

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0740592501

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 4.75mm (.187")

Documents:

[3D Model](#)

[Drawing \(PDF\)](#)

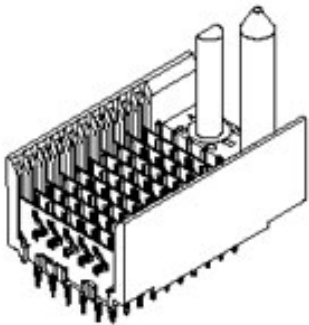
[RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family	Backplane Connectors
Series	74059
Application	Backplane
Application Tooling Documents	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



Series

image - Reference only

EU RoHS

RoHS Compliant by Exemption

REACH SVHC

Contains SVHC: No

Halogen-Free

Status

Not Reviewed

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® Signal Pin Inserter Repair Tool	0622015700
VHDM® 6 Row Pin and Shield Repair Tool	0622015800

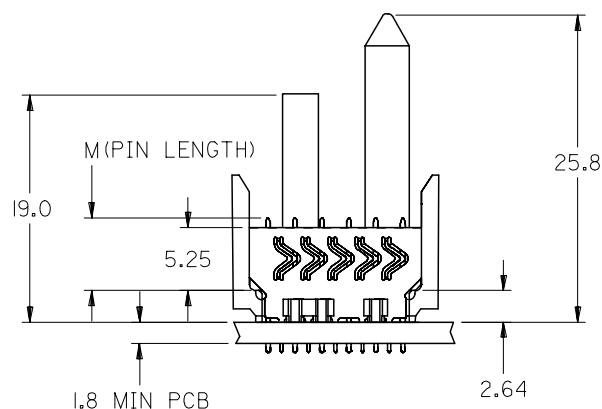
Surface Mount Compatible (SMC)	Yes	VHDM® 6 Row Shield Extraction Tool	0622016000
Temperature Range - Operating	-55°C to +105°C	VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 25 Wide, 50.00mm (1.97")	0622020204
Termination Interface: Style	Through Hole - Compliant Pin	VHDM® Insertion Module for Standard Shield Signal Header, 6 Row by 25 Wide, 50.00mm (1.97")	0622020208
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		
VHDM and Very High Density Metric are trademarks of Amphenol Corporation			

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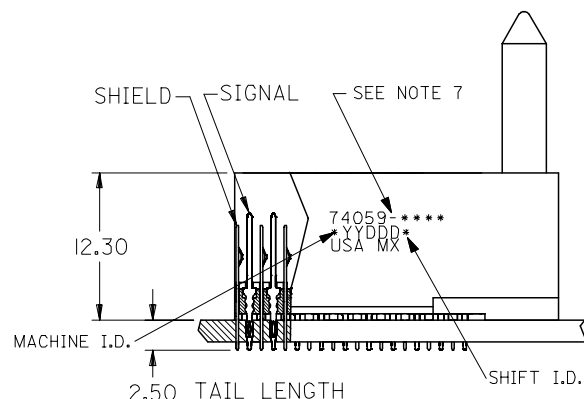
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BACKPLANE HOLE PATTERN
RECOMMENDED DIMENSIONS



- NOTES:
1. MATERIALS:
HOUSING - LIQUID CRYSTAL POLYMER (LCP),
GLASS-FILLED, UL 94V-0, COLOR: BLACK
SIGNAL PIN & SHIELD - COPPER ALLOY
 2. FINISHES:
CONTACT AREA: SELECTIVE GOLD (Au)
PCB TAILS: SELECTIVE TIN/LEAD (Sn/Pb)
OR SELECTIVE MATTE TIN (Sn)
NICKEL (Ni) OVERALL.
 3. THIS PART CONFORMS TO MOLEX PRODUCT
SPECIFICATION PS-74031-999
 4. FOR MIXED CONTACT LENGTHS CONSULT
MOLEX FOR AVAILABILITY
 5. FOR SPECIFIC MATERIAL NUMBERS & MATING
INFORMATION REFER TO SHEET 2 AND 3
 6. PACKAGE PER PK-74058-003
 7. EITHER MARK PART WITH PART NUMBER & DATE
CODE APPROXIMATELY WHERE SHOWN OR PLACE
LABEL ON THE TUBE.



ADDED TOLERANCE EC NO: UCP2006-2669 DRWN: 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		
				mm	INCH	DRAWN BY MWANG	DATE 1998/11/09	TITLE VHDM 6 ROW SHIELD END BACKPLANE SALES DRAWING			
M		REV	4 PLACES	± ---	± ---	CHECKED BY JLAURX	DATE 1998/11/09				
			3 PLACES	± ---	± ---	APPROVED BY	DATE				
			2 PLACES	± 0.15	± ---	CBIXLER	1998/11/19	DOCUMENT NO. SD-74059-002		SHEET NO. 1 OF 3	
			1 PLACE	± 0.25	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		SEE SHEET 2	
						ANGULAR ±1/2°		SIZE B		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

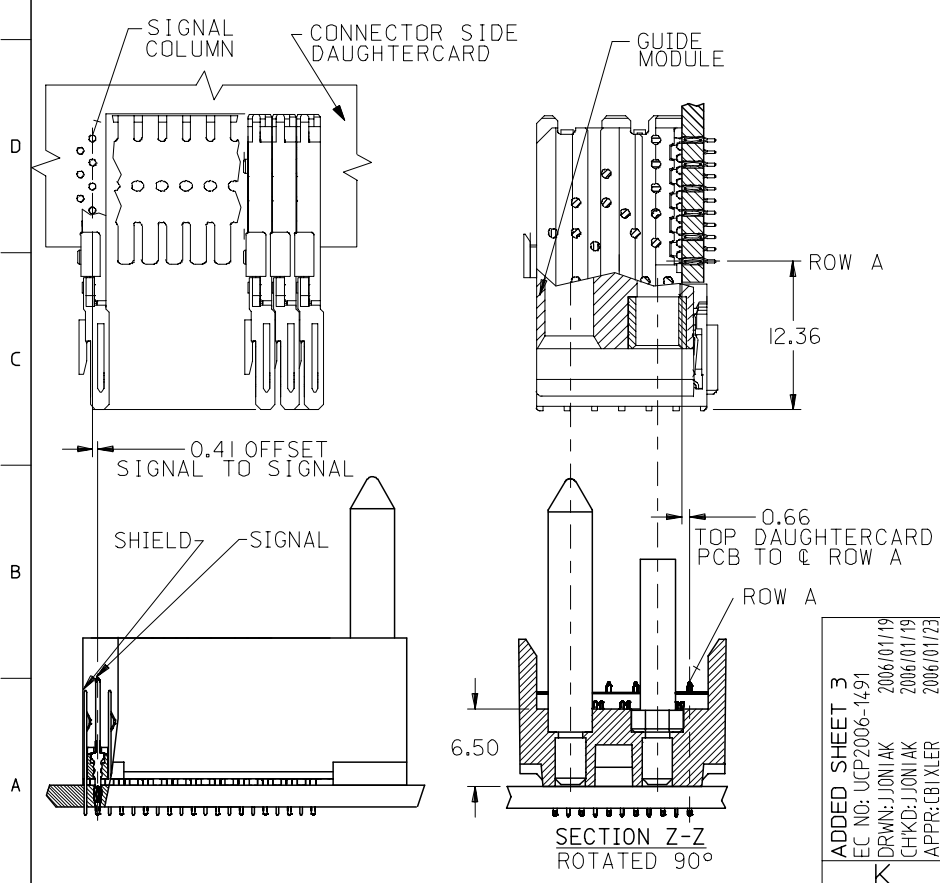
10 9 8 7 6 5 4 3 2 1

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

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	4.75	0.76	
74059-*5*6							1.27	
74059-*0*2	10	60	10	27.00	18.00	6.25	0.76	
74059-*0*7							1.27	
74059-*5*2	25	150	25	57.00	48.00	6.25	0.76	
74059-*5*7							1.27	
74059-*0*3	10	60	10	27.00	18.00	4.25	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	5.15	0.76	
74059-*5*9							1.27	

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

DESCRIPTION
REV

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

SCALE
2.5:1

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

VHDM 6 ROW
SHIELD END BACKPLANE
SALES DRAWING

MOLEX INCORPORATED

DOCUMENT NO.
SD-74059-002

SHEET NO.
2 OF 3

9 8 7 6 5 4 3 2 1