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**Part Number:** [0458440005](#)  
**Status:** **Active**  
**Overview:** [edge\\_card\\_connectors](#)  
**Description:** 2.50mm (.098") Pitch EXTreme PowerEdge™, Signal Connector, Double Sided, 3 Segments (8 Signal Contacts Per Segment), 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  
UL E29179

**General**

Product Family Edge Card Connectors  
Series [45844](#)  
Component Type Edgecard to PCB  
Overview [edge\\_card\\_connectors](#)  
Product Name EXTreme PowerEdge™

**Physical**

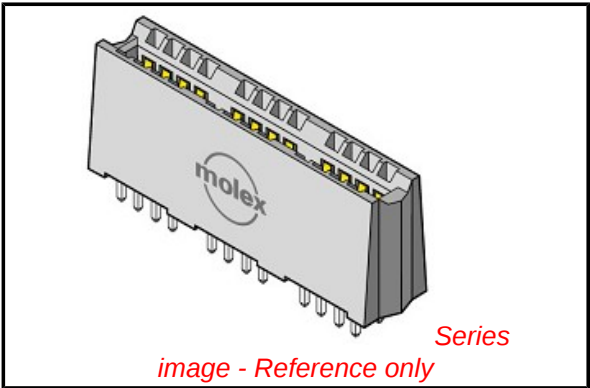
Circuits (Loaded) 24  
Circuits (maximum) 24  
Circuits Detail All Signal  
Color - Resin Black  
Durability (mating cycles max) 250  
Entry Angle Vertical (Top Entry)  
Flammability 94V-0  
Keying to Mating Part N/A  
Material - Metal Phosphor Bronze  
Material - Plating Mating Gold  
Material - Plating 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) 0.098 In  
Pitch - Mating Interface (mm) 2.50 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  
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



**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**  
[45844Series](#)

**Mates With**  
1.58mm (.062") double sided card edge

Process Temperature max. C

250

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification

PK-45714-001

Product Specification

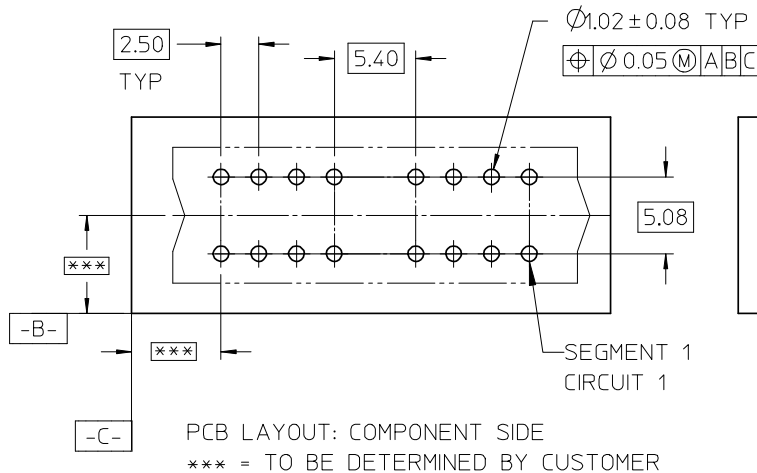
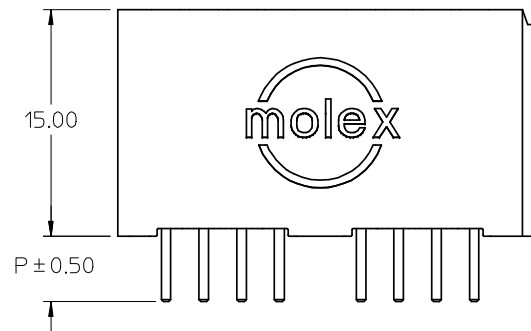
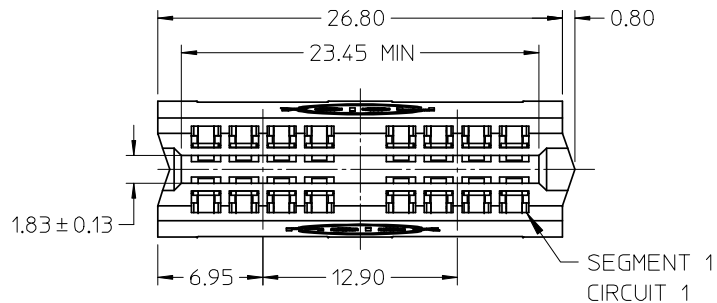
PS-45719-001

Sales Drawing

SD-45844-001

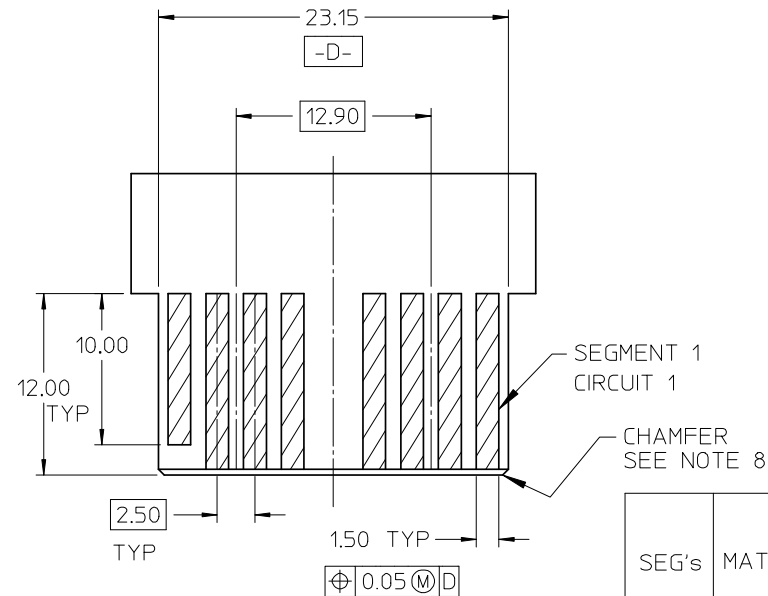
This document was generated on 06/04/2010

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## NOTES:

1. HOUSING MATL: LCP, UL94V-0, BLACK  
TERMINAL MATL: COPPER ALLOY
2. FINISH: SELECT GOLD: 30 M.I. MIN IN CONTACT AREA  
SELECT TIN: 150 M.I. MIN IN SOLDER AREA  
BOTH OVER NICKEL: 50 M.I. MIN
3. PRODUCT SPECIFICATION: PS-45719-001.
4. PACKAGING SPECIFICATION: PK-45714-001.
5. PCB THICKNESS: SEE CHART
6. EDGE CARD THICKNESS:  $1.57 \pm 0.15$
7. DIMENSIONS GIVEN ACROSS CENTERLINES ARE SYMMETRICAL ABOUT THOSE CENTERLINES WITHIN HALF THE TOTAL TOLERANCE.
8.  $0.50 \times 45^\circ$  CHAMFER ON LEADING EDGE, TYP 4 SIDES.



RECOMMENDED EDGE CARD LAYOUT  
TOLERANCE:  $\pm 0.05$

| SEG's | MATERIAL<br>NUMBER | DIM P | PCB<br>THK |
|-------|--------------------|-------|------------|
| 2     | 45844-0001         | 4.33  | 3.18/2.36  |
| 2     | 45844-0004         | 3.19  | 1.57       |

|                                                                                                                     |             |                                          |       |       |                                                            |  |                                                                                                                                  |                                                                |                           |  |  |
|---------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------|-------|-------|------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------|--|--|
| REVISE SLOT TOL.<br>EC NO: UCP2008-2498<br>DRWN: JSCHAFER 2008/04/16<br>CHKD: 2008/04/22<br>APPR: APATEL 2008/04/25 | DESCRIPTION | GENERAL TOLERANCES<br>(UNLESS SPECIFIED) |       |       | DIMENSION STYLE<br>MM ONLY                                 |  | SCALE<br>2:1                                                                                                                     | DESIGN UNITS<br>METRIC                                         | THIRD ANGLE<br>PROJECTION |  |  |
|                                                                                                                     |             |                                          | mm    | INCH  | DRAWN BY<br>MARGULIS                                       |  | DATE<br>2004/07/29                                                                                                               | TITLE<br>POWER EDGE ASSEMBLY<br>SIGNAL VERTICAL<br>SOLDER TAIL |                           |  |  |
|                                                                                                                     |             | 4 PLACES                                 | ± --- | ± --- | CHECKED BY<br>MARGULIS                                     |  | DATE<br>2004/07/29                                                                                                               |                                                                |                           |  |  |
|                                                                                                                     |             | 3 PLACES                                 | ± --- | ± --- | APPROVED BY<br>MARGULIS                                    |  | DATE<br>2004/07/29                                                                                                               |                                                                |                           |  |  |
|                                                                                                                     |             | 2 PLACES                                 | ± --- | ± --- | DOCUMENT NO.<br>SD-45844-001                               |  | SHEET NO.<br>1 OF 3                                                                                                              |                                                                |                           |  |  |
|                                                                                                                     |             | 1 PLACE                                  | ± --- | ± --- | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |  |                                                                                                                                  |                                                                |                           |  |  |
|                                                                                                                     |             | ANGULAR ±1/2°                            |       |       | SEE CHART                                                  |  |                                                                                                                                  |                                                                |                           |  |  |
|                                                                                                                     |             |                                          |       |       | SIZE<br>A                                                  |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                                |                           |  |  |

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5

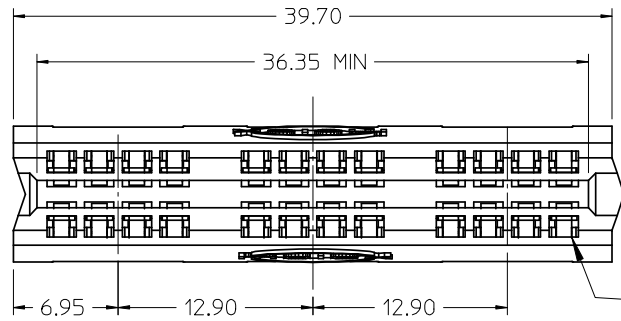
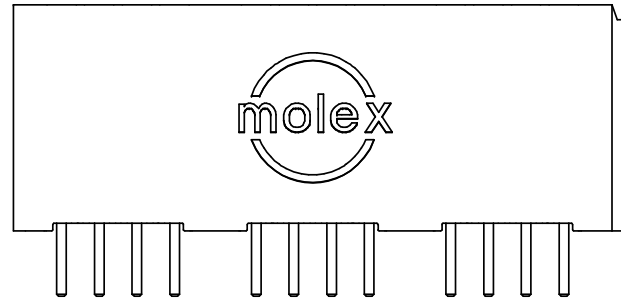
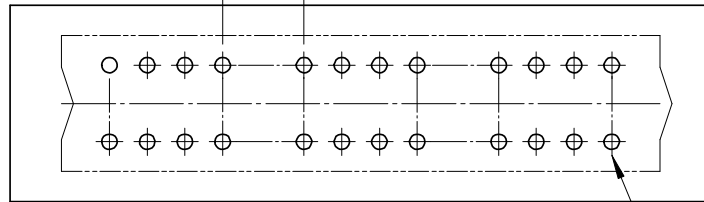
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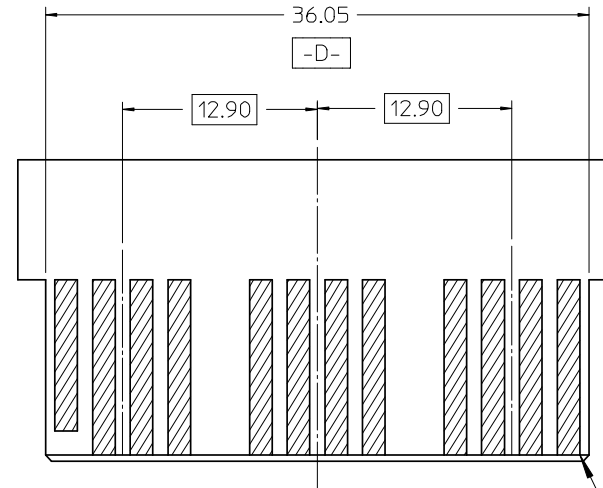
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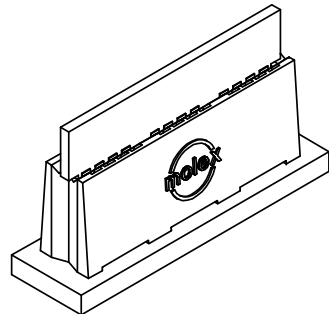
SEE SHEET ONE FOR NOTES AND DIMENSIONS NOT SHOWN

SEGMENT 1  
CIRCUIT 15.40  
TYP 2

PBC LAYOUT: COMPONENT SIDE

SEGMENT 1  
CIRCUIT 1SEGMENT 1  
CIRCUIT 1RECOMMENDED EDGE CARD LAYOUT:  
TOLERANCE:  $\pm 0.05$ 

| SEG's | MATERIAL<br>NUMBER | DIM P | PCB<br>THK |
|-------|--------------------|-------|------------|
| 3     | 45844-0002         | 4.33  | 3.18/2.36  |
| 3     | 45844-0005         | 3.19  | 1.57       |



|                     |            |              |            |
|---------------------|------------|--------------|------------|
| EC NO: UCP2008-2498 | 2008/04/16 | 2008/04/22   | 2008/04/25 |
| DRWN: JSCHAER       | CHKD:      | APPR: APATEL |            |
| D                   | REV        | DESCRIPTION  |            |

GENERAL TOLERANCES  
(UNLESS SPECIFIED)

|          | mm         | INCH      |
|----------|------------|-----------|
| 4 PLACES | $\pm$ ---  | $\pm$ --- |
| 3 PLACES | $\pm$ ---  | $\pm$ --- |
| 2 PLACES | $\pm 0.25$ | $\pm$ --- |
| 1 PLACE  | $\pm$ ---  | $\pm$ --- |

ANGULAR  $\pm 1/2^\circ$ DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONSDIMENSION STYLE  
MM ONLY

|             |            |
|-------------|------------|
| DRAWN BY    | DATE       |
| MARGULIS    | 2004/07/29 |
| CHECKED BY  | DATE       |
| MARGULIS    | 2004/07/29 |
| APPROVED BY | DATE       |
| MARGULIS    | 2004/07/29 |

MATERIAL NUMBER  
SEE CHARTSIZE  
ASCALE  
2:1DESIGN UNITS  
METRICTHIRD ANGLE  
PROJECTIONTITLE  
POWER EDGE ASSEMBLY  
SIGNAL VERTICAL  
SOLDER TAIL

MOLEX INCORPORATED

DOCUMENT NO.  
SD-45844-001SHEET NO.  
2

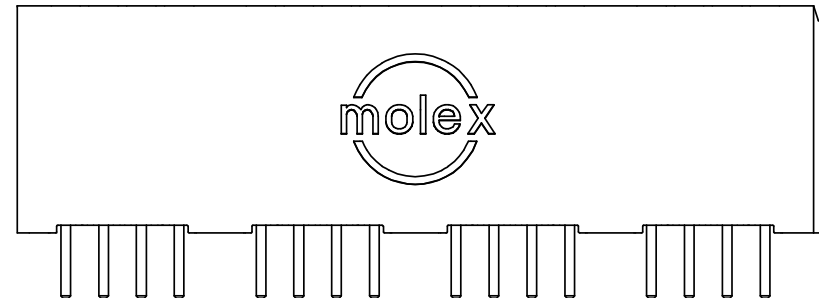
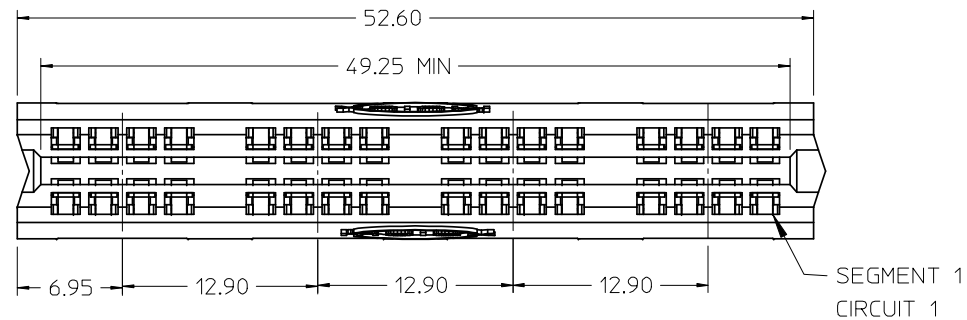
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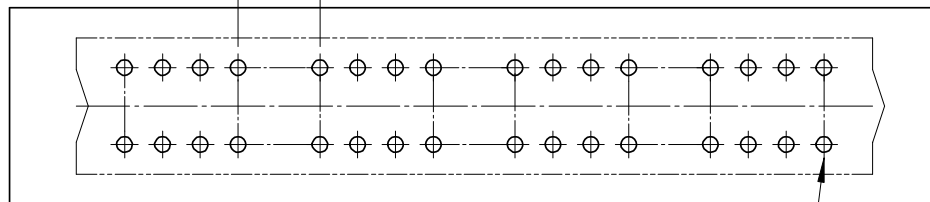
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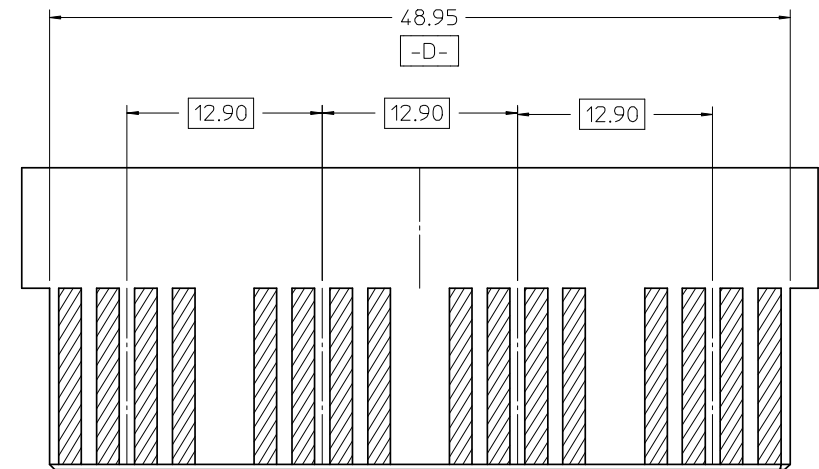
5.40  
TYP 3



PCB LAYOUT: COMPONENT SIDE

SEGMENT 1  
CIRCUIT 1

SEE SHEET ONE FOR NOTES AND DIMENSIONS NOT SHOWN



RECOMMENDED EDGE CARD LAYOUT  
TOLERANCE:±0.05

| SEG's | MATERIAL<br>NUMBER | DIM P | PCB<br>THK |
|-------|--------------------|-------|------------|
| 4     | 45844-0003         | 4.33  | 3.18/2.36  |
| 4     | 45844-0006         | 3.19  | 1.57       |

|                     |               |            |             |
|---------------------|---------------|------------|-------------|
| EC NO: UCP2008-2498 | DRWN:JSCHAFER | 2008/04/16 | DESCRIPTION |
| CH'KD:              | APPR:APATEL   | 2008/04/22 | REV         |
| D                   |               |            |             |

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

| DIMENSION STYLE<br>MM ONLY |            |
|----------------------------|------------|
| DRAWN BY                   | DATE       |
| MARGUL IS                  | 2004/07/29 |
| CHECKED BY                 | DATE       |
| MARGUL IS                  | 2004/07/29 |
| APPROVED BY                | DATE       |
| MARGUL IS                  | 2004/07/29 |
| MATERIAL NUMBER            | SEE CHART  |
| SIZE                       | A          |

|                                                                                                                                  |  |                        |  |                                                                                                                 |                |
|----------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|-----------------------------------------------------------------------------------------------------------------|----------------|
| SCALE<br>2:1                                                                                                                     |  | DESIGN UNITS<br>METRIC |  |  THIRD ANGLE<br>PROJECTION |                |
| TITLE                                                                                                                            |  |                        |  |                                                                                                                 |                |
| POWER EDGE ASSEMBLY<br>SIGNAL VERTICAL<br>SOLDER TAIL                                                                            |  |                        |  |                                                                                                                 |                |
|  MOLEX INCORPORATED                         |  |                        |  |                                                                                                                 |                |
| DOCUMENT NO.<br>SD-45844-001                                                                                                     |  |                        |  |                                                                                                                 | SHEET NO.<br>3 |
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