

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

**Part Number:** [0740572503](#)  
**Status:** **Active**  
**Overview:** [vhdm](#)  
**Description:** 2.00mm (.079") Pitch VHDM® Board-to-Board Backplane Header, Vertical, 6-Row, Open Signal Module, 150 Circuits, 25 Columns, Pin Length 4.25mm (.167"), 0.76µm (30µ") Gold (Au) Plating

**Documents:**

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

**Agency Certification**

UL E29179

**General**

Product Family Backplane Connectors  
 Series [74057](#)  
 Application Backplane  
 Application Tooling Documents [http://www.molex.com/pdm\\_docs/ats/TM-622010999.pdf](http://www.molex.com/pdm_docs/ats/TM-622010999.pdf)>Tooling Manual</a>  
 Comments Open Header  
 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  
 Flammability 94V-0  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Material - Metal Beryllium Copper, High Performance Alloy (HPA)  
 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) 0.071 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) 0.079 In  
 Pitch - Term. Interface (mm) 2.00 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.75

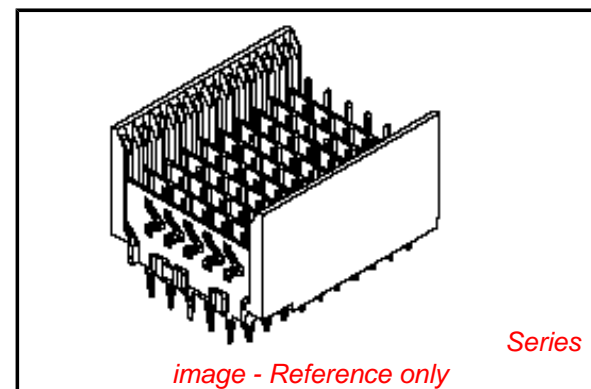


image - Reference only

**EU RoHS** **China RoHS**  
**RoHS Compliant by Exemption**  
**REACH SVHC**  
**Contains SVHC: No**  
**Halogen-Free**  
**Status** **Not Reviewed**  
  
 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**

[74057Series](#)

**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 Inserter Repair Tool	<a href="#">0622015700</a>
VHDM® 6 Row and Shield Repair Tool	<a href="#">0622015800</a>

Plating min: Termination (µin)	30
Plating min: Termination (µm)	0.75
Polarized to PCB	Yes
Stackable	Yes
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	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

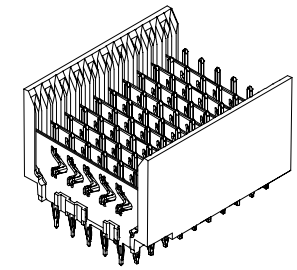
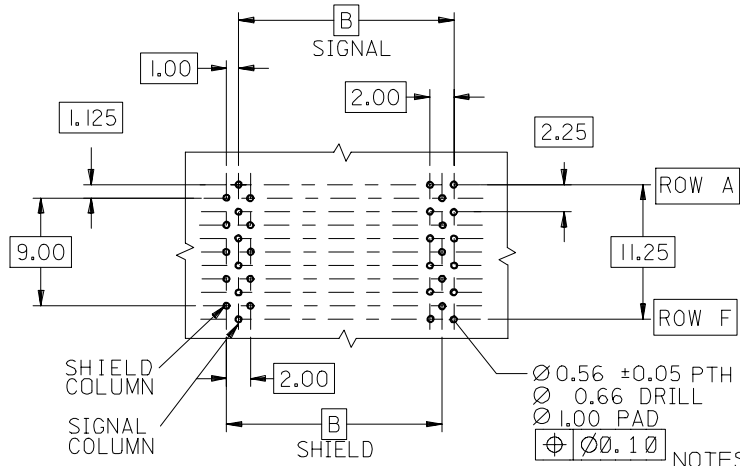
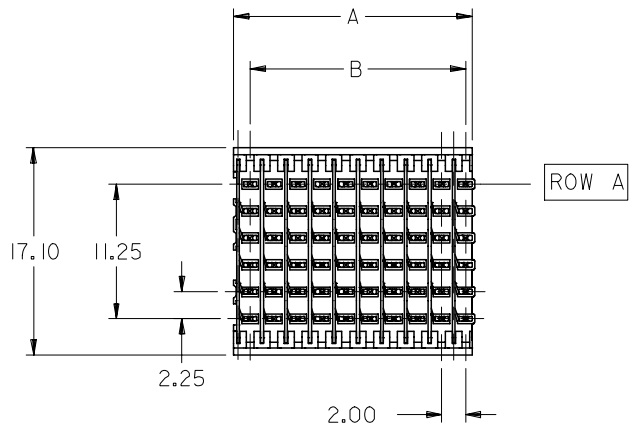
Packaging Specification	PK-74057-003
Sales Drawing	SD-74057-002

VHDM and Very High Density Metric are trademarks of Amphenol Corporation

VHDM® 6 Row Shield Extraction Tool	<a href="#">0622016000</a>
VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 25 Wide, 50.00mm (1.97")	<a href="#">0622020204</a>
VHDM® Insertion Module for Standard Shield Signal Header, 6 Row by 25 Wide, 50.00mm (1.97")	<a href="#">0622020208</a>

This document was generated on 05/19/2010

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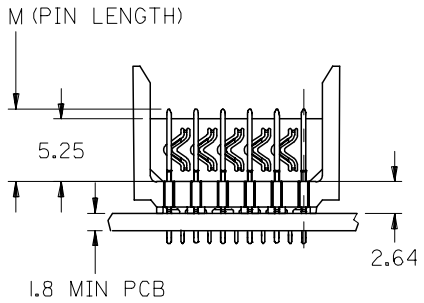
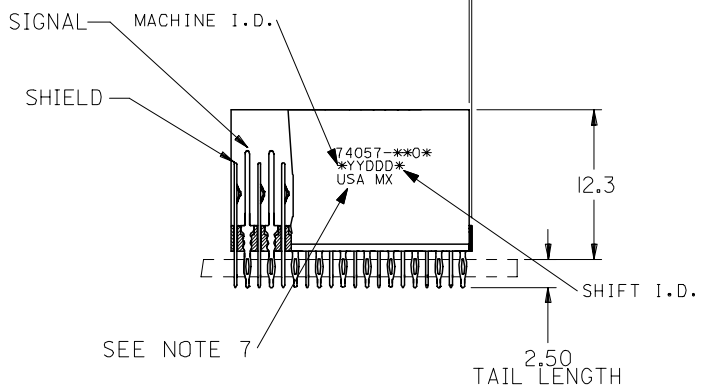
**BACKPLANE HOLE PATTERN  
RECOMMENDED DIMENSIONS**

- Ø 0.56 ±0.05 PTH
- Ø 0.66 DRILL
- Ø 1.00 PAD
- ⊕ Ø 0.10

**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
6. PACKAGE PER PK-74057-003
7. EITHER MARK PART WITH PART NUMBER & DATE CODE APPROXIMATELY WHERE SHOWN OR PLACE LABEL ON THE TUBE.

0.21 MAX OVERALL PROTRUSION



ADDED 15 COLUMN EC NO: UCP2006-1491 DRWNE: JONIAK 2006/01/19 CHKD: JONIAK 2006/01/19 APPR: CBIXLER 2006/01/23	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY	2.5:1	METRIC		
				DRAWN BY	DATE	TITLE		
				CHECKED BY	DATE	VHDM 6 ROW OPEN END BACKPLANE SALES ASSEMBLY		
				APPROVED BY	DATE	MOLEX INCORPORATED		
				CBIKLER	1998/11/09	DOCUMENT NO. SD-74057-002		
				MATERIAL NO.		SHEET NO.		
				SEE SHEET 3		1 OF 3		
				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

F

E

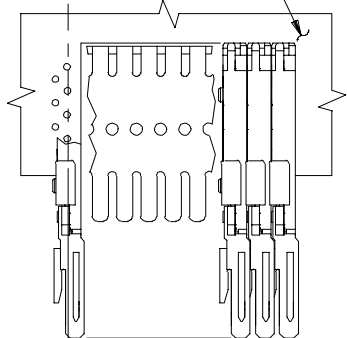
D

C

B

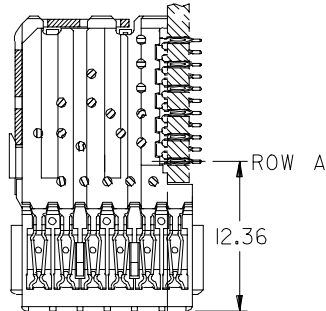
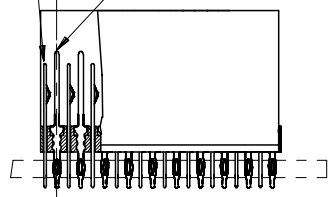
A

SIGNAL COLUMN  
DAUGHTERCARD CONNECTOR SIDE



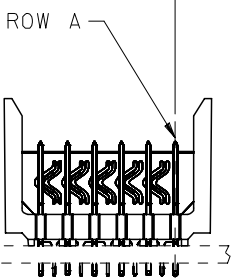
0.41 OFFSET  
SIGNAL TO SIGNAL

SHIELD  
SIGNAL



ROW A  
12.36

0.66  
TOP DAUGHTERCARD  
PCB TO  $\phi$  ROW A



MATERIAL NUMBER ASSIGNMENT

74057-\*\*-\*\* SEE TABLES (SHEET 3)

- NUMBER OF COLUMNS/PLATING
- 10 = 10 COLUMN TIN/LEAD
- 15 = 15 COLUMN TIN/LEAD
- 25 = 25 COLUMN TIN/LEAD
- 90 = 10 COLUMN MATTE TIN
- 95 = 15 COLUMN MATTE TIN
- 85 = 25 COLUMN MATTE TIN

ADDED 15 COLUMN 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)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY MWANG	DATE 1998/11/09	TITLE VHDM 6 ROW OPEN END BACKPLANE SALES ASSEMBLY	
		4 PLACES	±---	±---	CHECKED BY JLAURX	DATE 1998/11/09	APPROVED BY CBIXLER	
		3 PLACES	±---	±---	DATE 1998/11/09	DATE 1998/11/09		MATERIAL NO. SD-74057-002
2 PLACES	±---	±---	APPROVED BY DATE		DOCUMENT NO.		SHEET NO.	
1 PLACE	±---	±---	ANGULAR ±1/2°		MOLEX INCORPORATED		2 OF 3	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 3		SD-74057-002		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

PART NUMBER	COLUMN	NUMBER OF SIGNAL PIN	NUMBER OF SHIELD	A	B	M	Au (um) THICKNESS
74057-1001	10	60	10	20.00	18.00	4.75	0.76
74057-1006							1.27
74057-1501	15	90	15	30.00	28.00		0.76
74057-1506							1.27
74057-2501	25	150	25	50.00	48.00		0.76
74057-2501							1.27
74057-1002	10	60	10	20.00	18.00	0.76	
74057-1007						1.27	
74057-1502	15	90	15	30.00	28.00	0.76	
74057-1507						1.27	
74057-2502	25	150	25	50.00	48.00	0.76	
74057-2507						1.27	
74057-1003	10	60	10	20.00	18.00	0.76	
74057-1008						1.27	
74057-1503	15	90	15	30.00	28.00	0.76	
74057-1508						1.27	
74057-2503	25	150	25	50.00	48.00	0.76	
74057-2508						1.27	
74057-1004	10	60	10	20.00	18.00	0.76	
74057-1009						1.27	
74057-1504	15	90	15	30.00	28.00	0.76	
74057-1509						1.27	
74057-2504	25	150	25	50.00	48.00	0.76	
74057-2509						1.27	

TIN/LEAD CHART

PART NUMBER	COLUMN	NUMBER OF SIGNAL PIN	NUMBER OF SHIELD	A	B	M	Au (um) THICKNESS
74057-9001	10	60	10	20.00	18.00	4.75	0.76
74057-9006							1.27
74057-9501	15	90	15	30.00	28.00		0.76
74057-9506							1.27
74057-8501	25	150	25	50.00	48.00		0.76
74057-8501							1.27
74057-9002	10	60	10	20.00	18.00	0.76	
74057-9007						1.27	
74057-9502	15	90	15	30.00	28.00	0.76	
74057-9507						1.27	
74057-8502	25	150	25	50.00	48.00	0.76	
74057-8507						1.27	
74057-9003	10	60	10	20.00	18.00	0.76	
74057-9008						1.27	
74057-9503	15	90	15	30.00	28.00	0.76	
74057-9508						1.27	
74057-8503	25	150	25	50.00	48.00	0.76	
74057-8508						1.27	
74057-9004	10	60	10	20.00	18.00	0.76	
74057-9009						1.27	
74057-9504	15	90	15	30.00	28.00	0.76	
74057-9509						1.27	
74057-8504	25	150	25	50.00	48.00	0.76	
74057-8509						1.27	

LEAD FREE CHART

ADDED 15 COLUMN EC NO: UCP2006-1491 DRW: JJONIAK 2006/01/19 CHKD: JJONIAK 2006/01/19 APPR: CBIXLER 2006/01/23	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY JJONIAK	DATE 2006/01/10	TITLE VHDM 6 ROW OPEN END BACKPLANE SALES ASSEMBLY MOLEX INCORPORATED		
			4 PLACES ±---	±---	CHECKED BY JJONIAK	DATE 2006/01/10			
			3 PLACES ±---	±---	APPROVED BY JJONIAK	DATE 2006/01/10			
	2 PLACES ±---	±---	ANGULAR ±1/2°						
		1 PLACE ±---			MATERIAL NO. SEE CHARTS	DOCUMENT NO. SD-74057-002	SHEET NO. 3 OF 3		
		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					