

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

**Part Number:** [0740591023](#)  
**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, 60 Circuits, Pin Length 4.25mm (.167")

**Documents:**

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

**Agency Certification**

UL E29179

**General**

Product Family Backplane Connectors  
 Series [74059](#)  
 Application Backplane  
 Application Tooling Documents [Tooling Manual](http://www.molex.com/pdm_docs/ats/TM-622010999.pdf)  
 Comments Position B  
 Component Type PCB Header  
 Overview [vhdm](#)  
 Product Name VHDM®  
 Style N/A

**Physical**

Circuits (Loaded) 60  
 Circuits (maximum) 60  
 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 Yes  
 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

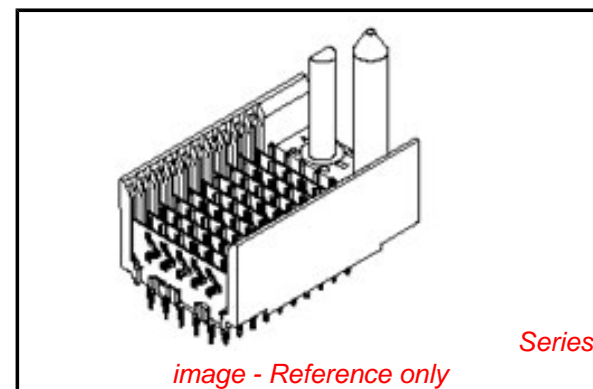


image - Reference only

**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](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® Insertion Module for Advanced Mate Signal Header, 6 Row by 11 Wide, 20.00mm (.787")	<a href="#">0622011101</a>
VHDM® Signal Pin Inserter Repair Tool	<a href="#">0622015700</a>

Plating min: Termination ( $\mu$ in)	30
Plating min: Termination ( $\mu$ m)	0.75
Polarized to PCB	Yes
Stackable	No
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

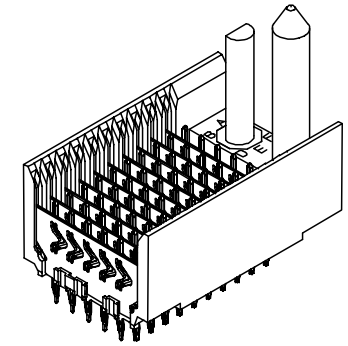
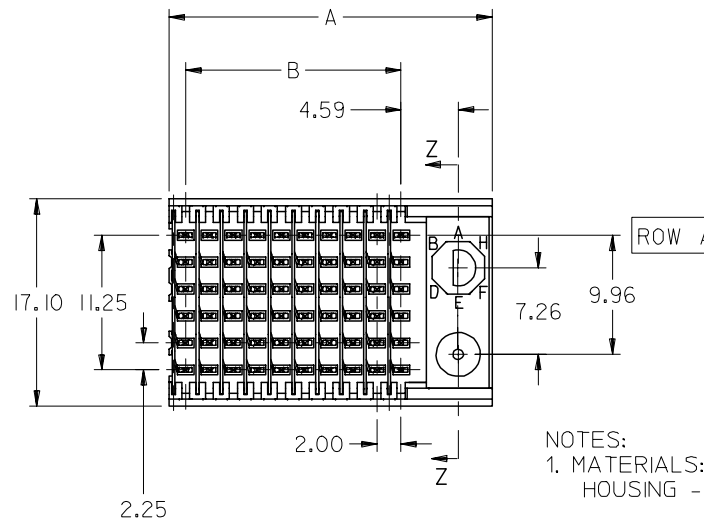
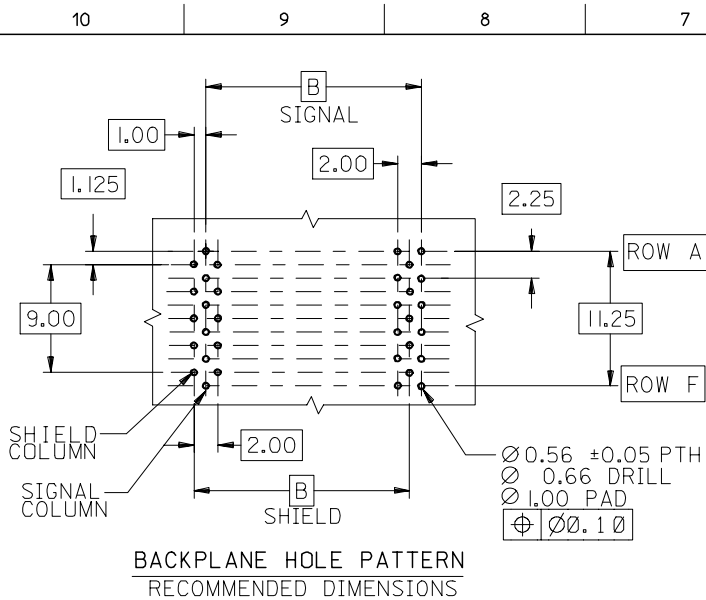
Sales Drawing	SD-74059-002
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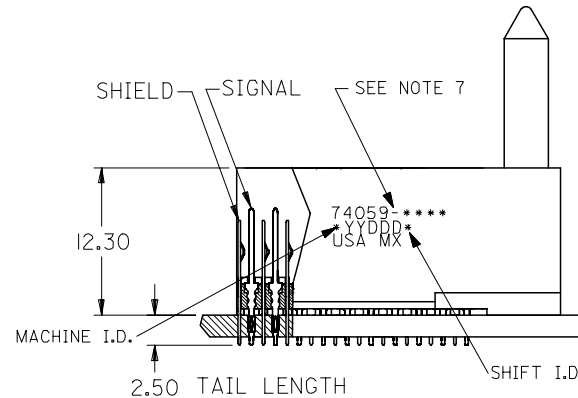
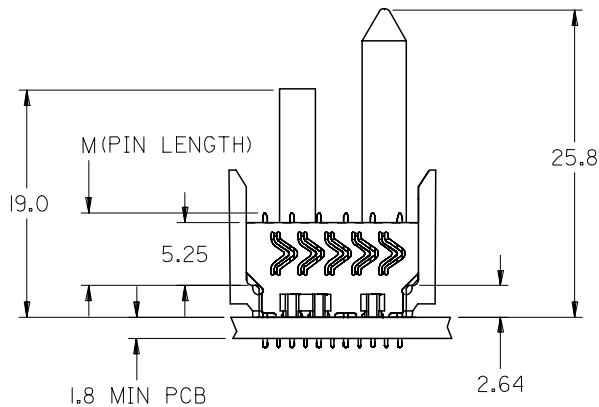
VHDM® 6 Row Pin and Shield Repair Tool	<a href="#">0622015800</a>
VHDM® 6 Row Shield Extraction Tool	<a href="#">0622016000</a>
VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 10 Wide, 20.00mm (.787")	<a href="#">0622020203</a>
VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 10 Wide, 20.00mm (.787")	<a href="#">0622020207</a>

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.



<b>ADDED TOLERANCE</b> EC NO: UCP2006-2669 DRW: JONIAK 2006/06/02 CHKD: JONIAK 2006/06/02 APPR: CBIXLER 2006/06/09	<b>QUALITY SYMBOLS</b> ▽=0 ▽=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM ONLY	<b>SCALE</b> 2.5:1	<b>DESIGN UNITS</b> METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY MWANG	DATE 1998/11/09	<b>TITLE</b> VHM 6 ROW SHIELD END BACKPLANE SALES DRAWING		
		2 PLACES ± 0.15 ± ---	1 PLACE ± 0.25 ± ---	CHECKED BY JLAURX	DATE 1998/11/09	<b>MOLEX INCORPORATED</b>		
		ANGULAR ±1/2°		APPROVED BY CBIXLER	DATE 1998/11/19	MATERIAL NO. <b>SEE SHEET 2</b>	DOCUMENT NO. SD-74059-002	SHEET NO. 1 OF 3
<b>REV</b>	<b>DESCRIPTION</b>	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		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

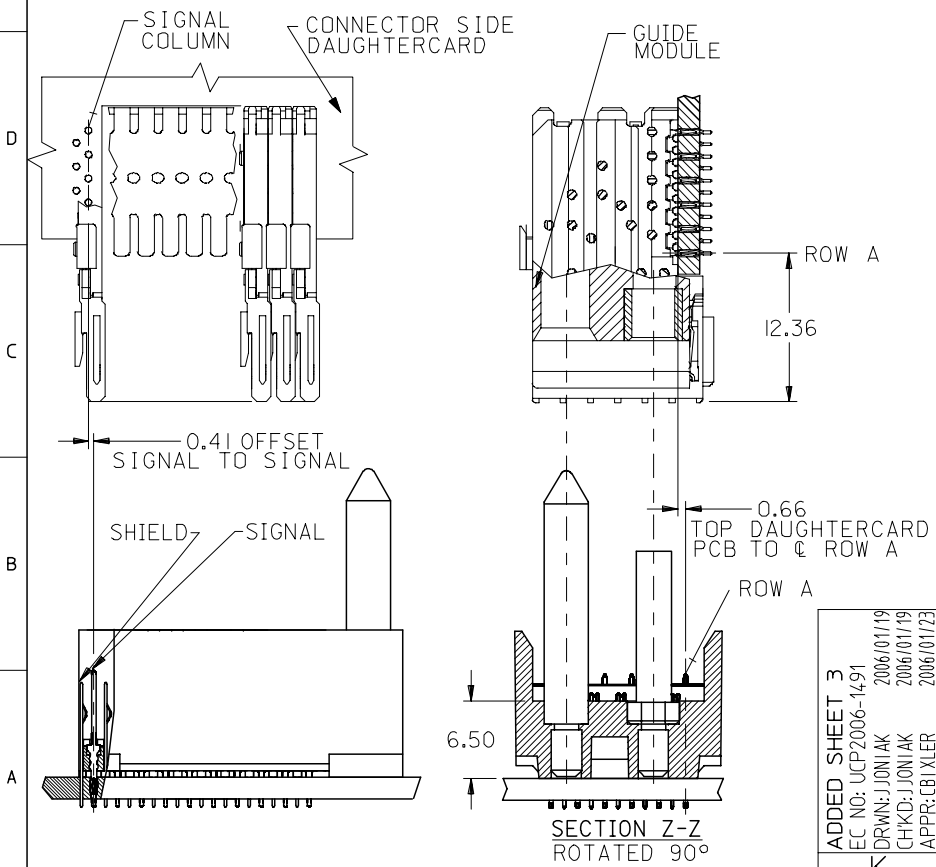
M/N 74059-( )	---0*	---1*	---2*	---3*	---4*	---5*	---6*	---7*	---8*
KEYING PIN ORIENTATION									

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  
 DRWN: 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