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Part Number: [0740591021](#)
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, 60 Circuits, Pin Length 4.75mm (.187")

Documents:

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

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

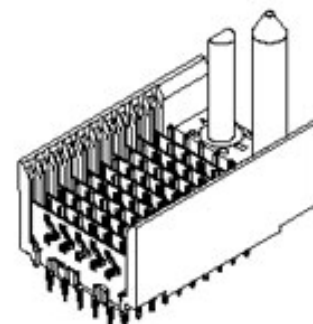


image - Reference only

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
 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® Insertion Module for Advanced Mate Signal Header, 6 Row by 11 Wide, 20.00mm (.787")	0622011101
VHDM® Signal Pin Inserter Repair Tool	0622015700

Plating min: Termination (µin)	30
Plating min: Termination (µm)	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)	72
Shield Type	Ground Plane Shield
Shielded	Yes
Voltage - Maximum	120V AC (RMS)/DC

Material Info

Reference - Drawing Numbers

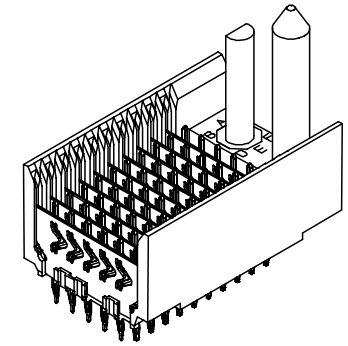
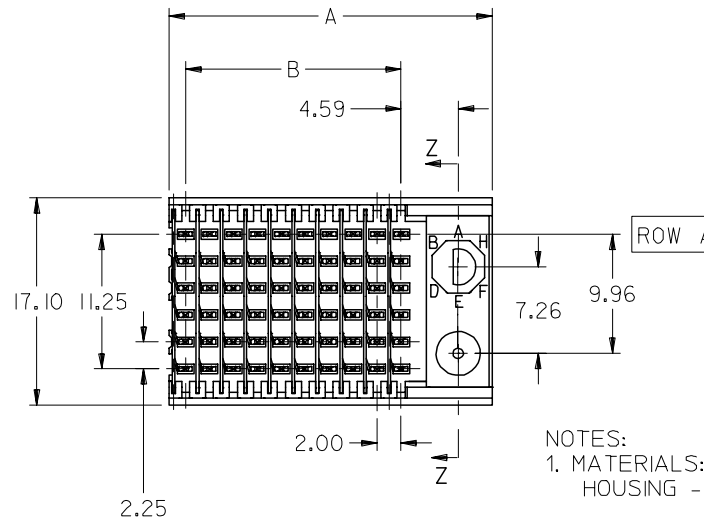
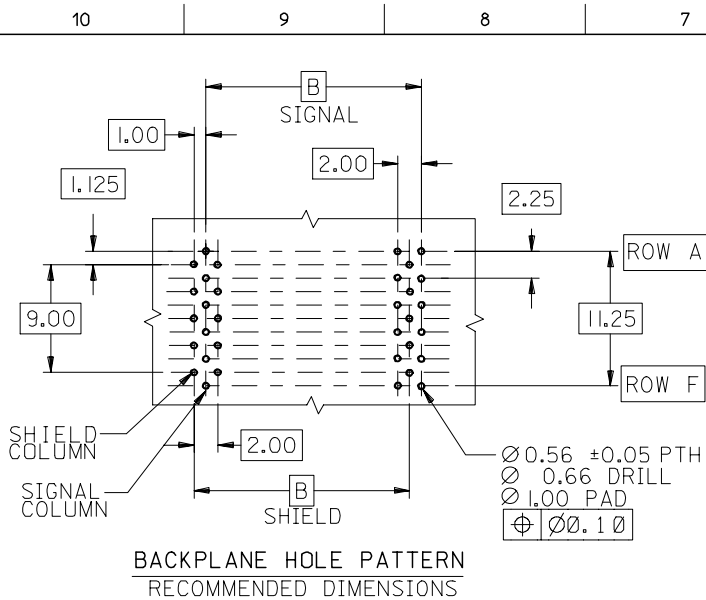
Sales Drawing	SD-74059-002
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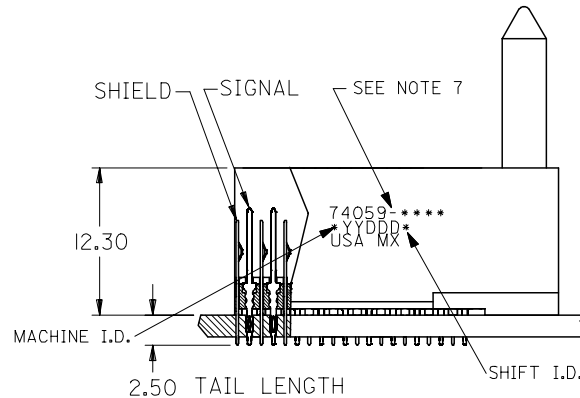
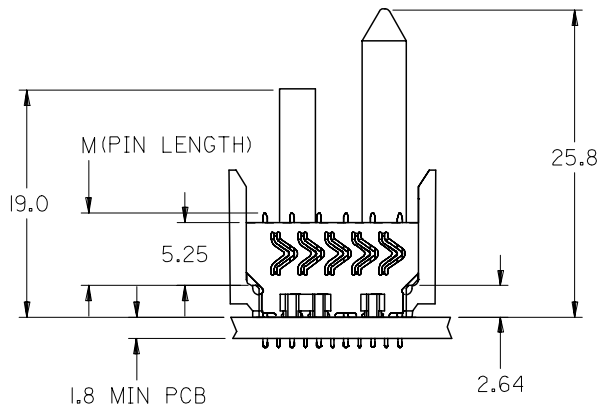
VHDM® 6 Row Pin and Shield Repair Tool	0622015800
VHDM® 6 Row Shield Extraction Tool	0622016000
VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 10 Wide, 20.00mm (.787")	0622020203
VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 10 Wide, 20.00mm (.787")	0622020207

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 MM ONLY	SCALE 2.5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.15 ± ---	1 PLACE ± 0.25 ± ---	DRAWN BY: MWANG DATE: 1998/11/09	TITLE VHDM 6 ROW SHIELD END BACKPLANE SALES DRAWING		
		ANGULAR ±1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		CHECKED BY: JLAURX DATE: 1998/11/09	APPROVED BY: CBIXLER DATE: 1998/11/19		
		MATERIAL NO. SEE SHEET 2		DOCUMENT NO. SD-74059-002		MOLEX INCORPORATED			
SHEET NO. 1 OF 3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

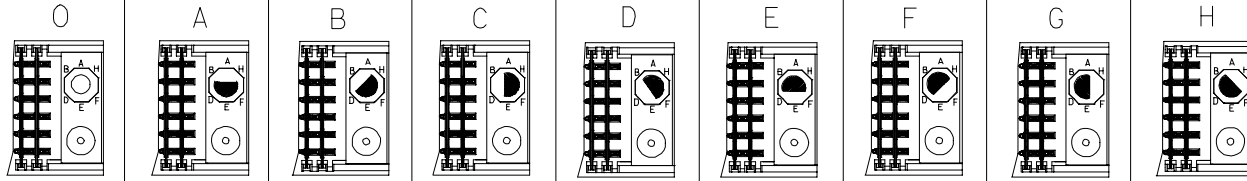
10 9 8 7 6 5 4 3 2 1

M/N
74059-()

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

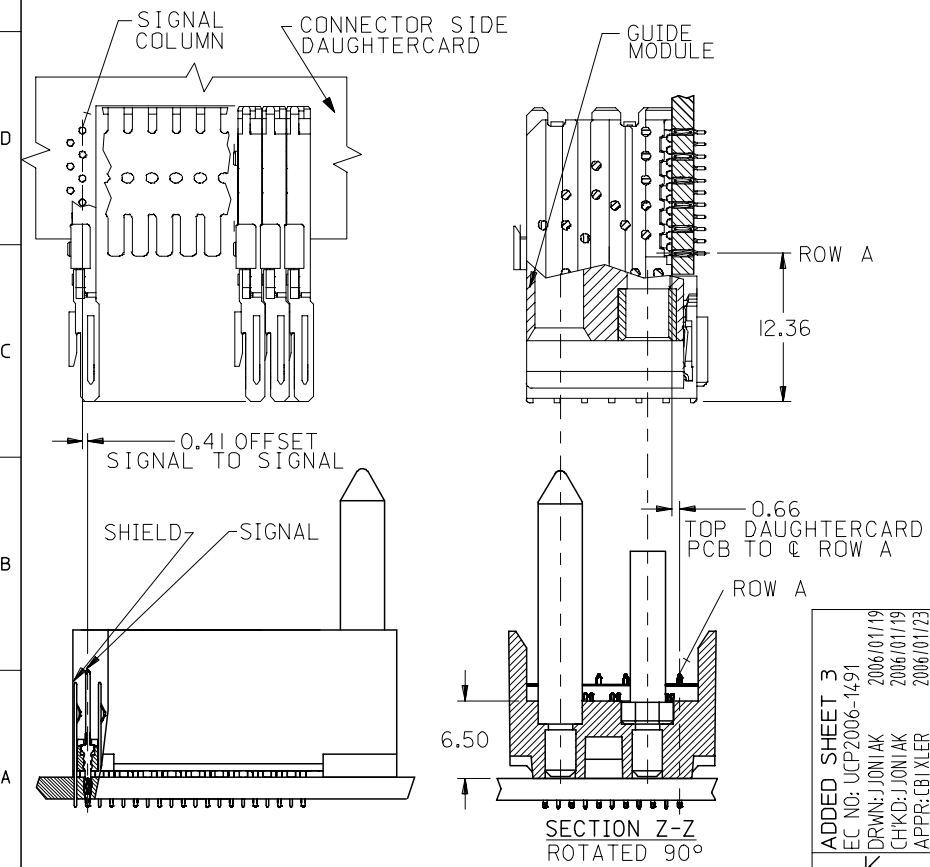
74059- * * * *

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							1.27	
74059-#5*1	25	150	25	57.00	48.00	6.25	0.76	
74059-#5*6							1.27	
74059-#0*2	10	60	10	27.00	18.00	5.15	0.76	
74059-#0*7							1.27	
74059-#5*2	25	150	25	57.00	48.00	4.25	0.76	
74059-#5*7							1.27	
74059-#0*3	10	60	10	27.00	18.00	5.15	0.76	
74059-#0*8							1.27	
74059-#5*3	25	150	25	57.00	48.00	4.25	0.76	
74059-#5*8							1.27	
74059-#0*4	10	60	10	27.00	18.00	5.15	0.76	
74059-#0*9							1.27	
74059-#5*4	25	150	25	57.00	48.00	4.25	0.76	
74059-#5*9							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	± .005	± .0002
3 PLACES	± .005	± .0002
2 PLACES	± .005	± .0002
1 PLACE	± .005	± .0002

 ANGULAR ±1/2°

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

SCALE: 2.5:1
 DESIGN UNITS: METRIC
 THIRD ANGLE PROJECTION
 VHDM 6 ROW SHIELD END BACKPLANE SALES DRAWING
 MOLEX INCORPORATED
 MATERIAL NO. SEE CHART
 DOCUMENT NO. SD-74059-002
 SHEET NO. 2 OF 3

9 8 7 6 5 4 3 2 1