

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

**Part Number:** [0740592512](#)  
**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	Position A
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	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
Plating min: Termination (µin)	30
Plating min: Termination (µm)	0.75
Polarized to PCB	Yes
Stackable	No

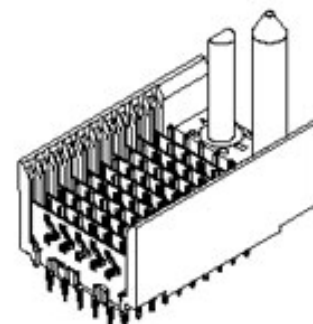


image - Reference only

Series

**EU RoHS**

**RoHS Compliant by Exemption**

**REACH SVHC**

Not Reviewed

**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>
Insertor 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

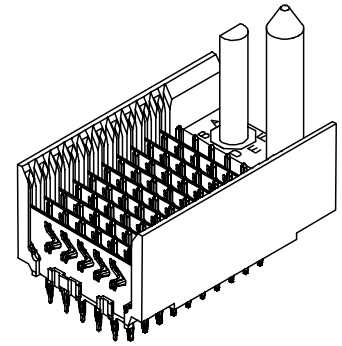
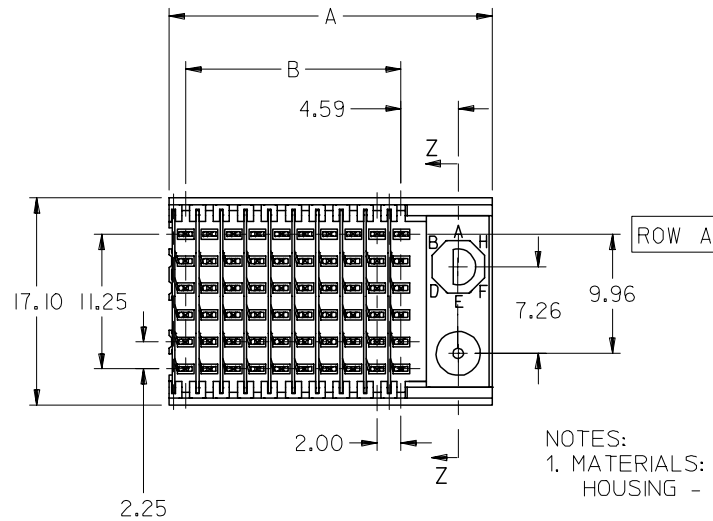
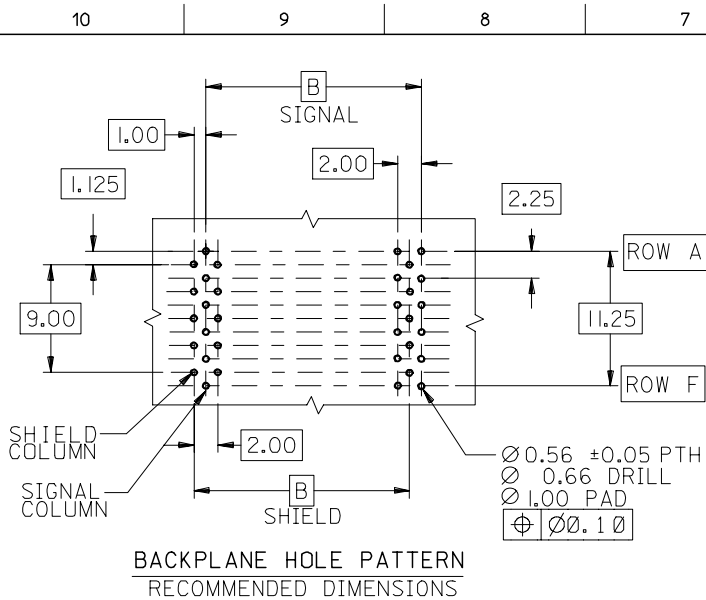
Sales Drawing SD-74059-002

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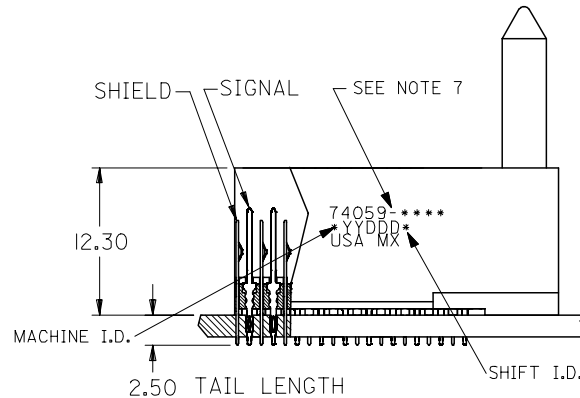
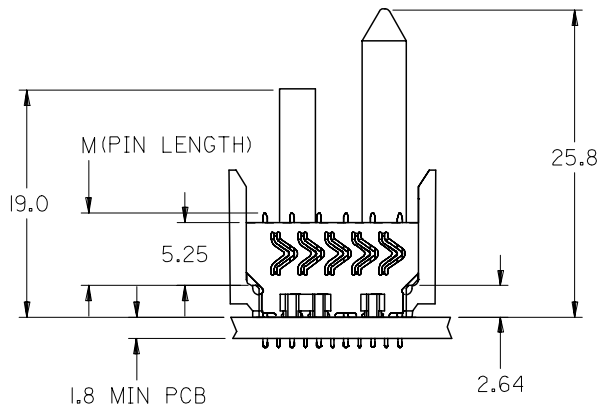
VHDM® 6 Row Shield Extraction Tool [0622016000](#)  
VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 25 Wide, 50.00mm (1.97") [0622020204](#)  
VHDM® Insertion Module for Standard Shield Signal Header, 6 Row by 25 Wide, 50.00mm (1.97") [0622020208](#)

This document was generated on 05/25/2010

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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 MM ONLY	SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY MWANG	DATE 1998/11/09	TITLE VHD6 6 ROW SHIELD END BACKPLANE SALES DRAWING		
		2 PLACES ± 0.15 ± ---	1 PLACE ± 0.25 ± ---	CHECKED BY JLAURX	DATE 1998/11/09			
		ANGULAR ±1/2°		APPROVED BY CBIXLER	DATE 1998/11/19	MOLEX INCORPORATED		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE SHEET 2	DOCUMENT NO. SD-74059-002	SHEET NO. 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

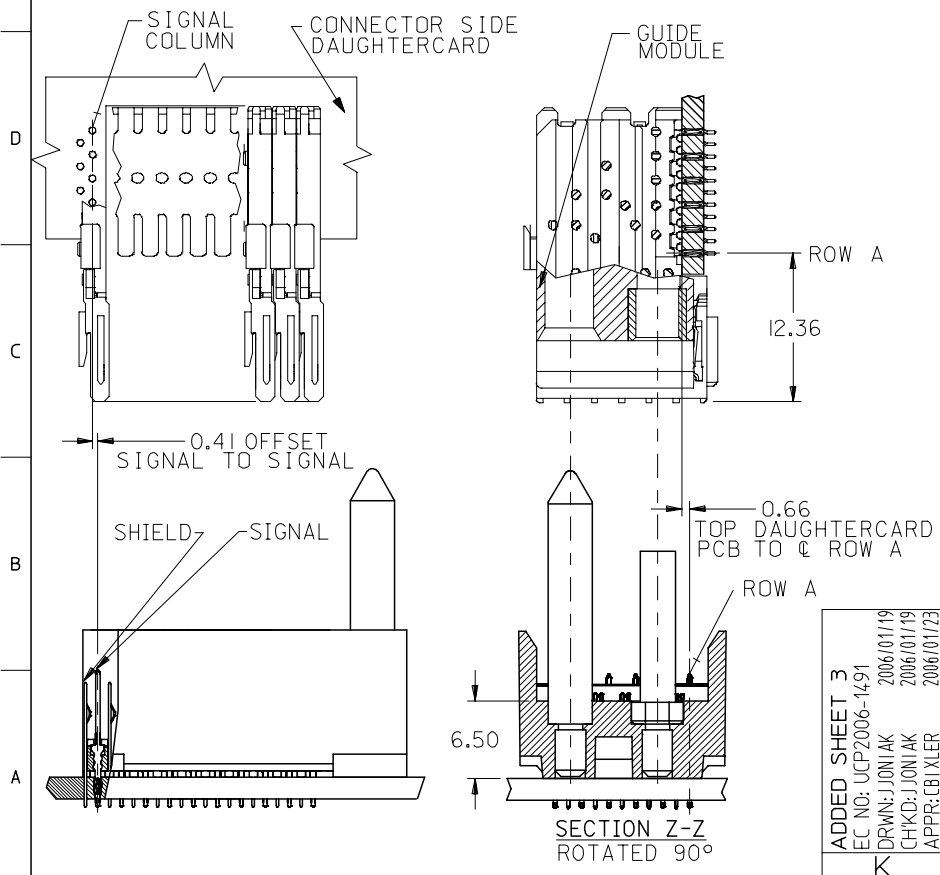
M/N 74059-( )	---0*	---1*	---2*	---3*	---4*	---5*	---6*	---7*	---8*
KEYING PIN ORIENTATION	O	A	B	C	D	E	F	G	H

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	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	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	▽=0	4 PLACES ± --- ± ---	DRAWN BY MWANG	DATE 1998/11/09	TITLE VHDM 6 ROW SHIELD END BACKPLANE SALES DRAWING		
	▽=0	3 PLACES ± --- ± ---	CHECKED BY JLAURX	DATE 1998/11/09	MOLEX INCORPORATED		
	▽=0	2 PLACES ± --- ± ---	APPROVED BY CBIXLER	DATE 1998/11/09	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-74059-002	SHEET NO. 2 OF 3
REV	DESCRIPTION	ANGULAR ±1/2°	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

9 8 7 6 5 4 3 2 1