

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0459110052

Status:

Active

Overview:

Description:

12.90mm (.508") Pitch EXTreme PowerEdge™, Mixed Power/Signal Card Edge Connector, Double Sided, 4 Segments (Signal, Power, Power, Power Sequence), Through Hole Solder for 1.57mm (.062") Thick PC Board

Agency Certification

|     |              |
|-----|--------------|
| CSA | LR 19980     |
| TUV | 30482572.001 |
| UL  | E29179       |

General

|                |                      |
|----------------|----------------------|
| Product Family | Edge Card Connectors |
| Series         | 45911                |
| Component Type | Edgecard to PCB      |
| Overview       | edge_card_connectors |
| Product Name   | EXTreme PowerEdge™   |

Physical

|                                |                                     |
|--------------------------------|-------------------------------------|
| Circuits (Loaded)              | 14                                  |
| Circuits (maximum)             | 14                                  |
| Circuits Detail                | 8 Signal, 2 Power, 2 Power, 2 Power |
| Color - Resin                  | Black                               |
| Durability (mating cycles max) | 250                                 |
| Entry Angle                    | Vertical (Top Entry)                |
| Flammability                   | 94V-0                               |
| Keying to Mating Part          | N/A                                 |
| Material - Metal               | Phosphor Bronze                     |
| Material - Plating Mating      | Gold                                |
| Material - Plating Termination | Tin                                 |
| Material - Resin               | High Temperature Thermoplastic      |
| PC Tail Length (in)            | 0.126 In                            |
| PC Tail Length (mm)            | 3.19 mm                             |
| PCB Thickness Recommended (in) | 0.062 In                            |
| PCB Thickness Recommended (mm) | 1.60 mm                             |
| Packaging Type                 | Tray                                |
| Pitch - Mating Interface (in)  | 0.508 In                            |
| Pitch - Mating Interface (mm)  | 12.90 mm                            |
| Plating min: Mating (µin)      | 30                                  |
| Plating min: Mating (µm)       | 0.75                                |
| Plating min: Termination (µin) | 150                                 |
| Plating min: Termination (µm)  | 3.75                                |
| Temperature Range - Operating  | -40°C to +105°C                     |
| Termination Interface: Style   | Through Hole                        |

Electrical

|                               |         |
|-------------------------------|---------|
| Current - Maximum per Contact | 3A, 40A |
| Voltage - Maximum             | 250V    |

Solder Process Data

|                                                |                        |
|------------------------------------------------|------------------------|
| Duration at Max. Process Temperature (seconds) | 5                      |
| Lead-free Process Capability                   | Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature        | 1                      |
| Process Temperature max. C                     | 250                    |

Material Info

EU RoHS

ELV and RoHS

Compliant

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

45911Series

Mates With

1.58mm (.062") double sided card edge

**Reference - Drawing Numbers**

|                         |              |
|-------------------------|--------------|
| Packaging Specification | PK-45714-001 |
| Product Specification   | PS-45719-001 |
| Sales Drawing           | SD-45911-001 |

This document was generated on 06/04/2010

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

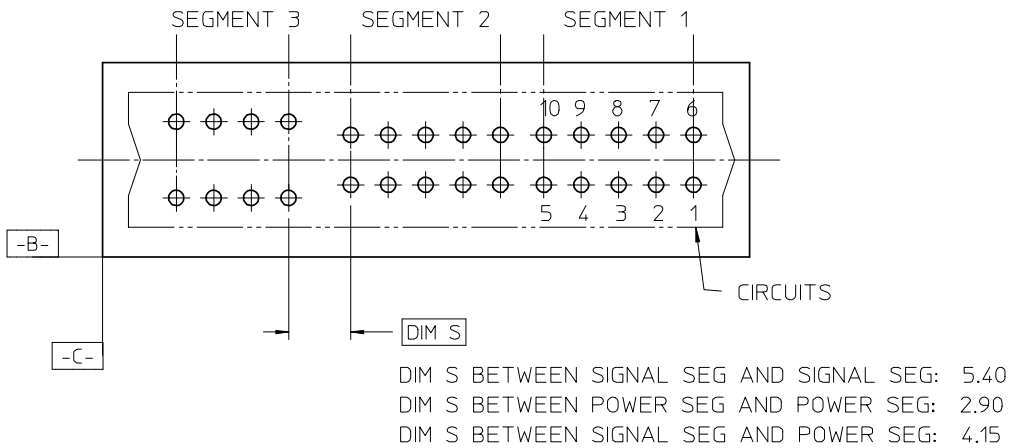
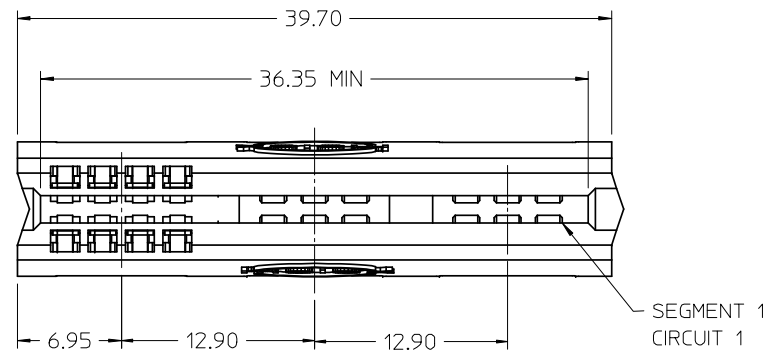


Diagram illustrating a 16-bit bus structure. The bus is divided into two segments, SEGMENT 2 (left) and SEGMENT 1 (right). Each segment is associated with a circuit, SEGMENT 2 CIRCUIT 1 and SEGMENT 1 CIRCUIT 1. The bus is numbered 8 7 6 5 4 3 2 1 from left to right, and 10 9 8 7 6 5 4 3 2 1 from right to left.

1

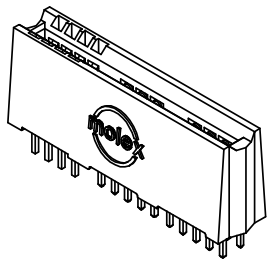
A

MATERIAL NUMBER: 45911-0007 SHOWN  
SEE SHEET ONE FOR ALL OTHER NOTES AND DIMENSIONS

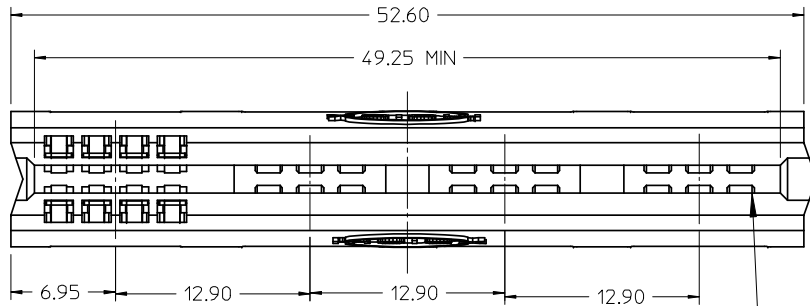


PCB LAYOUT: COMPONENT SIDE

| MATERIAL NUMBER | SEGMENT 3 | SEGMENT 2 | SEGMENT 1 | $\frac{DIM P}{DIM T}$ | PCB THK      |
|-----------------|-----------|-----------|-----------|-----------------------|--------------|
| 45911-0007      | SIGNAL    | POWER     | POWER     | $\frac{4.50}{4.33}$   | 3.18<br>2.36 |
| 45911-0008      | POWER     | SIGNAL    | POWER     |                       |              |
| 45911-0009      | SIGNAL    | SIGNAL    | POWER     |                       |              |
| 45911-0010      | SIGNAL    | POWER     | SIGNAL    |                       |              |
| 45911-0011      | POWER     | SIGNAL    | SIGNAL    |                       |              |
| 45911-0012      | POWER     | POWER     | SIGNAL    | $\frac{3.19}{3.19}$   | 1.57         |
| 45911-0013      | SIGNAL    | POWER     | POWER     |                       |              |
| 45911-0014      | POWER     | SIGNAL    | POWER     |                       |              |
| 45911-0015      | SIGNAL    | SIGNAL    | POWER     |                       |              |
| 45911-0016      | SIGNAL    | POWER     | SIGNAL    |                       |              |
| 45911-0017      | POWER     | SIGNAL    | SIGNAL    |                       |              |
| 45911-0018      | POWER     | POWER     | SIGNAL    |                       |              |

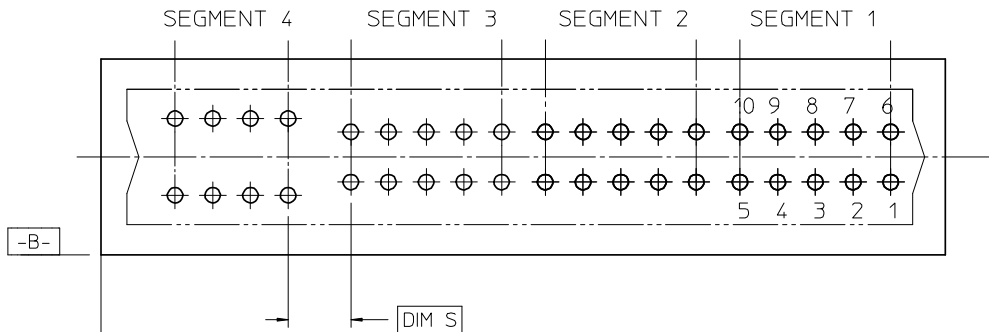


|                     |                                                                           |             |                                                                                                                                  |                                                            |        |                              |                     |                              |                          |                           |                                                                     |  |
|---------------------|---------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------|------------------------------|---------------------|------------------------------|--------------------------|---------------------------|---------------------------------------------------------------------|--|
| EC NO: UCP2008-2498 |                                                                           | DESCRIPTION | QUALITY SYMBOLS                                                                                                                  | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |        | DIMENSION STYLE<br>MM ONLY   |                     | SCALE<br>1:1                 | DESIGN UNITS<br>METRIC   | THIRD ANGLE<br>PROJECTION |                                                                     |  |
| G                   | DRWN: JSCHAFFER 2008/04/16<br>CHKD: 2008/04/22<br>APPR: APATEL 2008/04/25 |             |                                                                                                                                  |                                                            | mm     | INCH                         | DRAWN BY<br>DATE    |                              | TITLE                    |                           | POWER EDGE ASSEMBLY<br>POWER / SIGNAL MIXED<br>VERTICAL SOLDER TAIL |  |
|                     |                                                                           |             |                                                                                                                                  | 4 PLACES                                                   | ± ---  | ± ---                        | SAMIEC 2005/04/14   |                              |                          |                           |                                                                     |  |
|                     |                                                                           |             |                                                                                                                                  | 3 PLACES                                                   | ± ---  | ± ---                        | CHECKED BY<br>DATE  |                              |                          |                           |                                                                     |  |
|                     |                                                                           |             |                                                                                                                                  | 2 PLACES                                                   | ± 0.25 | ± ---                        | SAMIEC 2005/04/14   |                              |                          |                           |                                                                     |  |
|                     |                                                                           |             |                                                                                                                                  | 1 PLACE                                                    | ± 0.25 | ± ---                        | APPROVED BY<br>DATE |                              | molex MOLEX INCORPORATED |                           |                                                                     |  |
|                     |                                                                           |             |                                                                                                                                  | ANGULAR ±1/2°                                              |        | MARGULIS 2005/04/14          |                     |                              |                          |                           |                                                                     |  |
|                     |                                                                           |             |                                                                                                                                  | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |        | MATERIAL NUMBER<br>SEE CHART |                     | DOCUMENT NO.<br>SD-45911-001 |                          | SHEET NO.<br>2 OF 4       |                                                                     |  |
|                     |                                                                           | SIZE<br>A   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                            |        |                              |                     |                              |                          |                           |                                                                     |  |



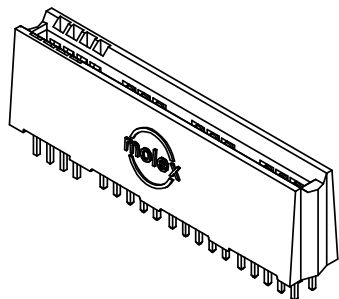
SEGMENT 1  
CIRCUIT 1

SEE CHART ON SHEET 4  
FOR MATERIAL NUMBERS

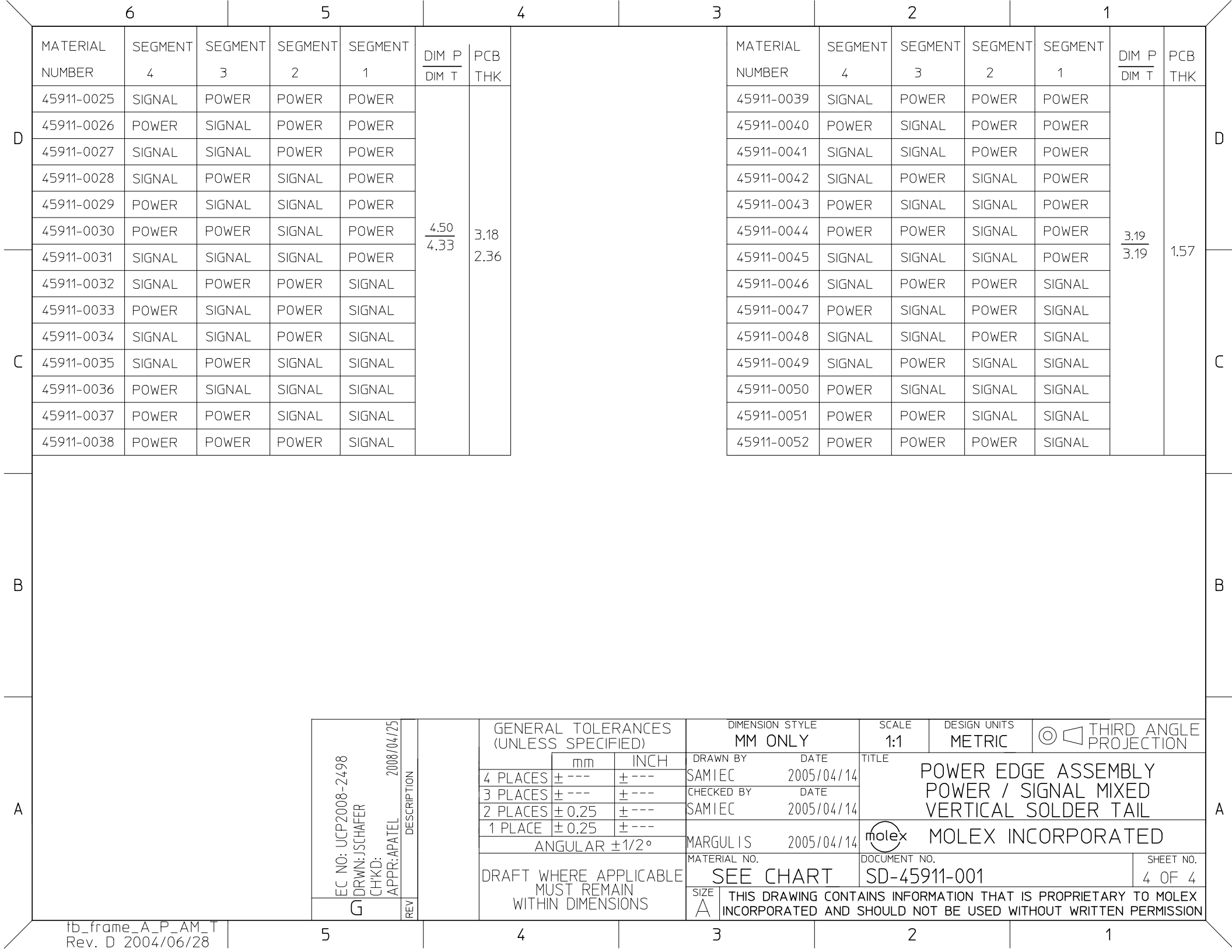


DIM S BETWEEN SIGNAL SEG AND SIGNAL SEG: 5.40  
DIM S BETWEEN POWER SEG AND POWER SEG: 2.90  
DIM S BETWEEN SIGNAL SEG AND POWER SEG: 4.15

PCB LAYOUT: COMPONENT SIDE



|                                                                |  |                                        |                        |                      |                                                                                                                                  |       |                      |                            |                          |                                                                              |                        |                        |  |
|----------------------------------------------------------------|--|----------------------------------------|------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------|-------|----------------------|----------------------------|--------------------------|------------------------------------------------------------------------------|------------------------|------------------------|--|
| EC NO: UCP2008-2498<br>DRWN: JSCHAFER<br>CHKD:<br>APPR: APATEL |  | 2008/04/16<br>2008/04/22<br>2008/04/25 | DESCRIPTION            | QUALITY SYMBOLS      | GENERAL TOLERANCES (UNLESS SPECIFIED)                                                                                            |       |                      | DIMENSION STYLE<br>MM ONLY |                          | SCALE<br>2:1                                                                 | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |  |
|                                                                |  |                                        |                        |                      |                                                                                                                                  | mm    | INCH                 | DRAWN BY<br>DATE           |                          | TITLE<br>POWER EDGE ASSEMBLY<br>POWER / SIGNAL MIXED<br>VERTICAL SOLDER TAIL |                        |                        |  |
|                                                                |  |                                        |                        | 4 PLACES             | ± ---                                                                                                                            | ± --- | SAMIEC<br>2005/04/14 |                            |                          |                                                                              |                        |                        |  |
|                                                                |  |                                        |                        | 3 PLACES             | ± ---                                                                                                                            | ± --- | CHECKED BY<br>DATE   |                            |                          |                                                                              |                        |                        |  |
|                                                                |  |                                        |                        | 2 PLACES             | ± 0.25                                                                                                                           | ± --- | SAMIEC<br>2005/04/14 |                            |                          |                                                                              |                        |                        |  |
|                                                                |  |                                        |                        | 1 PLACE              | ± 0.25                                                                                                                           | ± --- | APPROVED BY<br>DATE  |                            | molex MOLEX INCORPORATED |                                                                              |                        |                        |  |
| ANGULAR ±1/2°                                                  |  |                                        | MARGULIS<br>2005/04/14 |                      |                                                                                                                                  |       |                      |                            |                          |                                                                              |                        |                        |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS     |  |                                        |                        | MATERIAL NUMBER      |                                                                                                                                  |       |                      | DOCUMENT NO.               |                          |                                                                              |                        | SHEET NO.              |  |
|                                                                |  |                                        |                        | SEE CHART ON SHEET 4 |                                                                                                                                  |       |                      | SD-45911-001               |                          |                                                                              |                        | 3                      |  |
|                                                                |  |                                        |                        | SIZE<br>A            | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |       |                      |                            |                          |                                                                              |                        |                        |  |





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

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.