

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

**Part Number:** [0740296002](#)  
**Status:** **Active**  
**Overview:** [vhdm](#)  
**Description:** 2.00mm (.079") Pitch VHDM® Board-to-Board Backplane Receptacle Power Module, Vertical, 6-Row, 4 Circuits, Dual-Module Assembly, Gold (Au) Selective 0.76µm (30µ")

**Documents:**

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

**Agency Certification**

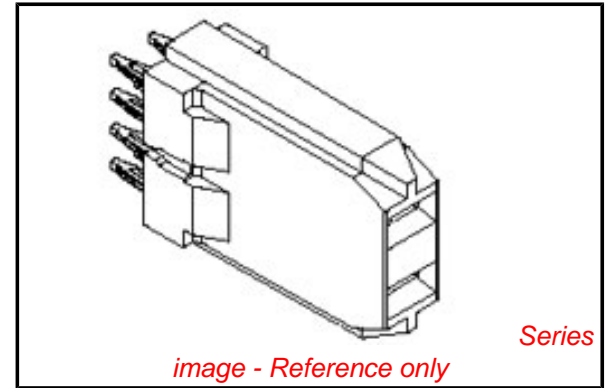
UL E29179

**General**

Product Family Backplane Connectors  
 Series [74029](#)  
 Application Backplane  
 Application Tooling Documents [Tooling Manual](http://www.molex.com/pdm_docs/ats/TM-622010999.pdf)  
 Comments Backplane Receptacle Module, Power  
 Component Type Power Receptacle  
 Overview [vhdm](#)  
 Product Name VHDM®  
 Style N/A

**Physical**

Circuits (Loaded) 2  
 Circuits (maximum) 2  
 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 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) 0.110 In  
 PC Tail Length (mm) 2.80 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) 0.157 In  
 Pitch - Term. Interface (mm) 4.00 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.75  
 Plating min: Termination (µin) 15



**EU RoHS**

**RoHS Compliant by Exemption**

**REACH SVHC**

**Contains SVHC: No**

**Halogen-Free**

**Status**

**Halogen-Free**

**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**

[74029Series](#)

**Mates With**

[74026 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 #
VHDM® Backplane 6 and 8 Row Power Module Insertion Tool	<a href="#">0622020211</a>

Plating min: Termination (µm)	0.375
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	10A
Data Rate	2.5 Gbps
Real Signals (per 25mm)	72
Shielded	No
Voltage - Maximum	250V

### **Material Info**

#### **Reference - Drawing Numbers**

Packaging Specification	PK-70873-545
Sales Drawing	SD-74029-011

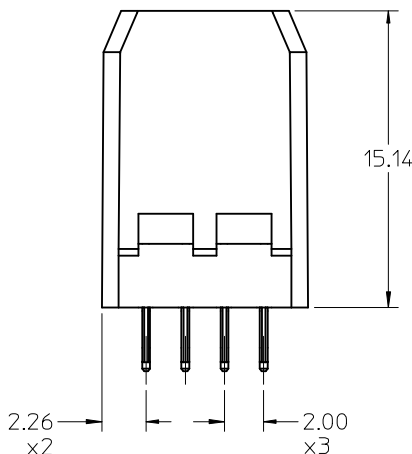
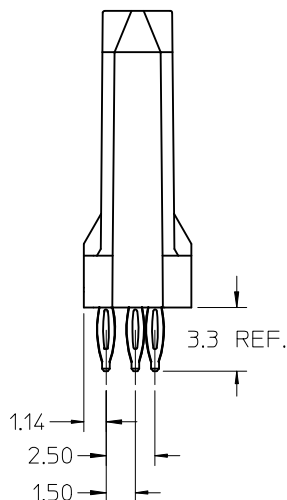
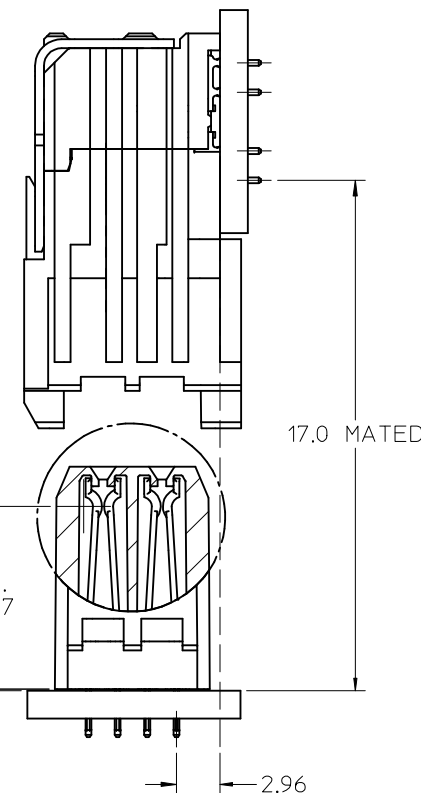
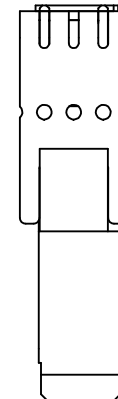
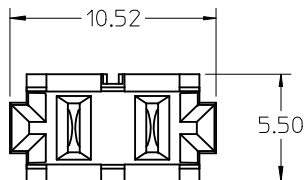
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NOTES:

1. MATERIALS:  
HOUSING - LIQUID CRYSTAL POLYMER (LCP),  
UL94 V-0, COLOR: BLACK.  
TERMINAL - COPPER ALLOY
2. FINISH: 30 μ IN MIN. GOLD ON MATING SURFACE;  
TIN/LEAD ON TAILS; NICKEL UNDERPLATE.
3. FINISH: 50 μ IN MIN. GOLD ON MATING SURFACE;  
TIN/LEAD ON TAILS; NICKEL UNDERPLATE.
4. THIS PART CONFORMS TO PRODUCT SPECIFICATION  
PS-74031-999.
5. SINGLE ROW ASSEMBLY PACKED PER PK-70873-0876.
6. MATES WITH 74026 SERIES DAUGHTERCARD POWER ASSEMBLY.
7. MATING INTERFACE MEASURED FROM BOTTOM OF HOUSING.



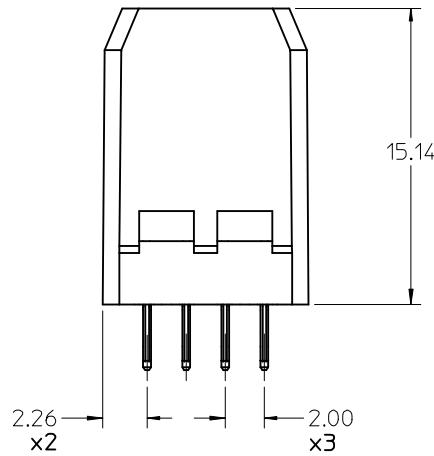
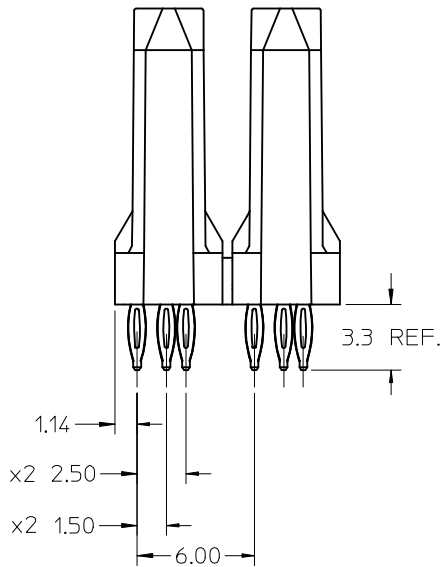
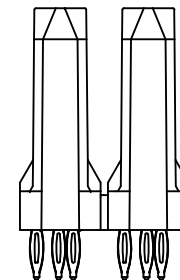
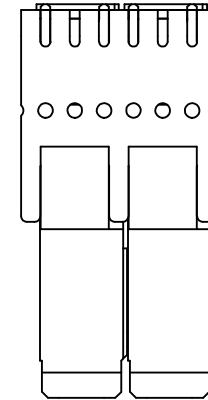
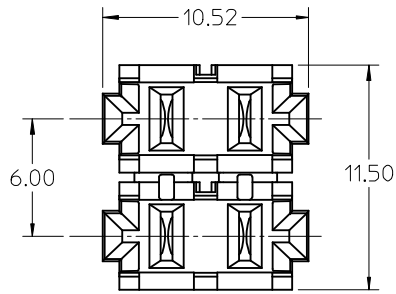
MOLEX P/N	GOLD THICKNESS
74029-6000	30uin
74029-6050	50uin

SINGLE ROW ASSEMBLY

ADD TOLERANCE EC NO: UCP2009-3005 DRWN: BSMART 2009/06/15 CHKD: SDANNELL 2009/06/16 APPR: SMILLER 2009/06/16	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY	
	DESCRIPTION ▽ = 0 ∇ = 0	mm	INCH	DIMENSION STYLE MM ONLY		TITLE	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY ELO	DATE 2003/07/14	VHDM/HSD POWER 6 ROW BACKPLANE SALES ASSEMBLY MOLEX INCORPORATED	
		2 PLACES ± 0.25 ± ---	1 PLACE ± --- ± ---	CHECKED BY STANFORD	DATE 2003/07/17		
ANGULAR ± 5 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY BIXLER	DATE 2003/07/21	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-74029-011	
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO. 1 OF 3	

**NOTES:**

1. THIS DESIGN INTENDED AS OPTION TO HAVING TWO SINGLE ROW MODULES NEXT TO EACH OTHER.
2. FINISH: 30 μ IN GOLD ON MATING SURFACE; TIN/LEAD ON TAILS; NICKEL UNDERPLATE.
3. FINISH: 50 μ IN GOLD ON MATING SURFACE; TIN/LEAD ON TAILS; NICKEL UNDERPLATE.
4. DUAL ROW ASSEMBLIES PACKED PER PK-70873-545.

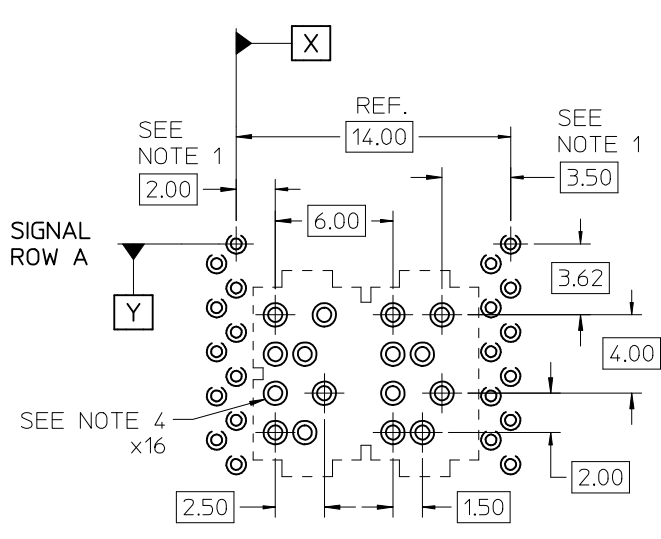


**DUAL ROW ASSEMBLY**

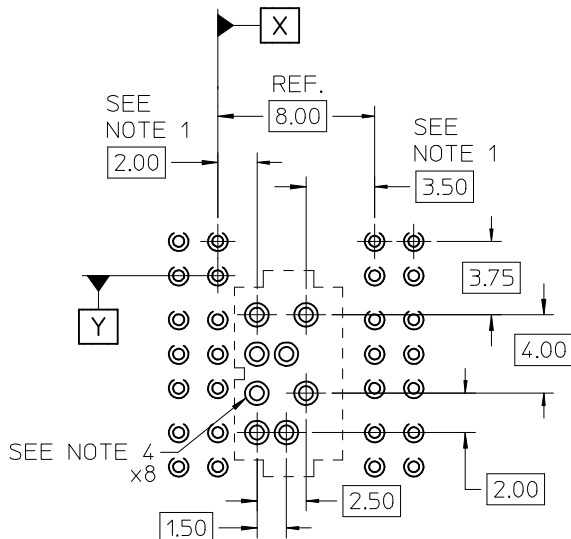
MOLEX P/N	CONTACT PLATING
74029-6002	SEE NOTE 2.
74029-6052	SEE NOTE 3.

SEE SHEET 1 EC NO: UCP2009-3005 DRWN: BSMART 2009/06/15 CHKD: SDANNELL 2009/06/16 APPR: SMILLER 2009/06/16	QUALITY SYMBOLS ▽ = 0 ∇ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE <b>4:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
		DIMENSION STYLE <b>MM ONLY</b>	TITLE <b>VHDM/HSD POWER 6 ROW BACKPLANE SALES ASSEMBLY</b>				
		DRAWN BY ELO	DATE 2003/07/14	MOLEX INCORPORATED			
		CHECKED BY STANFORD	DATE 2003/07/17	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-74029-011		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY BIXLER	DATE 2003/07/21	SHEET NO. 2 OF 3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

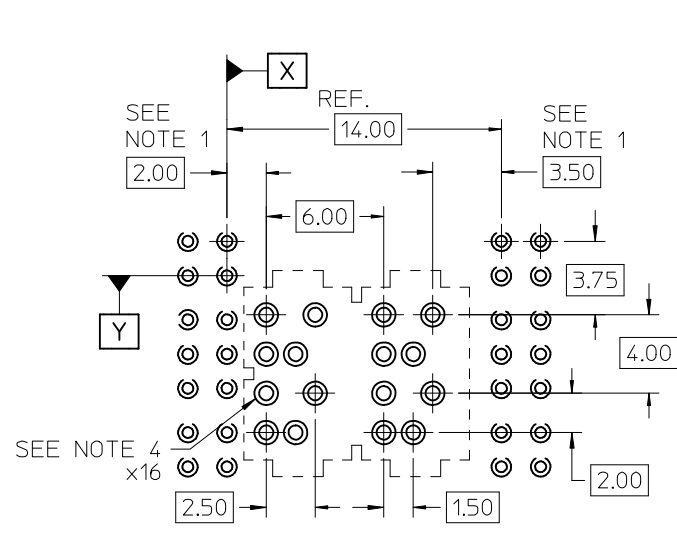
# BOARD LAYOUTS: 1.8 mm MIN. BOARD THICKNESS



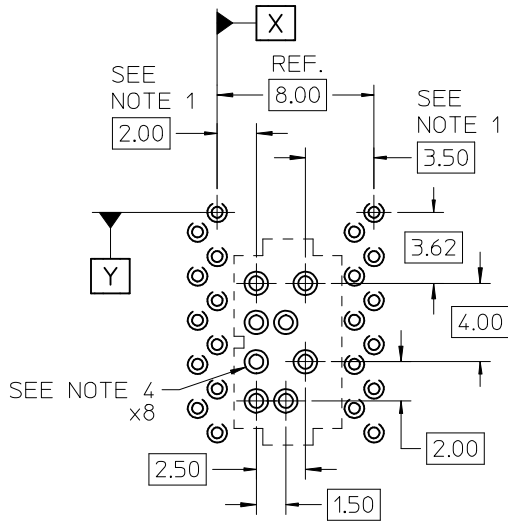
VHDM DUAL ROW POWER



VHDM-HSD SINGLE ROW POWER



VHDM-HSD DUAL ROW POWER



VHDM SINGLE ROW POWER

**NOTES:**

1. ADDITIONAL SPACING CAN BE ADDED IN MULTIPLES OF 2.0 mm AS REQUIRED. FOR EACH ADDITIONAL SINGLE ROW POWER, ADD 6.00 mm.
2. SIGNAL ROW A IS IN LINE WITH DATUM Y IN ALL FOUR LAYOUTS.
3. FOUR HOLES ARE USED PER POWER CONTACT.
4. EACH POWER HOLE TO BE MANUFACTURED AS FOLLOWS:

- Ø0.725±0.075 PLATED THROUGH HOLE
- Ø1.20 PAD
- Ø0.838 DRILL
- ⊕ 0.10 X Y

SEE SHEET 1 EC NO: UCP2009-3005 DRWN: BSMART 2009/06/15 CHKD: SDANNELZ09/06/16 APPR: SWILLER 2009/06/16	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	REVISE ON CAD ONLY
	▽ -0 ∇ -0	mm	INCH	DIMENSION STYLE MM ONLY		TITLE <b>VHDM/HSD POWER 6 ROW BACKPLANE SALES ASSEMBLY</b> MOLEX INCORPORATED
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.25 ± ---	1 PLACE ± --- ± ---	
	ANGULAR ± 5 °		DRAFT WHERE APPLICABLE		MATERIAL NO. DOCUMENT NO. SHEET NO. SEE SHT 1 & 2 SD-74029-011 3 OF 3	
MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				