

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0740296000

Status:

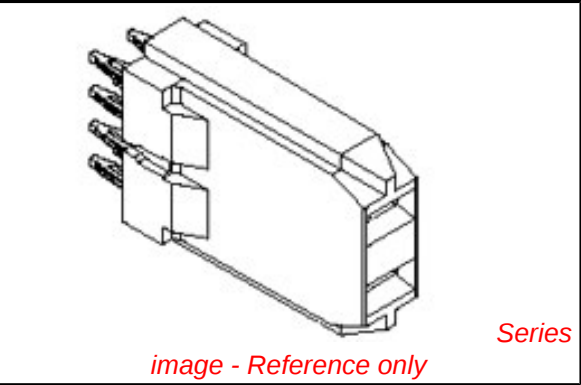
Active

Overview:

[vhdm](#)

Description:

2.00mm (.079") Pitch VHDM® Board-to-Board Backplane Receptacle Power Module, Vertical, 6-Row, 2 Circuits, Gold (Au) Selective 0.76µm (30µ")



Documents:

[3D Model](#)

[Drawing \(PDF\)](#)

[Packaging Specification \(PDF\)](#)

[Product Specification PS-74031-999 \(PDF\)](#)

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

|                                |                                                                                 |
|--------------------------------|---------------------------------------------------------------------------------|
| Agency Certification           |                                                                                 |
| UL                             | E29179                                                                          |
| General                        |                                                                                 |
| Product Family                 | Backplane Connectors                                                            |
| Series                         | <a href="#">74029</a>                                                           |
| Application                    | Backplane                                                                       |
| Application Tooling Documents  | <a href="http://www.molex.com/pdm_docs/ats/TM-622010999.pdf">Tooling Manual</a> |
| Comments                       | Backplane Receptacle Module, Power                                              |
| Component Type                 | Power Receptacle                                                                |
| Overview                       | <a href="#">vhdm</a>                                                            |
| 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                                                                            |

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](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 (μin) | 15                           |
| 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**

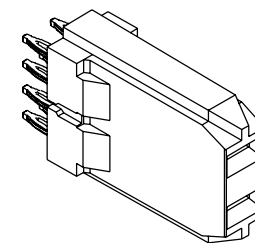
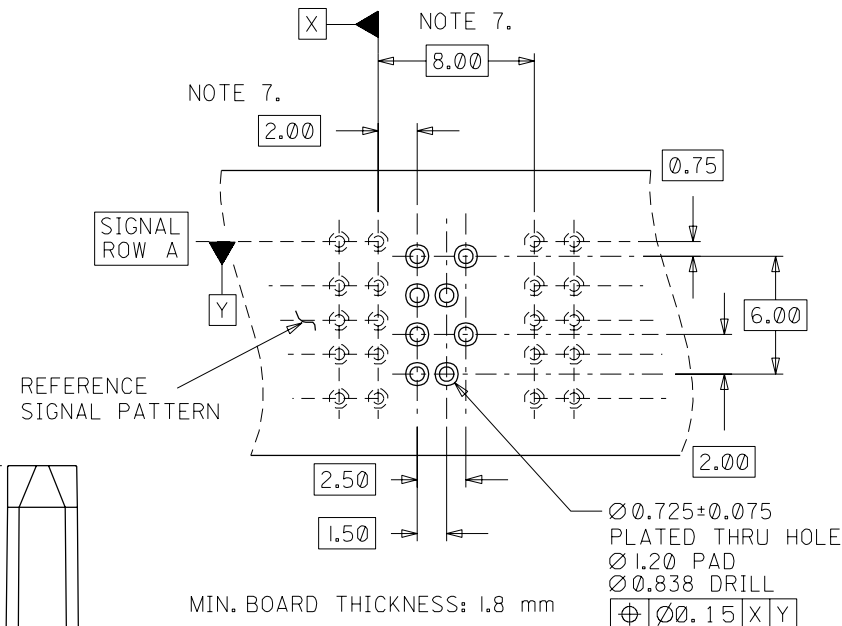
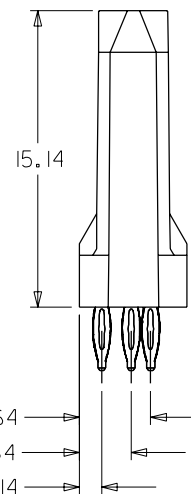
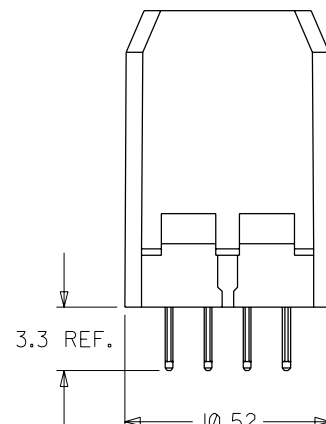
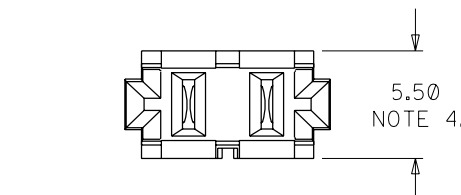
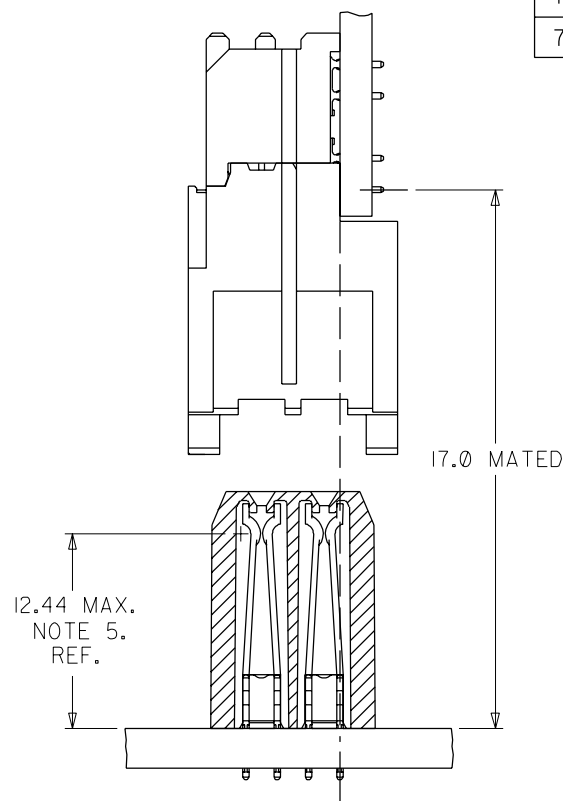
|                         |                            |
|-------------------------|----------------------------|
| Packaging Specification | PK-70873-0876              |
| Product Specification   | PS-74031-999               |
| Sales Drawing           | SD-74029-006, SD-74029-011 |

VHDM and Very High Density Metric are trademarks of Amphenol Corporation

This document was generated on 05/19/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

| ASSEMBLY # | CONTACT PLATING |
|------------|-----------------|
| 74029-6000 | SEE NOTE 2.     |
| 74029-6050 | SEE NOTE 3.     |



- NOTES:
1. MATERIALS: HOUSING - GLASS FILLED LIQUID CRYSTAL POLYMER, UL 94V-0, BLACK; TERMINAL - COPPER ALLOY.
  2. FINISH: SELECT GOLD IN CONTACT AREA, 30 microINCH THICK; TIN/LEAD IN COMPLIANT AREA.
  3. FINISH: SELECT GOLD IN CONTACT AREA, 50 microINCH THICK; TIN/LEAD IN COMPLIANT AREA.
  4. USE 6.0 mm NOMINAL FOR BACKPLANE LAYOUT.
  5. DIMENSION IS MEASURED FROM BOTTOM OF HOUSING.
  6. PACKED PER PK-70873-0876.
  7. THIS DIMENSION TO BE MULTIPLE OF 2.00 mm AS REQUIRED.

|                                                                                                               |             |                                                  |                                                                                                                                   |                    |                                                                      |                           |                                                           |                                             |                       |
|---------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------|---------------------------|-----------------------------------------------------------|---------------------------------------------|-----------------------|
| INITIAL RELEASE<br>EC NO. UDT2001-0940<br>DRWN: ELO 01/05/02<br>CHK: GORSKI 01/05/03<br>APPR: BIXLER 01/05/07 | DESCRIPTION | QUALITY SYMBOLS<br><div>MAJOR<br/>CRITICAL</div> | GENERAL TOLERANCES:<br>(UNLESS SPECIFIED)                                                                                         | SCALE              | DESIGN UNITS                                                         | THIRD ANGLE<br>PROJECTION | DIMENSIONS                                                |                                             | REVISE ON<br>CAD ONLY |
|                                                                                                               |             |                                                  |                                                                                                                                   | 4 : 1              | <input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH |                           | <input type="checkbox"/> mm <input type="checkbox"/> INCH | <input checked="" type="checkbox"/> mm ONLY |                       |
|                                                                                                               |             |                                                  |                                                                                                                                   | DRAWN BY & DATE    |                                                                      |                           | TITLE:                                                    |                                             |                       |
|                                                                                                               |             |                                                  |                                                                                                                                   | ELO 01/50/02       |                                                                      |                           | HSD POWER                                                 |                                             |                       |
|                                                                                                               |             |                                                  |                                                                                                                                   | CHECKED BY & DATE  |                                                                      |                           | 5 ROW BACKPLANE                                           |                                             |                       |
| A                                                                                                             | REV         |                                                  | ANGULAR: ± °                                                                                                                      | GORSKI 01/05/03    |                                                                      | SALES ASSEMBLY            |                                                           | SHEET NO.<br>1 OF 1                         |                       |
|                                                                                                               |             |                                                  |                                                                                                                                   | APPROVED BY & DATE |                                                                      | MOLEX INCORPORATED        |                                                           |                                             |                       |
|                                                                                                               |             |                                                  |                                                                                                                                   | BIXLER 01/05/07    |                                                                      |                           |                                                           |                                             |                       |
|                                                                                                               |             |                                                  |                                                                                                                                   | CAD FILENAME       |                                                                      | MATERIAL NO.              | DRAWING NO.                                               |                                             |                       |
|                                                                                                               |             |                                                  |                                                                                                                                   | SD-74029-006.S01   |                                                                      | SEE CHART                 | SD-74029-006                                              |                                             |                       |
| DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS                                                       |             |                                                  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |                    |                                                                      |                           |                                                           |                                             | SIZE                  |

## NOTES:

## 1. MATERIALS:

HOUSING - LIQUID CRYSTAL POLYMER (LCP),  
UL94 V-0, COLOR: BLACK.

TERMINAL - COPPER ALLOY

2. FINISH: 30  $\mu$  IN MIN. GOLD ON MATING SURFACE;  
TIN/LEAD ON TAILS; NICKEL UNDERPLATE.

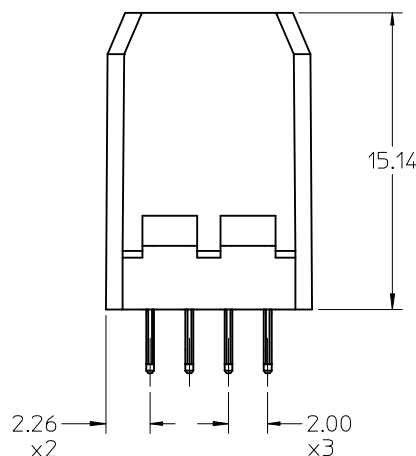
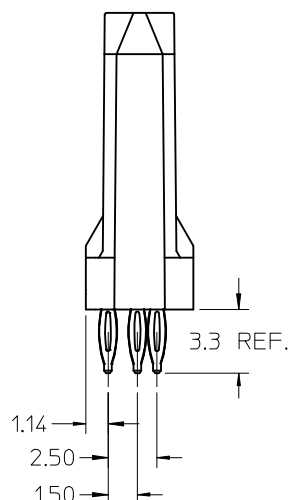
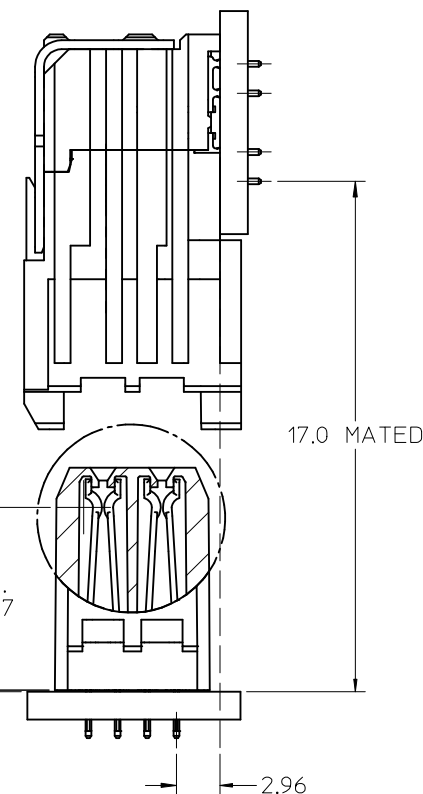
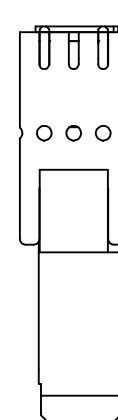
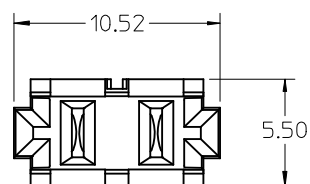
3. FINISH: 50  $\mu$  IN MIN. GOLD ON MATING SURFACE;  
TIN/LEAD ON TAILS; NICKEL UNDERPLATE.

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.



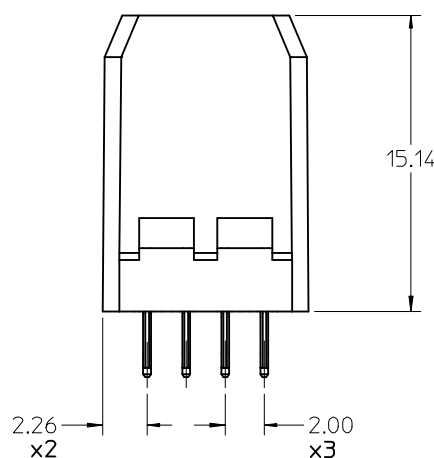
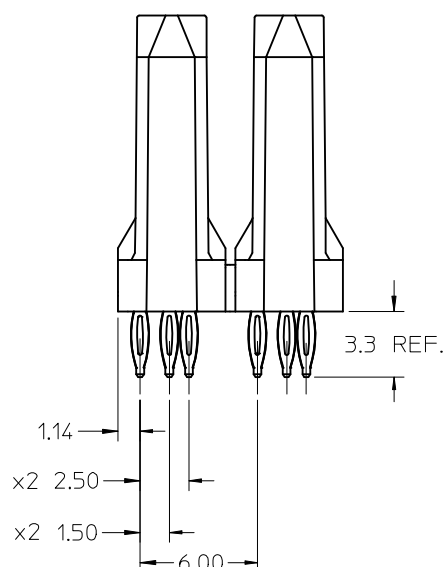
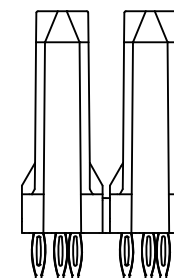
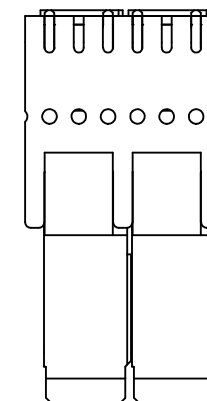
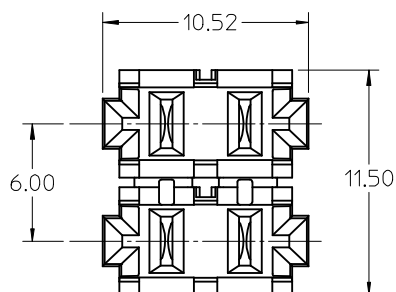
| MOLEX P/N  | GOLD THICKNESS |
|------------|----------------|
| 74029-6000 | 30 $\mu$ in    |
| 74029-6050 | 50 $\mu$ in    |

## SINGLE ROW ASSEMBLY

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

NOTES:

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

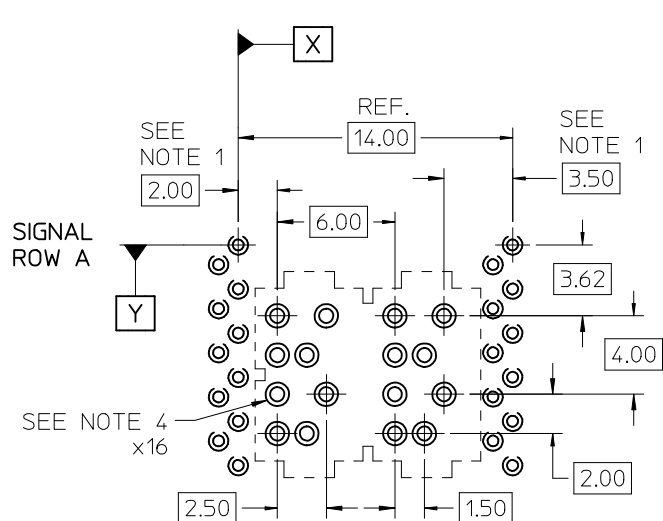


DUAL ROW ASSEMBLY

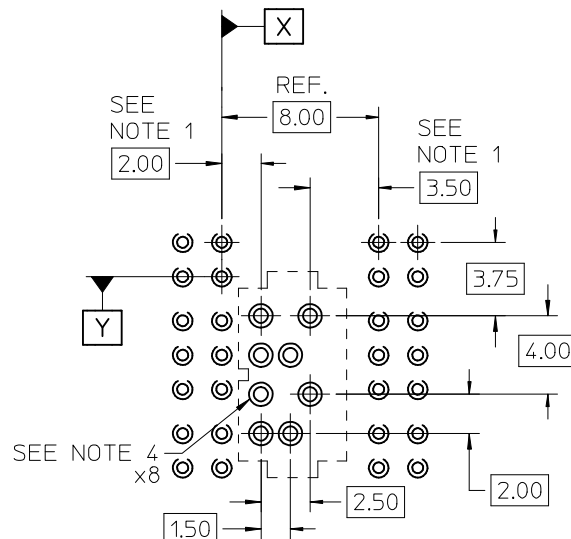
| MOLEX P/N  | CONTACT PLATING |
|------------|-----------------|
| 74029-6002 | SEE NOTE 2.     |
| 74029-6052 | SEE NOTE 3.     |

|                                                                                                                        |                                   |                                                                                                                                                                                                                              |                                                                                                                                                                                   |                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SEE SHEET 1<br>EC NO: UCP2009-3005<br>DRWN: BSMART 2009/06/15<br>CHKD: SDANNELL 2009/06/16<br>APPR: SMILLER 2009/06/16 | QUALITY SYMBOLS<br>▴ = 0<br>▽ = 0 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.25 ± ---<br>1 PLACE ± --- ± ---<br>ANGULAR ± 5 °<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN WITHIN DIMENSIONS | SCALE 4:1<br>DESIGN UNITS METRIC<br>DIMENSION STYLE MM ONLY<br>DRAWN BY DATE<br>ELO 2003/07/14<br>CHECKED BY DATE<br>STANFORD 2003/07/17<br>APPROVED BY DATE<br>BIXLER 2003/07/21 | THIRD ANGLE PROJECTION<br>REVISE ON CAD ONLY<br>TITLE<br>VHDM/HSD POWER<br>6 ROW BACKPLANE<br>SALES ASSEMBLY<br>MOLEX INCORPORATED<br>MATERIAL NO. SEE CHART<br>DOCUMENT NO. SD-74029-011<br>SHEET NO. 2 OF 3 |
|                                                                                                                        |                                   |                                                                                                                                                                                                                              |                                                                                                                                                                                   |                                                                                                                                                                                                               |
|                                                                                                                        |                                   |                                                                                                                                                                                                                              |                                                                                                                                                                                   |                                                                                                                                                                                                               |
|                                                                                                                        |                                   |                                                                                                                                                                                                                              |                                                                                                                                                                                   |                                                                                                                                                                                                               |

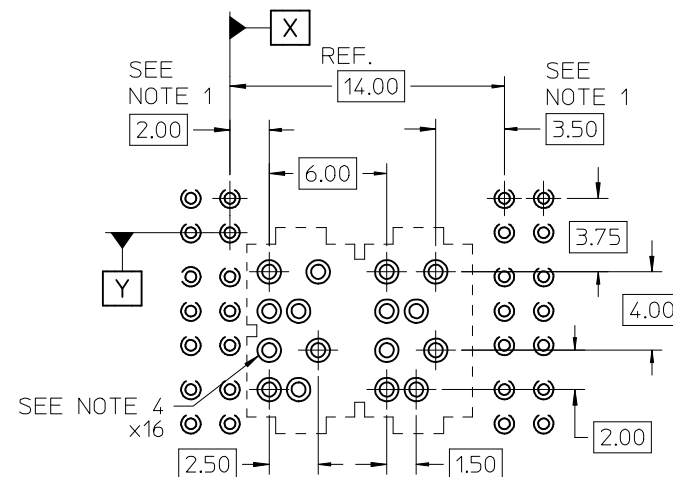
# BOARD LAYOUTS: 1.8 mm MIN. BOARD THICKNESS



VHDM DUAL ROW POWER



VHDM-HSD SINGLE ROW POWER



VHDM-HSD DUAL ROW POWER

## NOTES:

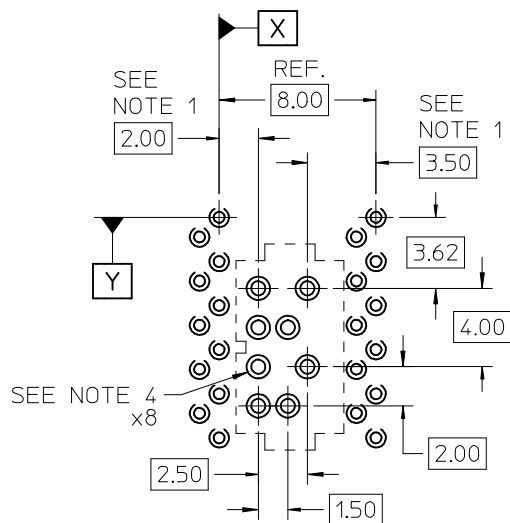
1. ADDITIONAL SPACING CAN BE ADDED IN MULTIPLES OF 2.0 mm AS REQUIRED. FOR EACH ADDITIONAL SINGLE ROW POWER, ADD 6.00 mm.
2. SIGNAL ROW A IS IN LINE WITH DATUM Y IN ALL FOUR LAYOUTS.
3. FOUR HOLES ARE USED PER POWER CONTACT.
4. EACH POWER HOLE TO BE MANUFACTURED AS FOLLOWS:

Ø0.725±0.075 PLATED THROUGH HOLE

Ø1.20 PAD

Ø0.838 DRILL

⌀ 0.10 X Y



VHDM SINGLE ROW POWER

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

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А