOCUMENT NO. | | SHEET NO. | | |
| | | | SEE SHEET 2 | | SD-74059-002 | | 1 OF 3 | | |
| | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | |

10 9 8 7 6 5 4 3 2 1

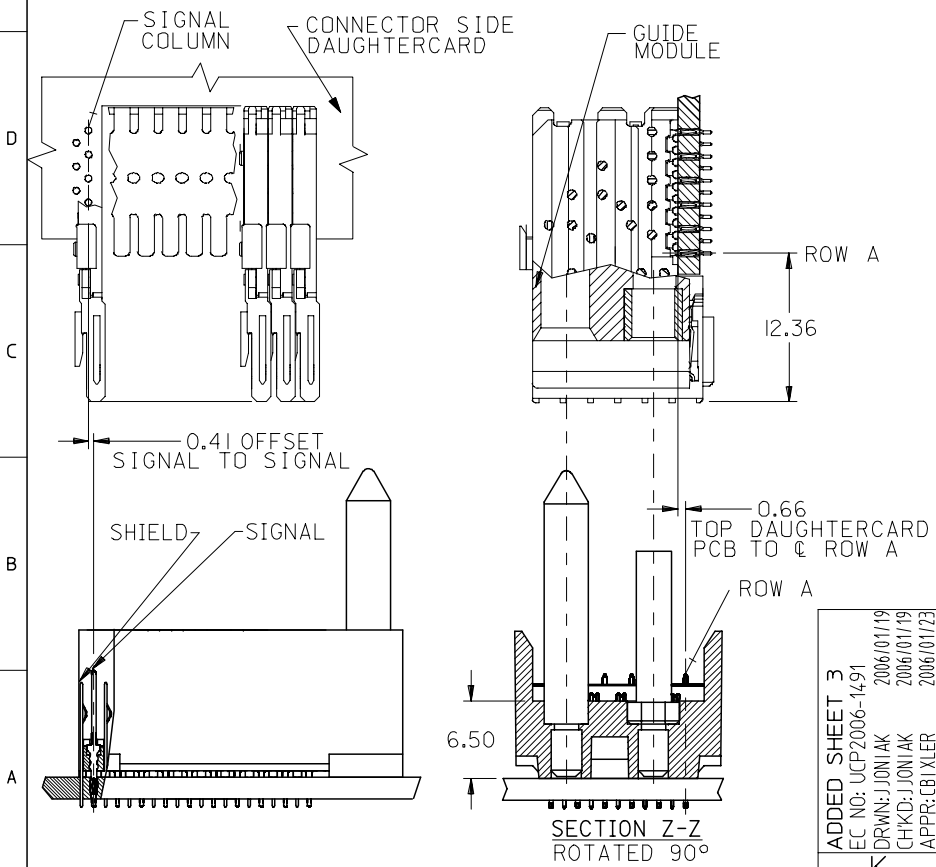
| | | | | | | | | | |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| M/N 74059-() | -**0* | -**1* | -**2* | -**3* | -**4* | -**5* | -**6* | -**7* | -**8* |
| KEYING PIN ORIENTATION | O | A | B | C | D | E | F | G | H |

74059- * * * *

NUMBER OF COLUMNS/PLATING
 10 = 10 COLUMN TIN/LEAD
 21 = 11 COLUMN TIN/LEAD*
 25 = 25 COLUMN TIN/LEAD
 90 = 10 COLUMN MATTE TIN
 85 = 25 COLUMN MATTE TIN
 81 = 11 COLUMN MATTE TIN*

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

* - SEE SHEET 3 FOR 11 COLUMN P/N'S



| PART NUMBER | COLUMN | NUMBER OF SIGNAL PIN | NUMBER OF SHIELD | A | B | M | Au (um) THICKNESS | Sn (um) THICKNESS |
|-------------|--------|----------------------|------------------|-------|-------|------|-------------------|-------------------|
| 74059-*0*1 | 10 | 60 | 10 | 27.00 | 18.00 | 4.75 | 0.76 | 0.76-1.52 |
| 74059-*0*6 | 10 | 60 | 10 | 27.00 | 18.00 | 4.75 | 1.27 | |
| 74059-*5*1 | 25 | 150 | 25 | 57.00 | 48.00 | 4.75 | 0.76 | |
| 74059-*5*6 | 25 | 150 | 25 | 57.00 | 48.00 | 4.75 | 1.27 | |
| 74059-*0*2 | 10 | 60 | 10 | 27.00 | 18.00 | 6.25 | 0.76 | |
| 74059-*0*7 | 10 | 60 | 10 | 27.00 | 18.00 | 6.25 | 1.27 | |
| 74059-*5*2 | 25 | 150 | 25 | 57.00 | 48.00 | 6.25 | 0.76 | |
| 74059-*5*7 | 25 | 150 | 25 | 57.00 | 48.00 | 6.25 | 1.27 | |
| 74059-*0*3 | 10 | 60 | 10 | 27.00 | 18.00 | 4.25 | 0.76 | |
| 74059-*0*8 | 10 | 60 | 10 | 27.00 | 18.00 | 4.25 | 1.27 | |
| 74059-*5*3 | 25 | 150 | 25 | 57.00 | 48.00 | 4.25 | 0.76 | |
| 74059-*5*8 | 25 | 150 | 25 | 57.00 | 48.00 | 4.25 | 1.27 | |
| 74059-*0*4 | 10 | 60 | 10 | 27.00 | 18.00 | 5.15 | 0.76 | |
| 74059-*0*9 | 10 | 60 | 10 | 27.00 | 18.00 | 5.15 | 1.27 | |
| 74059-*5*4 | 25 | 150 | 25 | 57.00 | 48.00 | 5.15 | 0.76 | |
| 74059-*5*9 | 25 | 150 | 25 | 57.00 | 48.00 | 5.15 | 1.27 | |

ADDED SHEET 3
 EC NO: UCP2006-1491
 DRW: JONIAK 2006/01/19
 CHKD: JONIAK 2006/01/19
 APPR: CBIXLER 2006/01/23

QUALITY SYMBOLS
 ▽=0
 ▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | mm | INCH |
|----------|-------|-------|
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± --- | ± --- |
| 1 PLACE | ± --- | ± --- |

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE
 MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
 MM ONLY

SCALE
 2.5:1

DESIGN UNITS
 METRIC

THIRD ANGLE PROJECTION

DRAWN BY: MWANG DATE: 1998/11/09
 CHECKED BY: JLAURX DATE: 1998/11/09
 APPROVED BY: CBIXLER DATE: 1998/11/09

VHDM 6 ROW
 SHIELD END BACKPLANE
 SALES DRAWING

MOLEX INCORPORATED

DOCUMENT NO. SD-74059-002
 SHEET NO. 2 OF 3

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9 8 7 6 5 4 3 2 1