

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

**Part Number:** [0459110025](#)  
**Status:** **Active**  
**Overview:** [edge\\_card\\_connectors](#)  
**Description:** 12.90mm (.508") Pitch EXTreme PowerEdge™, Mixed Power/Signal Card Edge Connector, Double Sided, 4 Segments (Power, Power, Power, Signal Sequence), Through Hole Solder for 2.36mm (.093") or 3.18mm (.125") Thick PC Board

**Documents:**

|                               |                                                          |
|-------------------------------|----------------------------------------------------------|
| <a href="#">3D Model</a>      | <a href="#">Product Specification PS-45719-001 (PDF)</a> |
| <a href="#">Drawing (PDF)</a> | <a href="#">RoHS Certificate of Compliance (PDF)</a>     |

**Agency Certification**

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

**General**

|                |                                      |
|----------------|--------------------------------------|
| Product Family | Edge Card Connectors                 |
| Series         | <a href="#">45911</a>                |
| Component Type | Edgecard to PCB                      |
| Overview       | <a href="#">edge_card_connectors</a> |
| Product Name   | EXTreme PowerEdge™                   |

**Physical**

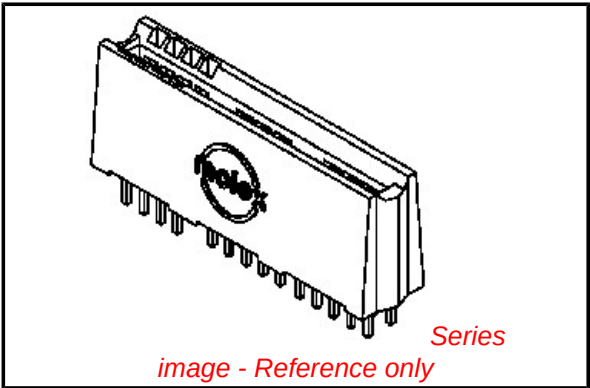
|                                |                                     |
|--------------------------------|-------------------------------------|
| Circuits (Loaded)              | 14                                  |
| Circuits (maximum)             | 14                                  |
| Circuits Detail                | 2 Power, 2 Power, 2 Power, 8 Signal |
| 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)            | 0.182 In                            |
| PC Tail Length (mm)            | 4.63 mm                             |
| PCB Thickness Recommended (in) | 0.093 In, 0.125 In                  |
| PCB Thickness Recommended (mm) | 2.40 mm, 3.20 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) |



**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC**  
**Contains SVHC: No**  
**Halogen-Free**  
**Status**

**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

|                                         |     |
|-----------------------------------------|-----|
| Max. Cycles at Max. Process Temperature | 1   |
| Process Temperature max. C              | 250 |

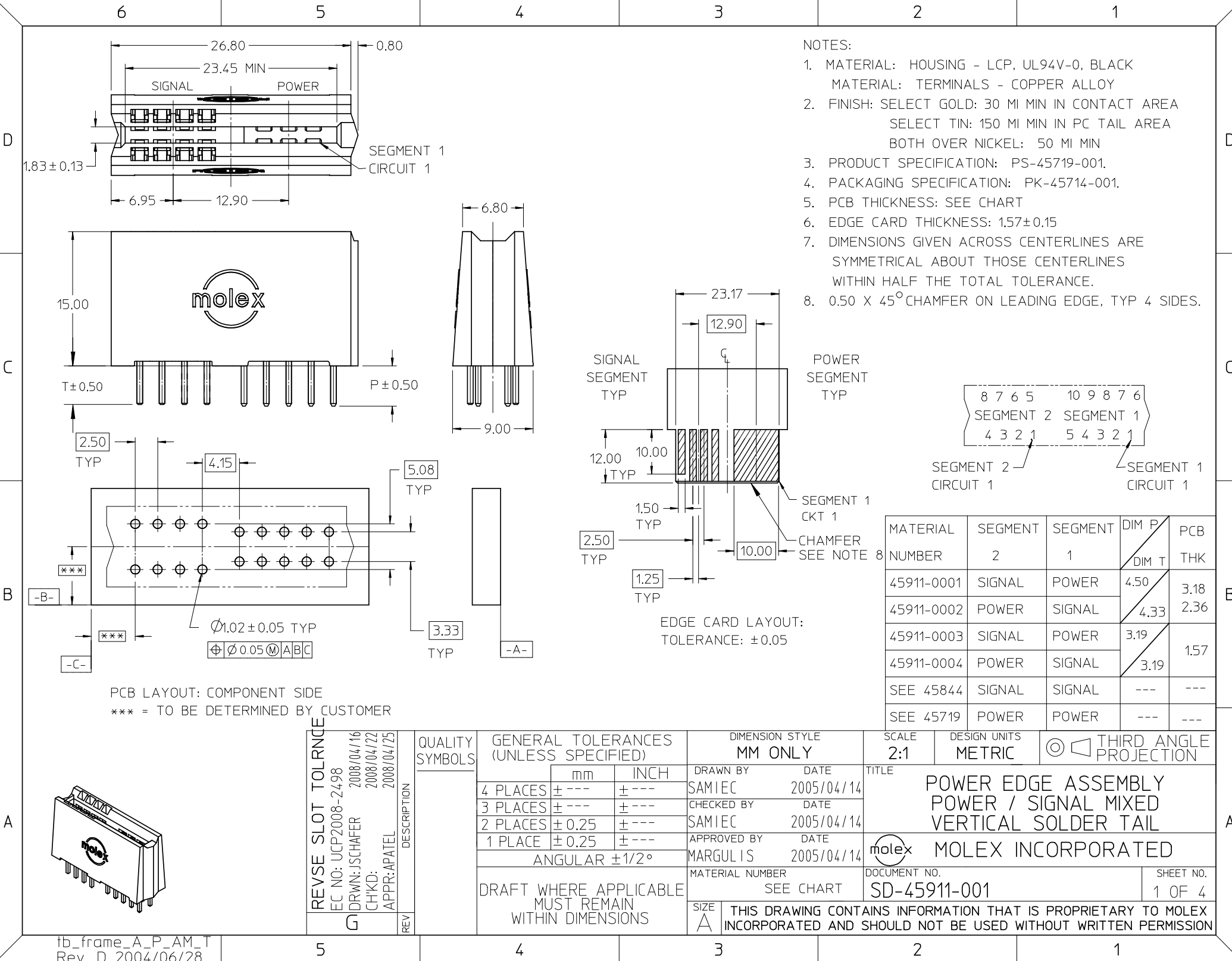
**Material Info**

**Reference - Drawing Numbers**

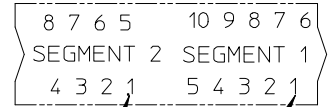
|                         |              |
|-------------------------|--------------|
| Packaging Specification | PK-45714-001 |
| Product Specification   | PS-45719-001 |
| Sales Drawing           | SD-45911-001 |

This document was generated on 06/04/2010

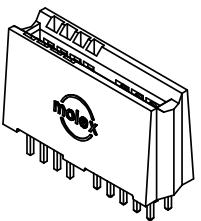
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



- NOTES:
- MATERIAL: HOUSING - LCP, UL94V-0, BLACK  
MATERIAL: TERMINALS - COPPER ALLOY
  - FINISH: SELECT GOLD: 30 MI MIN IN CONTACT AREA  
SELECT TIN: 150 MI MIN IN PC TAIL AREA  
BOTH OVER NICKEL: 50 MI MIN
  - PRODUCT SPECIFICATION: PS-45719-001.
  - PACKAGING SPECIFICATION: PK-45714-001.
  - PCB THICKNESS: SEE CHART
  - EDGE CARD THICKNESS: 1.57±0.15
  - DIMENSIONS GIVEN ACROSS CENTERLINES ARE SYMMETRICAL ABOUT THOSE CENTERLINES WITHIN HALF THE TOTAL TOLERANCE.
  - 0.50 X 45° CHAMFER ON LEADING EDGE, TYP 4 SIDES.



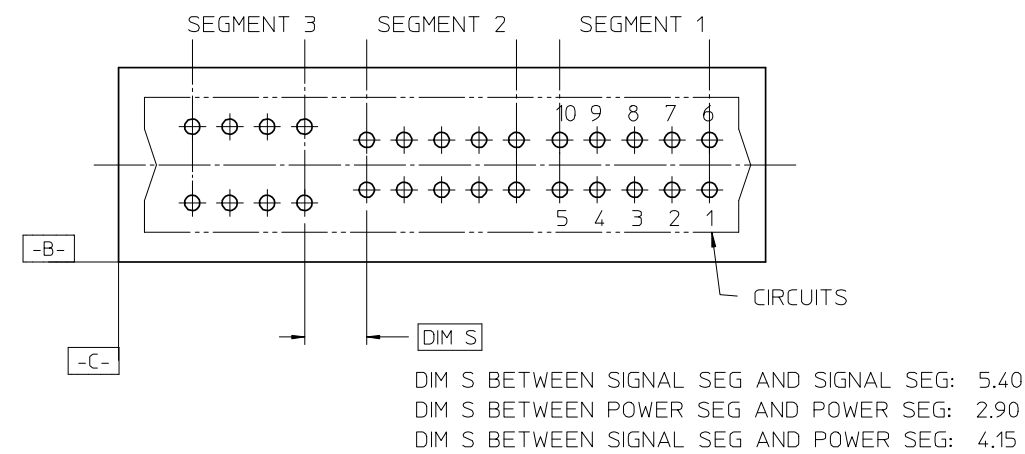
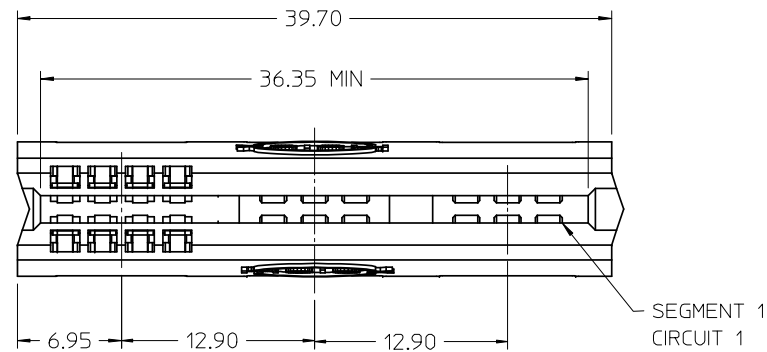
| MATERIAL NUMBER | SEGMENT 2 | SEGMENT 1 | DIM P<br>DIM T | PCB THK |
|-----------------|-----------|-----------|----------------|---------|
| 45911-0001      | SIGNAL    | POWER     | 4.50           | 3.18    |
| 45911-0002      | POWER     | SIGNAL    | 4.33           | 2.36    |
| 45911-0003      | SIGNAL    | POWER     | 3.19           | 1.57    |
| 45911-0004      | POWER     | SIGNAL    | 3.19           | 1.57    |
| SEE 45844       | SIGNAL    | SIGNAL    | ---            | ---     |
| SEE 45719       | POWER     | POWER     | ---            | ---     |



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

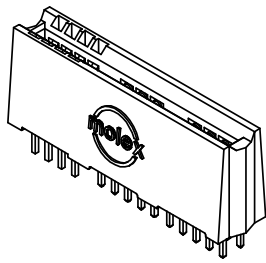
6 5 4 3 2 1

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

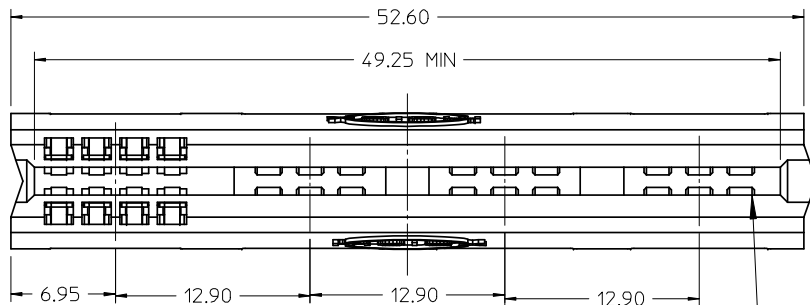


PCB LAYOUT: COMPONENT SIDE

| 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    |                       |              |

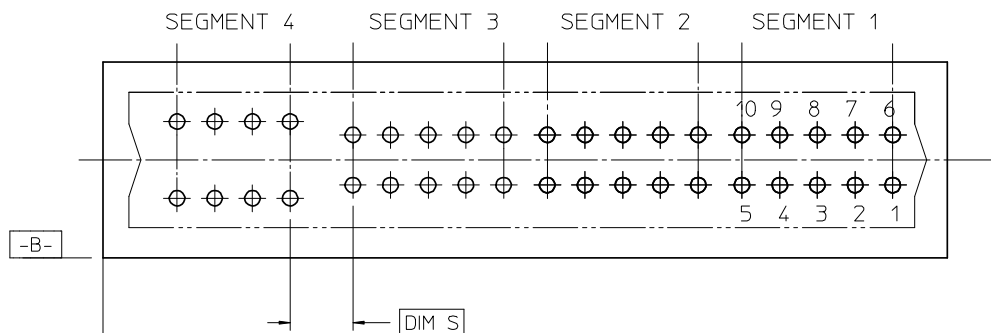


|                                                                                          |             |                 |                                                            |        |       |                              |                                                                   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



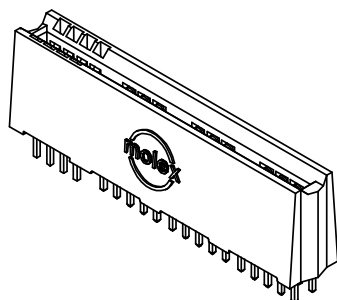
SEGMENT 1  
CIRCUIT 1

SEE CHART ON SHEET 4  
FOR MATERIAL NUMBERS

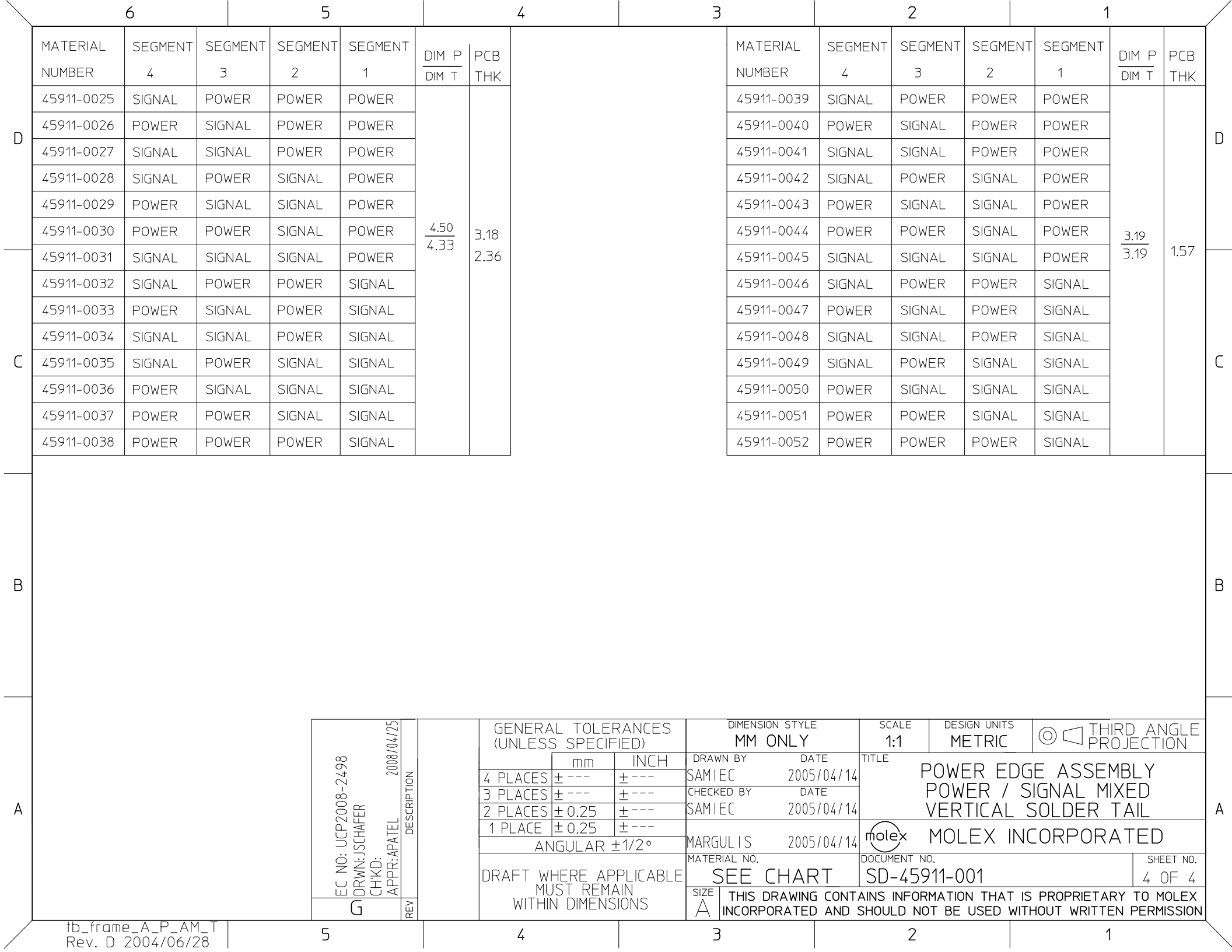


DIM S BETWEEN SIGNAL SEG AND SIGNAL SEG: 5.40  
DIM S BETWEEN POWER SEG AND POWER SEG: 2.90  
DIM S BETWEEN SIGNAL SEG AND POWER SEG: 4.15

PCB LAYOUT: COMPONENT SIDE



|                                                                                                 |        |             |                      |                                                            |        |                            |                                                                                                                                  |                    |                                                                              |                                                                                                                 |
|-------------------------------------------------------------------------------------------------|--------|-------------|----------------------|------------------------------------------------------------|--------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| EC NO: UCP2008-2498<br>DRWN: JSCHAFER 2008/04/16<br>CHKD: 2008/04/22<br>APPR: APATEL 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<br>PROJECTION |
|                                                                                                 |        |             |                      |                                                            | mm     | INCH                       | DRAWN BY<br>SAMIEC                                                                                                               | DATE<br>2005/04/14 | TITLE<br>POWER EDGE ASSEMBLY<br>POWER / SIGNAL MIXED<br>VERTICAL SOLDER TAIL |                                                                                                                 |
|                                                                                                 |        |             |                      | 4 PLACES                                                   | ± ---  | ± ---                      | CHECKED BY<br>SAMIEC                                                                                                             | DATE<br>2005/04/14 |                                                                              |                                                                                                                 |
|                                                                                                 |        |             |                      | 3 PLACES                                                   | ± ---  | ± ---                      | APPROVED BY<br>MARGULIS                                                                                                          | DATE<br>2005/04/14 |                                                                              |                                                                                                                 |
|                                                                                                 |        |             |                      | 2 PLACES                                                   | ± 0.25 | ± ---                      | DOCUMENT NO.<br>SD-45911-001                                                                                                     |                    |                                                                              |                                                                                                                 |
| 1 PLACE                                                                                         | ± 0.25 | ± ---       | SEE CHART ON SHEET 4 |                                                            |        |                            |                                                                                                                                  |                    |                                                                              |                                                                                                                 |
| G                                                                                               |        | REV         |                      | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |        | 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.