

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0740592502](#)  
**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, 150 Circuits, Pin Length 6.25mm (.246")

**Documents:**

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**General**

Product Family	Backplane Connectors
Series	<a href="#">74059</a>
Application	Backplane
Application Tooling Documents	<a href="http://www.molex.com/pdm_docs/ats/TM-622010999.pdf">http://www.molex.com/pdm_docs/ats/TM-622010999.pdf</a> >Tooling Manual</a>
Comments	No Keying Position
Component Type	PCB Header
Overview	<a href="#">vhdm</a>
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

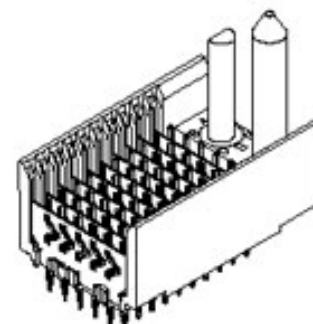


image - Reference only

Series

**EU RoHS**

**RoHS Compliant by Exemption**

**REACH SVHC**

**Contains SVHC: No**

**Halogen-Free**

**Status**

**Halogen-Free**

**China RoHS**



Pb

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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	<a href="#">0622013700</a>
VHDM® Signal Pin	<a href="#">0622015700</a>
Insert Repair Tool	
VHDM® 6 Row Pin and Shield Repair Tool	<a href="#">0622015800</a>

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) 72  
Shield Type Ground Plane Shield  
Shielded Yes  
Voltage - Maximum 120V AC (RMS)/DC

### Material Info

### Reference - Drawing Numbers

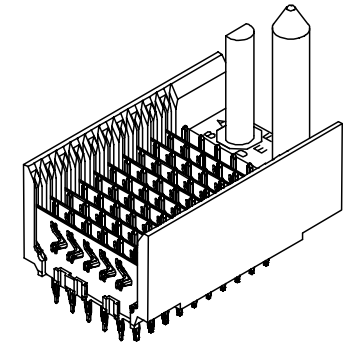
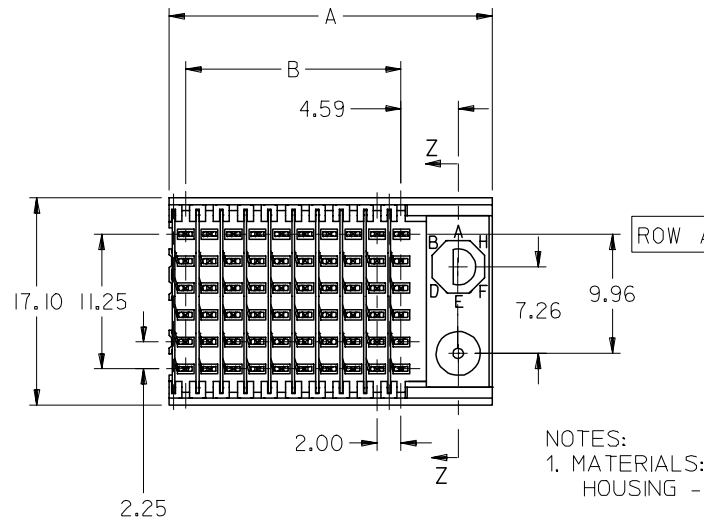
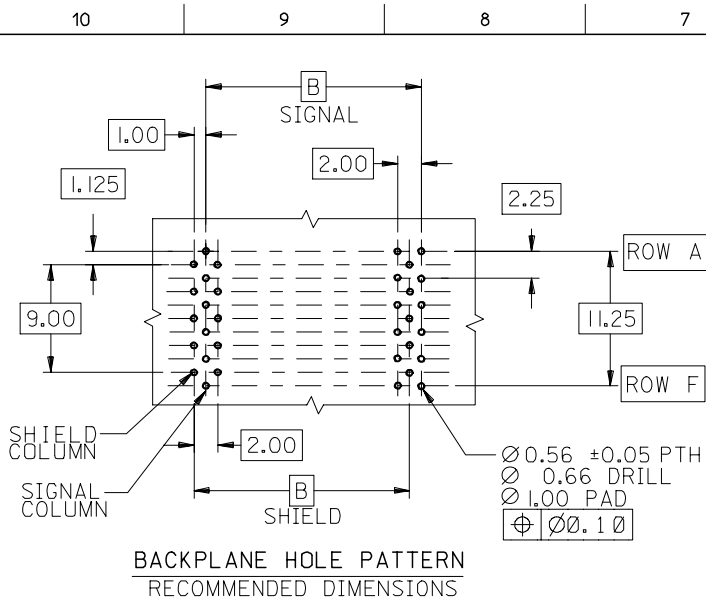
Sales Drawing SD-74059-002

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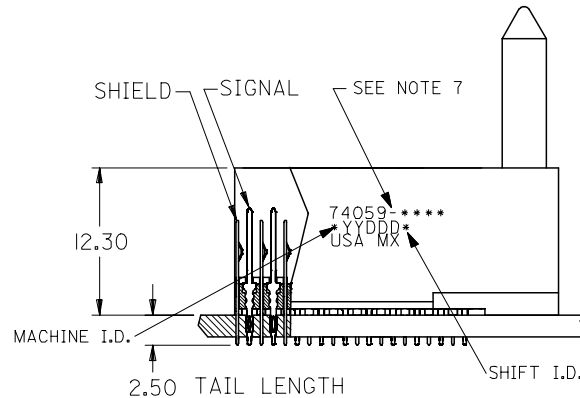
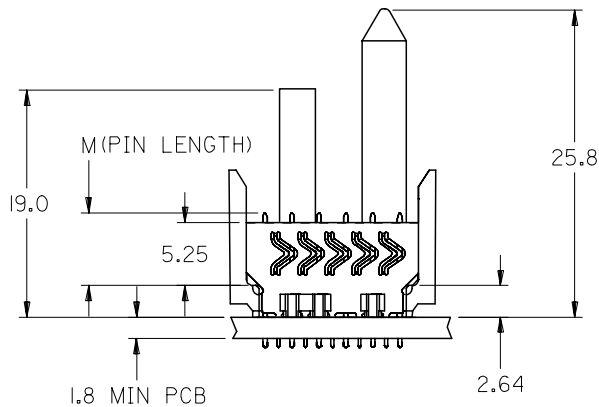
VHDM® 6 Row Shield Extraction Tool [0622016000](#)  
VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 25 Wide, 50.00mm (1.97") [0622020204](#)  
VHDM® Insertion Module for Standard Shield Signal Header, 6 Row by 25 Wide, 50.00mm (1.97") [0622020208](#)

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	INCH	MM ONLY	2.5:1	METRIC		
		4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE		
		3 PLACES ± ---	± ---	MWANG	1998/11/09	VHD6 6 ROW SHIELD END BACKPLANE SALES DRAWING		
		2 PLACES ± 0.15	± ---	CHECKED BY	DATE	MOLEX INCORPORATED		
		1 PLACE ± 0.25	± ---	JLAURX	1998/11/09			
		ANGULAR ±1/2°		APPROVED BY	DATE			
				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		
				SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
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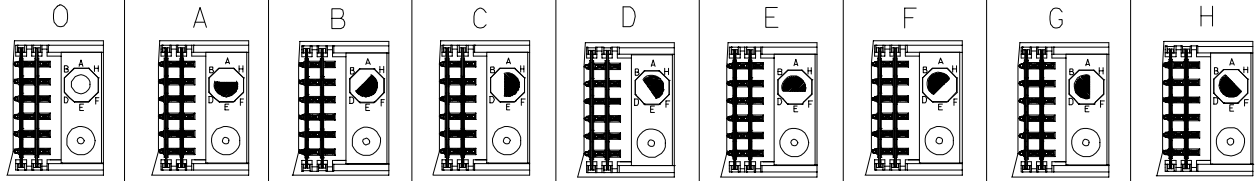
10 9 8 7 6 5 4 3 2 1

M/N  
74059-( )

---0\* ---1\* ---2\* ---3\* ---4\* ---5\* ---6\* ---7\* ---8\*

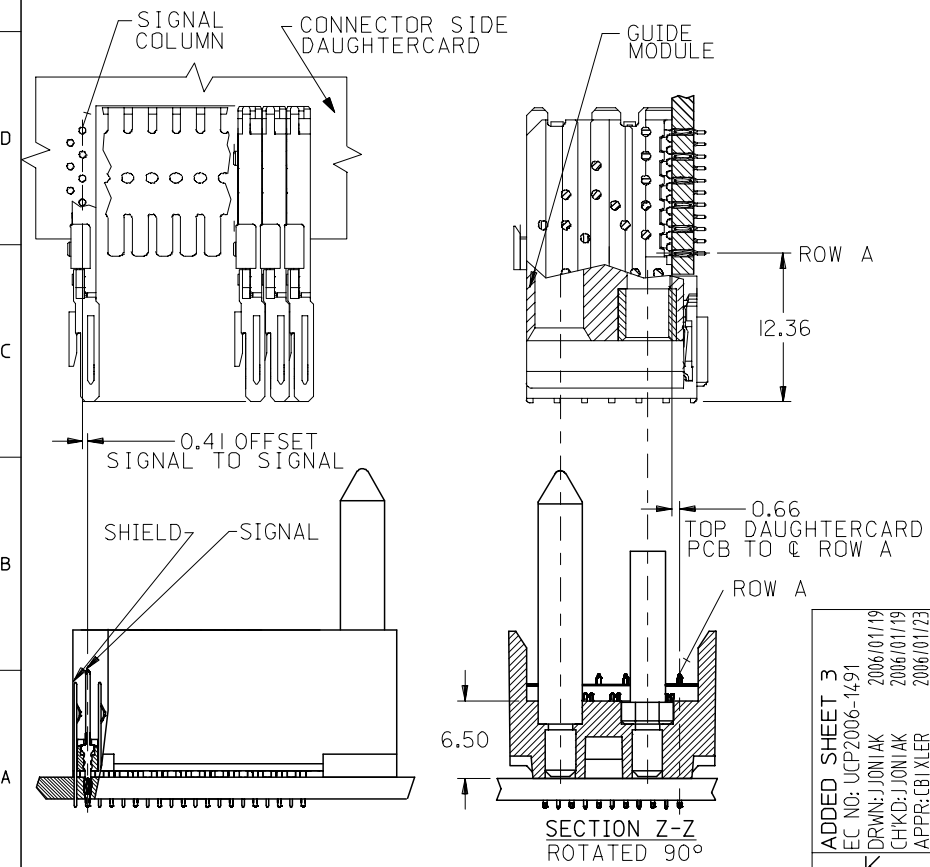
74059- \* \* \* \*

KEYING PIN ORIENTATION



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	6.25	0.76	
74059-*5*6	25	150	25	57.00	48.00	6.25	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  
 DRWN: JONIAK 2006/01/19  
 CHKD: JONIAK 2006/01/19  
 APPR: CBIXLER 2006/01/23

QUALITY SYMBOLS  
 ▽=0  
 ▽=0  
 DESCRIPTION  
 REV

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  
 DRAWN BY: MWANG  
 DATE: 1998/11/09  
 CHECKED BY: JLAURX  
 DATE: 1998/11/09  
 APPROVED BY: CBIXLER  
 DATE: 1998/11/09  
 MATERIAL NO.  
 SEE CHART

SCALE: 2.5:1  
 DESIGN UNITS: METRIC  
 THIRD ANGLE PROJECTION  
 TITLE: VHDM 6 ROW SHIELD END BACKPLANE SALES DRAWING  
 MOLEX INCORPORATED  
 DOCUMENT NO: SD-74059-002  
 SHEET NO: 2 OF 3  
 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

9 8 7 6 5 4 3 2 1