

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

**Part Number:** [0459110041](#)  
**Status:** **Active**  
**Description:** 12.90mm (.508") Pitch EXTreme PowerEdge™, Mixed Power/Signal Card Edge Connector, Double Sided, 4 Segments (Power, Power, Signal, Signal Sequence), Through Hole Solder for 1.57mm (.062") Thick PC Board

**Documents:**

[3D Model](#) [Product Specification PS-45719-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR 19980  
TUV 30482572.001  
UL E29179

**General**

Product Family Edge Card Connectors  
Series [45911](#)  
Component Type Edgecard to PCB  
Product Name EXTreme PowerEdge™

**Physical**

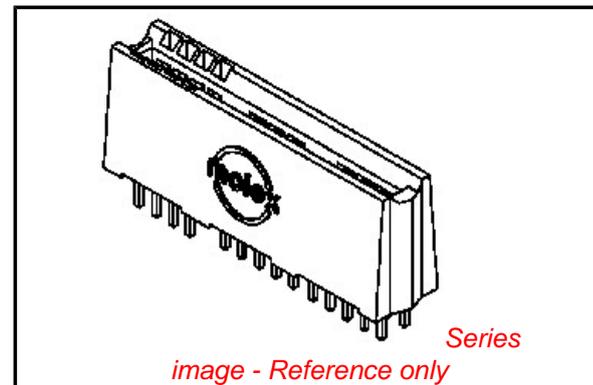
Circuits (Loaded) 20  
Circuits (maximum) 20  
Circuits Detail 2 Power, 2 Power, 8 Signal, 8 Signal  
Color - Resin Black  
Durability (mating cycles max) 250  
Entry Angle Vertical (Top Entry)  
Flammability 94V-0  
Keying to Mating Part N/A  
Material - Metal Phosphor Bronze  
Material - Plating Mating Gold  
Material - Plating Termination Tin  
Material - Resin High Temperature Thermoplastic  
PC Tail Length (in) 0.126 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



**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

**Material Info**

**Reference - Drawing Numbers**

Product Specification

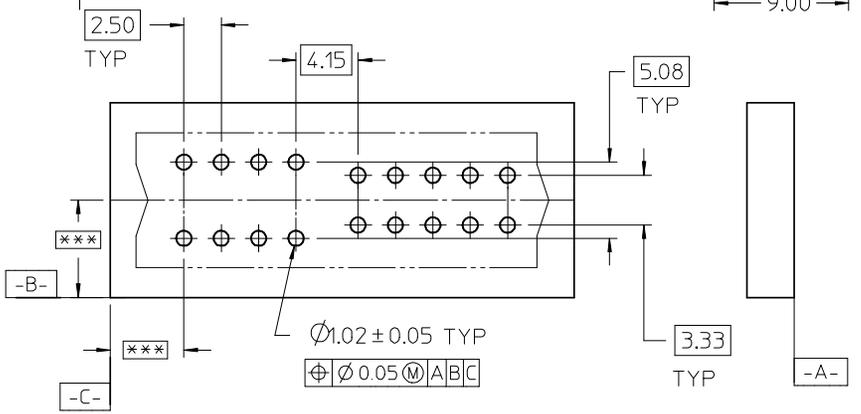
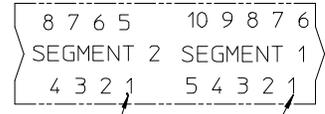
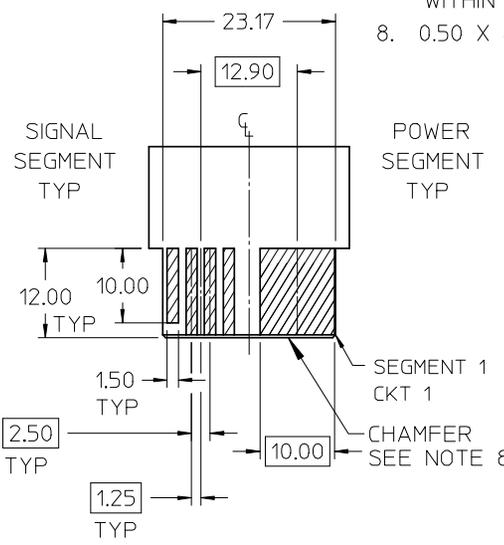
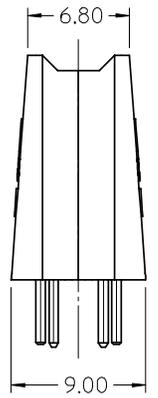
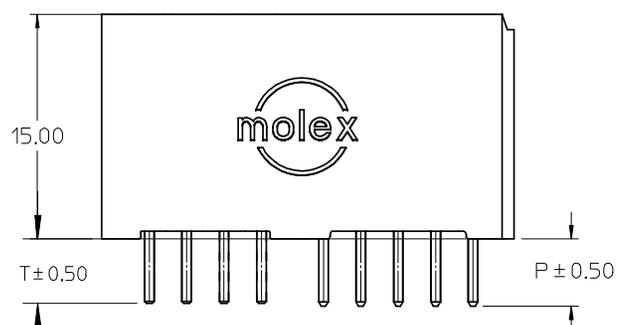
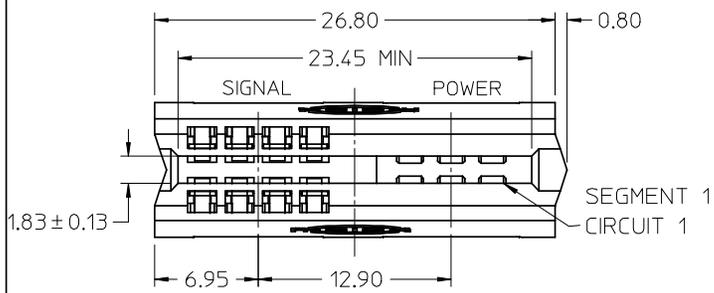
PS-45719-001

Sales Drawing

SD-45911-001

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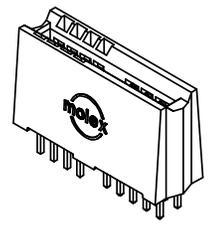


PCB LAYOUT: COMPONENT SIDE  
\*\*\* = TO BE DETERMINED BY CUSTOMER

- 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 / 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          |         |
| SEE 45844       | SIGNAL    | SIGNAL    | ---           | ---     |
| SEE 45719       | POWER     | POWER     | ---           | ---     |

EDGE CARD LAYOUT:  
TOLERANCE: ±0.05



|             |            |                    |
|-------------|------------|--------------------|
| REVISE<br>G | REV        | DESCRIPTION        |
|             | 2008/04/25 | APPR: APATEL       |
|             | 2008/04/22 | CHKD: JSCHAFFER    |
|             | 2008/04/16 | DRWN: UCP2008-2498 |

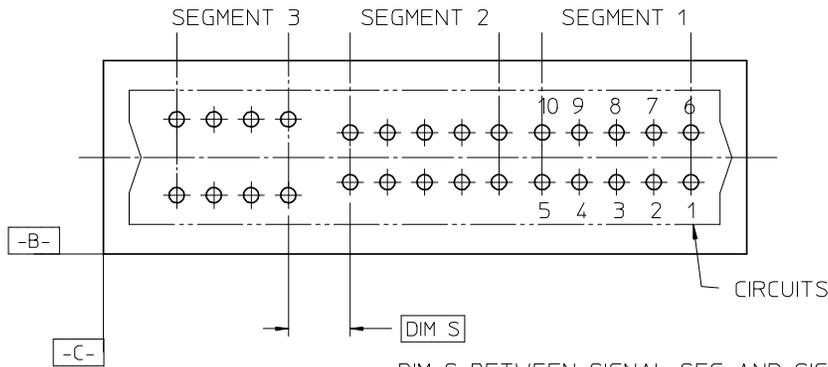
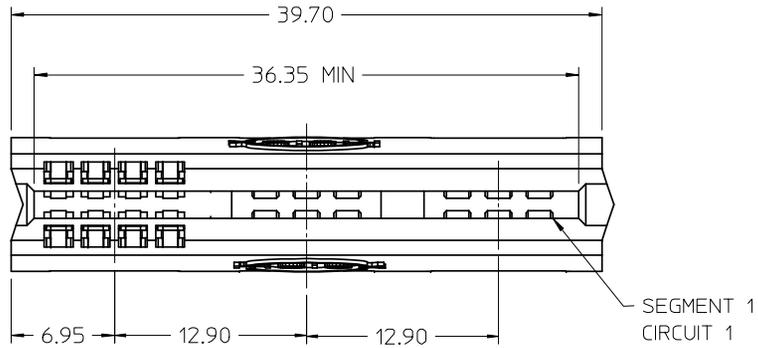
|                 |
|-----------------|
| QUALITY SYMBOLS |
|-----------------|

|  |              |
|--|--------------|
| GENERAL TOLERANCES (UNLESS SPECIFIED)                |              |
|  | mm INCH      |
| 4 PLACES   | ± --- ± ---  |
| 3 PLACES   | ± --- ± ---  |
| 2 PLACES   | ± 0.25 ± --- |
| 1 PLACE  | ± 0.25 ± --- |
| ANGULAR ±1/2°  |              |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |              |

|                              |                    |
|------------------------------|--------------------|
| DIMENSION STYLE<br>MM ONLY   |                    |
| DRAWN BY<br>SAMIEC           | DATE<br>2005/04/14 |
| CHECKED BY                   | DATE               |
| SAMIEC                       | 2005/04/14         |
| APPROVED BY<br>MARGULIS      | DATE<br>2005/04/14 |
| MATERIAL NUMBER<br>SEE CHART | SIZE<br>A          |

|   |                              |                        |
|---|------------------------------|------------------------|
| SCALE<br>2:1  | DESIGN UNITS<br>METRIC       | THIRD ANGLE PROJECTION |
| TITLE<br>POWER EDGE ASSEMBLY<br>POWER / SIGNAL MIXED<br>VERTICAL SOLDER TAIL  |                              |                        |
| molex MOLEX INCORPORATED  |                              |                        |
| MATERIAL NUMBER<br>SEE CHART  | DOCUMENT NO.<br>SD-45911-001 | SHEET NO.<br>1 OF 4    |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                              |                        |

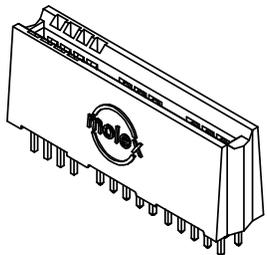
MATERIAL NUMBER: 45911-0007 SHOWN  
 SEE SHEET ONE FOR ALL OTHER NOTES AND DIMENSIONS



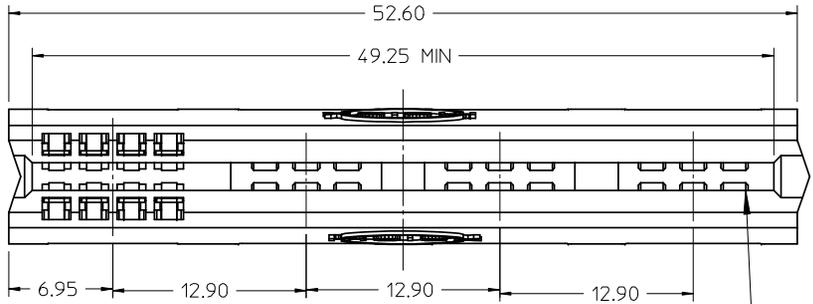
DIM S BETWEEN SIGNAL SEG AND SIGNAL SEG: 5.40  
 DIM S BETWEEN POWER SEG AND POWER SEG: 2.90  
 DIM S BETWEEN SIGNAL SEG AND POWER SEG: 4.15

PCB LAYOUT: COMPONENT SIDE

| MATERIAL NUMBER | SEGMENT 3 | SEGMENT 2 | SEGMENT 1 | DIM P<br>DIM T | PCB<br>THK   |
|-----------------|-----------|-----------|-----------|----------------|--------------|
| 45911-0007      | SIGNAL    | POWER     | POWER     | 4.50<br>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    | 3.19<br>3.19   | 1.57         |
| 45911-0012      | POWER     | POWER     | SIGNAL    |                |              |
| 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    |                |              |

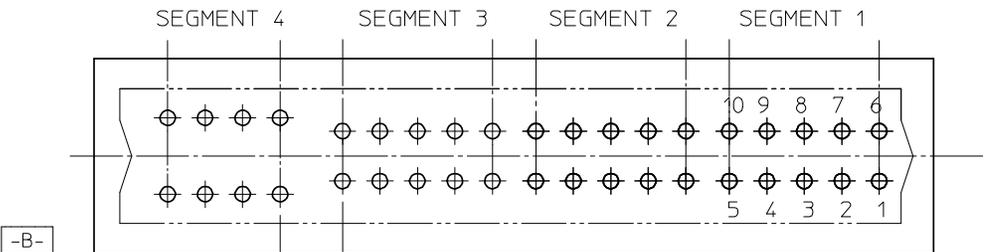


|   |                                |  |          |                            |                              |                              |  |                           |  |
|---|--------------------------------|--|----------|----------------------------|------------------------------|------------------------------|--|---------------------------|--|
| EC NO: UCP2008-2498<br>DRWN: JSCHAFFER 2008/04/16<br>CHKD: 2008/04/22<br>APPR: APATEL 2008/04/25<br>REV G | QUALITY SYMBOLS<br>DESCRIPTION | 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 |                           |  |
|   |                                | 4 PLACES   | ± ---    | ± ---                      | CHECKED BY                   | DATE                         |  |                           |  |
|   |                                | 3 PLACES   | ± ---    | ± ---                      | SAMIEC                       | 2005/04/14                   | MOLEX INCORPORATED   |                           |  |
|   |                                | 2 PLACES   | ± 0.25   | ± ---                      | APPROVED BY                  | DATE                         |  |                           |  |
| 1 PLACE   | ± 0.25                         | ± ---  | MARGULIS | 2005/04/14                 | 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  |                                | 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



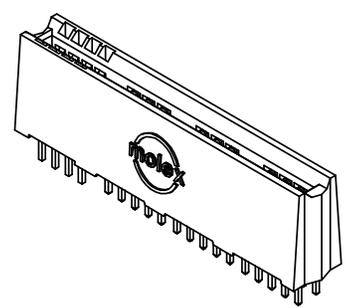
-B-

-C-

DIM S

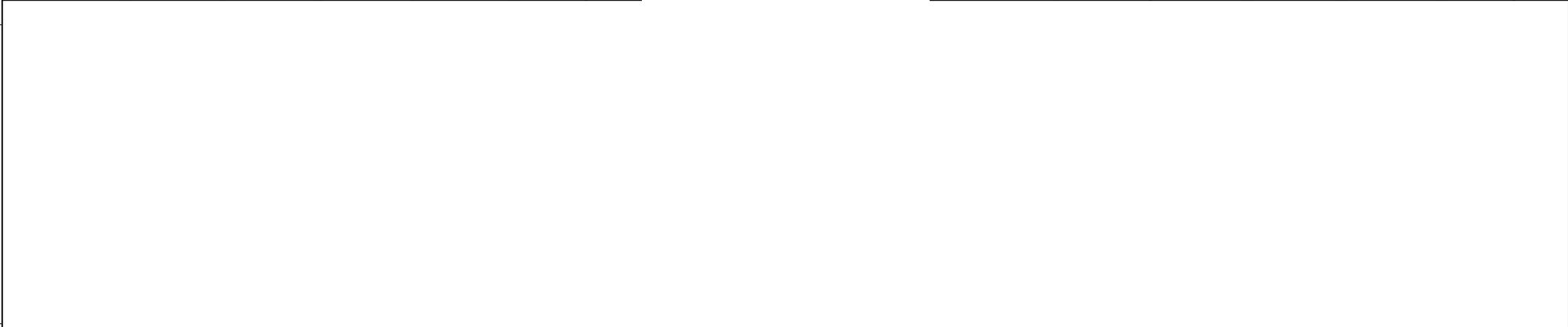
DIM S BETWEEN SIGNAL SEG AND SIGNAL SEG: 5.40  
 DIM S BETWEEN POWER SEG AND POWER SEG: 2.90  
 DIM S BETWEEN SIGNAL SEG AND POWER SEG: 4.15

PCB LAYOUT: COMPONENT SIDE



|   |                                       |                                       |  |                                   |   |  |  |                        |  |  |
|---|---------------------------------------|---------------------------------------|--|-----------------------------------|---|--|--|------------------------|--|--|
| EC NO: UCP2008-2498<br>DRWN: JSCHAFFER 2008/04/16<br>CHKD: 2008/04/22<br>APPR: APATEL 2008/04/25<br>G | QUALITY SYMBOLS<br>DESCRIPTION<br>REV | GENERAL TOLERANCES (UNLESS SPECIFIED) |  | DIMENSION STYLE<br><b>MM ONLY</b> |   | SCALE<br>2:1   | DESIGN UNITS<br>METRIC   | THIRD ANGLE 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   | MOLEX INCORPORATED   |                        |  |  |
|   |                                       | 2 PLACES                              | ± 0.25   | ± ---                             | MATERIAL NUMBER<br>SEE CHART ON SHEET 4 |  |  |                        |  |  |
| 1 PLACE   | ± 0.25                                | ± ---                                 | 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 |  |                        |  |  |

| 6               |           | 5         |           |           | 4                     |              | 3               |           | 2         |           |           | 1                     |         |
|-----------------|-----------|-----------|-----------|-----------|-----------------------|--------------|-----------------|-----------|-----------|-----------|-----------|-----------------------|---------|
| MATERIAL NUMBER | SEGMENT 4 | SEGMENT 3 | SEGMENT 2 | SEGMENT 1 | $\frac{DIM P}{DIM T}$ | PCB THK      | MATERIAL NUMBER | SEGMENT 4 | SEGMENT 3 | SEGMENT 2 | SEGMENT 1 | $\frac{DIM P}{DIM T}$ | PCB THK |
| 45911-0025      | SIGNAL    | POWER     | POWER     | POWER     | $\frac{4.50}{4.33}$   | 3.18<br>2.36 | 45911-0039      | SIGNAL    | POWER     | POWER     | POWER     | $\frac{3.19}{3.19}$   | 1.57    |
| 45911-0026      | POWER     | SIGNAL    | POWER     | POWER     |                       |              | 45911-0040      | POWER     | SIGNAL    | POWER     | POWER     |                       |         |
| 45911-0027      | SIGNAL    | SIGNAL    | POWER     | POWER     |                       |              | 45911-0041      | SIGNAL    | SIGNAL    | POWER     | POWER     |                       |         |
| 45911-0028      | SIGNAL    | POWER     | SIGNAL    | POWER     |                       |              | 45911-0042      | SIGNAL    | POWER     | SIGNAL    | POWER     |                       |         |
| 45911-0029      | POWER     | SIGNAL    | SIGNAL    | POWER     |                       |              | 45911-0043      | POWER     | SIGNAL    | SIGNAL    | POWER     |                       |         |
| 45911-0030      | POWER     | POWER     | SIGNAL    | POWER     |                       |              | 45911-0044      | POWER     | POWER     | SIGNAL    | POWER     |                       |         |
| 45911-0031      | SIGNAL    | SIGNAL    | SIGNAL    | POWER     |                       |              | 45911-0045      | SIGNAL    | SIGNAL    | SIGNAL    | POWER     |                       |         |
| 45911-0032      | SIGNAL    | POWER     | POWER     | SIGNAL    |                       |              | 45911-0046      | SIGNAL    | POWER     | POWER     | SIGNAL    |                       |         |
| 45911-0033      | POWER     | SIGNAL    | POWER     | SIGNAL    |                       |              | 45911-0047      | POWER     | SIGNAL    | POWER     | SIGNAL    |                       |         |
| 45911-0034      | SIGNAL    | SIGNAL    | POWER     | SIGNAL    |                       |              | 45911-0048      | SIGNAL    | SIGNAL    | POWER     | SIGNAL    |                       |         |
| 45911-0035      | SIGNAL    | POWER     | SIGNAL    | SIGNAL    |                       |              | 45911-0049      | SIGNAL    | POWER     | SIGNAL    | SIGNAL    |                       |         |
| 45911-0036      | POWER     | SIGNAL    | SIGNAL    | SIGNAL    |                       |              | 45911-0050      | POWER     | SIGNAL    | SIGNAL    | SIGNAL    |                       |         |
| 45911-0037      | POWER     | POWER     | SIGNAL    | SIGNAL    |                       |              | 45911-0051      | POWER     | POWER     | SIGNAL    | SIGNAL    |                       |         |
| 45911-0038      | POWER     | POWER     | POWER     | SIGNAL    |                       |              | 45911-0052      | POWER     | POWER     | POWER     | SIGNAL    |                       |         |



|  |  |        |                            |  |                    |  |                        |  |
|--|--|--------|----------------------------|--|--------------------|--|------------------------|--|
| EC NO: UCP2008-2498<br>DRWN: JSCHAFER<br>CHKD:<br>APPR: APATEL<br>2008/04/25<br>DESCRIPTION<br>REV | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |        | DIMENSION STYLE<br>MM ONLY |  | SCALE<br>1:1       | DESIGN UNITS<br>METRIC   | THIRD ANGLE 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<br>SAMIEC   | DATE<br>2005/04/14 |  |                        |  |
|  | 3 PLACES   | ± ---  | ± ---                      |  |                    |  |                        |  |
|  | 2 PLACES   | ± 0.25 | ± ---                      |  |                    |  |                        |  |
|  | 1 PLACE  | ± 0.25 | ± ---                      |  |                    |  |                        |  |
|  | ANGULAR ±1/2°  |        | MATERIAL NO.<br>SEE CHART  | MARGULIS   | 2005/04/14         | DOCUMENT NO.<br>SD-45911-001   | SHEET NO.<br>4 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 |                    |  |                        |  |