

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

**Part Number:** [0457190009](#)  
**Status:** **Active**  
**Overview:** [edge\\_card\\_connectors](#)  
**Description:** 12.90mm (.508") Pitch EXTreme PowerEdge™, Connector, 4 Segments (8 Total Contacts), Through Hole Solder for 1.57mm (.062") Thick PC Board, Mates to a 1.57mm (.062") Thick Card Edge or Bus Bar Tab

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

**Agency Certification**

CSA LR19980  
TUV R72090228

**General**

Product Family Edge Card Connectors  
Series [45719](#)  
Component Type Edgecard to PCB  
Overview [edge\\_card\\_connectors](#)  
Product Name Bus Bar Socket, EXTreme PowerEdge™

**Physical**

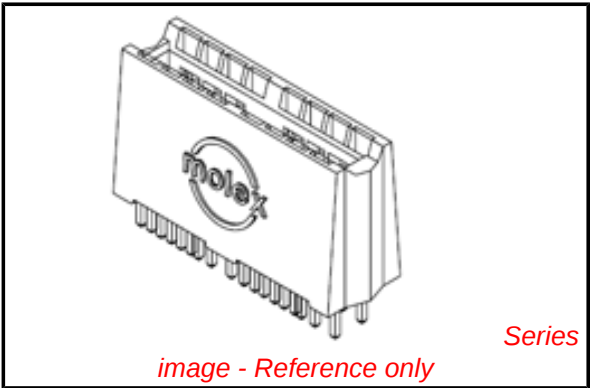
Circuits (Loaded) 8  
Circuits (maximum) 8  
Circuits Detail All Power  
Color - Resin Black  
Durability (mating cycles max) 200  
Entry Angle Vertical (Top Entry)  
Flammability 94V-0  
Keying to Mating Part N/A  
Material - Metal High Performance Alloy (HPA)  
Material - Plating Mating Gold  
Material - Plating Termination Tin  
Material - Resin High Temperature Thermoplastic  
PC Tail Length (in) 0.115 In  
PC Tail Length (mm) 2.92 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 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



**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC**  
Not Reviewed  
**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**  
[45719Series](#)

**Mates With**  
1.58mm (.062") double sided card edge or bus bar tab

Process Temperature max. C250

Material Info

Reference - Drawing Numbers

Packaging SpecificationPK-45714-001

Product SpecificationPS-45719-001

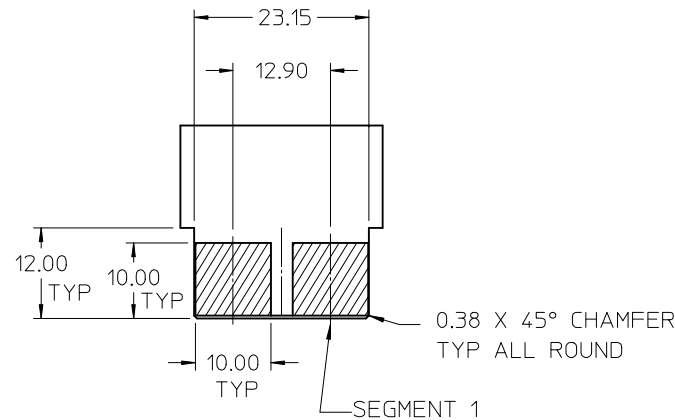
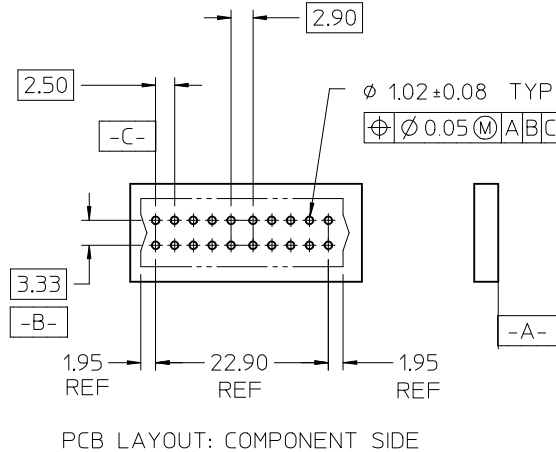
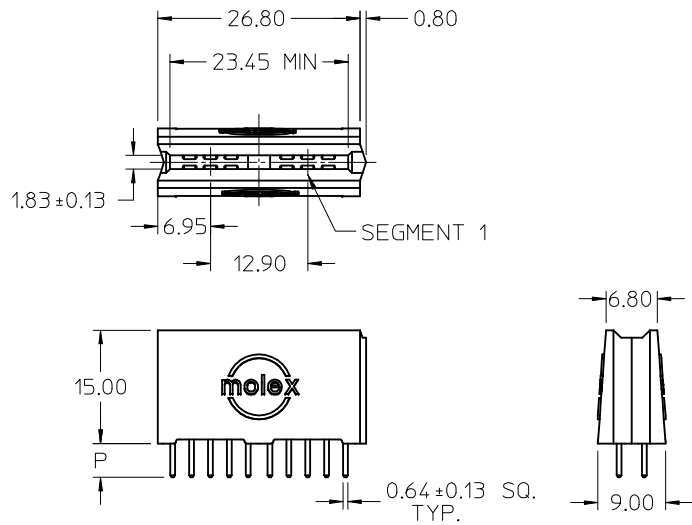
Sales DrawingSD-45719-001

This document was generated on 06/04/2010

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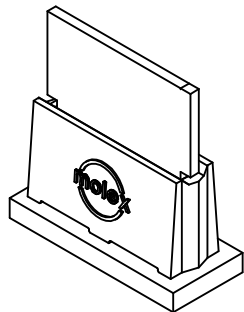
NOTES:

- HOUSING MATL: LCP, UL94V-0, COLOR BLACK  
TERMINAL MATL: COPPER ALLOY
- FINISH: SELECT GOLD: 30 M.I. MIN IN CONTACT AREA  
SELECT TIN: 150 M.I. MIN IN SOLDER AREA  
OVERALL NICKEL UNDERPLATE.
- 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 TOTAL TOLERANCE.
- VOIDED SEGMENTS DO NOT HAVE TERMINALS IN THE TOP OR BOTTOM ROW



RECOMMENDED EDGE CARD LAYOUT  
TOLERANCE: ±0.05

| MATERIAL NUMBER | VOIDED SEGMENT | P    | PCB THK |
|-----------------|----------------|------|---------|
| 45719-0001      | NONE           | 4.50 | 3.18    |
| 45719-2001      | 1              |      |         |
| 45719-2002      | 2              | 3.63 | 2.36    |
| 45719-0004      | NONE           |      |         |
| 45719-2003      | 1              | 2.92 | 1.57    |
| 45719-2004      | 2              |      |         |
| 45719-0007      | NONE           | 2.92 | 1.57    |
| 45719-2005      | 1              |      |         |
| 45719-2006      | 2              |      |         |



|                     |             |
|---------------------|-------------|
| ADD PIN DIM & TOL   | DESCRIPTION |
| EC NO: UCP2009-2476 | 2009/04/07  |
| DRWN: JSCHAFER      | 2009/04/07  |
| CHKD:               | 2009/04/20  |
| APPR: APATEL        | 2009/04/20  |
| E1                  | REV         |

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

| DIMENSION STYLE |            |
|-----------------|------------|
| MM ONLY         |            |
| DRAWN BY        | DATE       |
| MARGUL IS       | 2003/11/11 |
| CHECKED BY      | DATE       |
| MARGUL IS       | 2003/11/11 |
| APPROVED BY     | DATE       |
| MARGUL IS       | 2003/11/11 |
| SIZE            |            |
| A               |            |

|                                                                                                          |                        |                                                                                                                 |
|----------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------|
| SCALE<br>1:1                                                                                             | DESIGN UNITS<br>METRIC |  THIRD ANGLE<br>PROJECTION |
| TITLE                                                                                                    |                        |                                                                                                                 |
| POWER EDGE ASSEMBLY<br>POWER VERTICAL<br>SOLDER TAIL                                                     |                        |                                                                                                                 |
|  MOLEX INCORPORATED |                        |                                                                                                                 |
| DOCUMENT NO.<br>SD-45719-001                                                                             |                        | SHEET NO.<br>1 OF 3                                                                                             |
| AINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION           |                        |                                                                                                                 |

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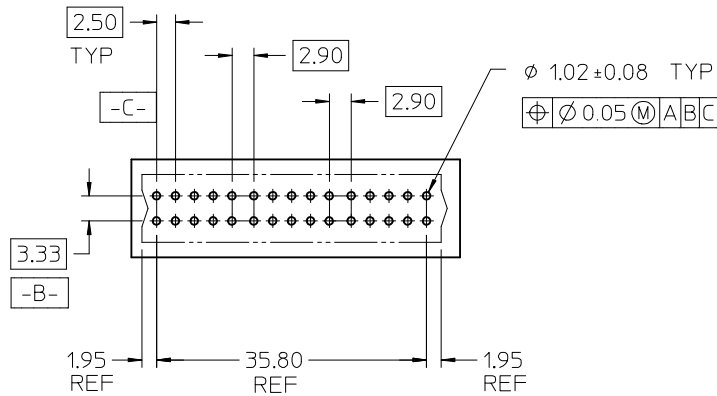
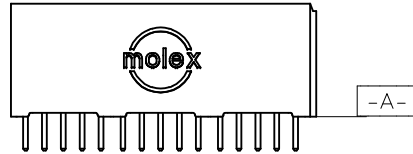
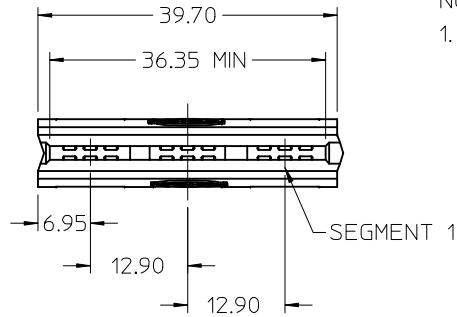
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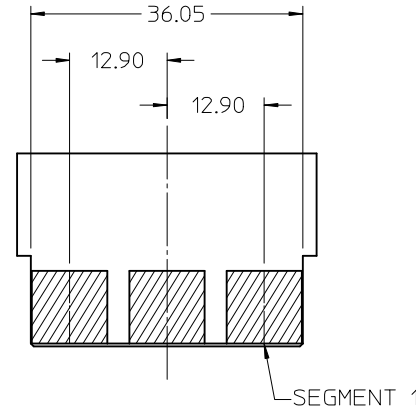
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## NOTES:

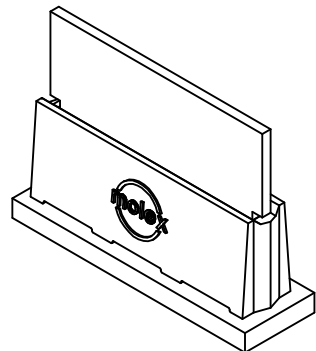
1. FOR ALL OTHER DIMENSIONS AND NOTES SEE SHEET 1.



PCB LAYOUT: COMPONENT SIDE

RECOMMENDED EDGE CARD LAYOUT  
EDGE CARD TOLERANCE: ±0.05

| MATERIAL NUMBER | VOIDED SEGMENT | P    | PCB THK |
|-----------------|----------------|------|---------|
| 45719-0002      | NONE           | 4.50 | 3.18    |
| 45719-3001      | 1              |      |         |
| 45719-3002      | 2              |      |         |
| 45719-3003      | 3              |      |         |
| 45719-3004      | 1,2            |      |         |
| 45719-3005      | 1,3            |      |         |
| 45719-3006      | 2,3            |      |         |
| 45719-0005      | NONE           | 3.63 | 2.36    |
| 45719-3007      | 1              |      |         |
| 45719-3008      | 2              |      |         |
| 45719-3009      | 3              |      |         |
| 45719-3010      | 1,2            |      |         |
| 45719-3011      | 1,3            |      |         |
| 45719-3012      | 2,3            |      |         |
| 45719-0008      | NONE           | 2.92 | 1.57    |
| 45719-3013      | 1              |      |         |
| 45719-3014      | 2              |      |         |
| 45719-3015      | 3              |      |         |
| 45719-3016      | 1,2            |      |         |
| 45719-3017      | 1,3            |      |         |
| 45719-3018      | 2,3            |      |         |



|                     |            |             |
|---------------------|------------|-------------|
| EC NO: UCP2009-2476 | 2009/04/07 | DESCRIPTION |
| DRWN: JSCHAFER      | 2009/04/07 |             |
| CHKD:               | 2009/04/07 |             |
| APPR: APATEL        | 2009/04/20 |             |
| E1                  | REV        |             |

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 DIMENSIONSDIMENSION STYLE  
MM ONLY

|             |            |
|-------------|------------|
| DRAWN BY    | DATE       |
| MARGULIS    | 2003/11/11 |
| CHECKED BY  | DATE       |
| MARGULIS    | 2003/11/11 |
| APPROVED BY | DATE       |
| MARGULIS    | 2003/11/11 |

SCALE  
1:1DESIGN UNITS  
METRICTHIRD ANGLE  
PROJECTIONPOWER EDGE ASSEMBLY  
POWER VERTICAL  
SOLDER TAIL

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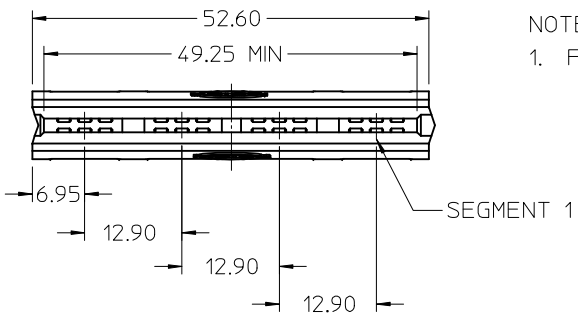
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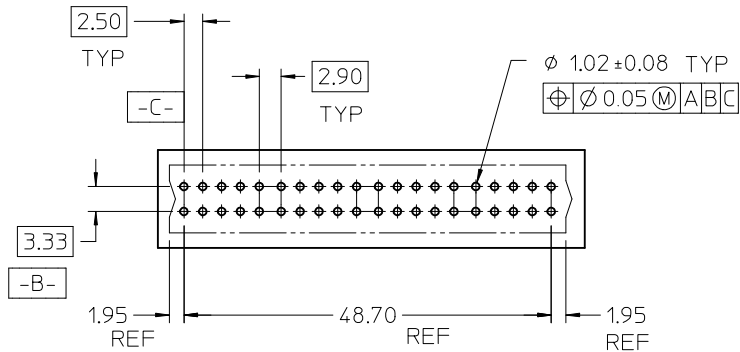
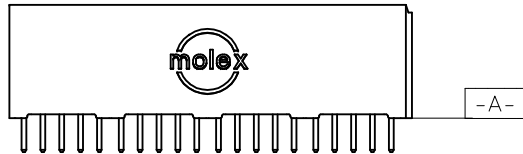
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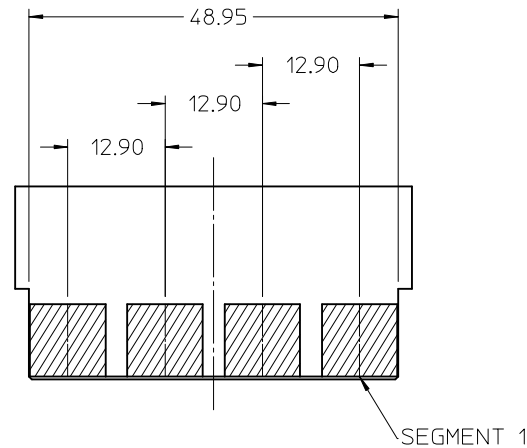


## NOTES:

1. FOR ALL OTHER DIMENSIONS AND NOTES SEE SHEET 1.



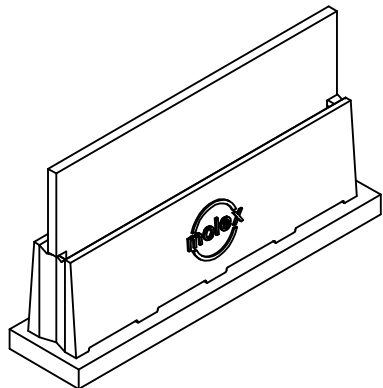
PCB LAYOUT: COMPONENT SIDE



RECOMMENDED EDGE CARD LAYOUT

EDGE CARD TOLERANCE:  $\pm 0.05$ 

| MATERIAL NUMBER | VOIDED SEGMENT | P    | PCB THK |
|-----------------|----------------|------|---------|
| 45719-0003      | NONE           | 4.50 | 3.18    |
| 45719-4001      | 1              |      |         |
| 45719-4002      | 2              |      |         |
| 45719-4003      | 3              |      |         |
| 45719-4004      | 4              |      |         |
| 45719-4005      | 1,2            |      |         |
| 45719-4006      | 1,3            |      |         |
| 45719-4007      | 1,4            |      |         |
| 45719-4008      | 2,3            |      |         |
| 45719-4009      | 2,4            |      |         |
| 45719-4010      | 3,4            |      |         |
| 45719-0006      | NONE           | 3.63 | 2.36    |
| 45719-4011      | 1              |      |         |
| 45719-4012      | 2              |      |         |
| 45719-4013      | 3              |      |         |
| 45719-4014      | 4              |      |         |
| 45719-4015      | 1,2            |      |         |
| 45719-4016      | 1,3            |      |         |
| 45719-4017      | 1,4            |      |         |
| 45719-4018      | 2,3            |      |         |
| 45719-4019      | 2,4            |      |         |
| 45719-4020      | 3,4            | 2.92 | 1.57    |
| 45719-0009      | NONE           |      |         |
| 45719-4021      | 1              |      |         |
| 45719-4022      | 2              |      |         |
| 45719-4023      | 3              |      |         |
| 45719-4024      | 4              |      |         |
| 45719-4025      | 1,2            |      |         |
| 45719-4026      | 1,3            |      |         |
| 45719-4027      | 1,4            |      |         |
| 45719-4028      | 2,3            |      |         |
| 45719-4029      | 2,4            |      |         |
| 45719-4030      | 3,4            |      |         |



|                     |            |             |
|---------------------|------------|-------------|
| EC NO: UCP2009-2476 | 2009/04/07 | DESCRIPTION |
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| APPR: APATEL        | 2009/04/20 |             |
| E1                  | REV        |             |

## GENERAL TOLERANCES (UNLESS SPECIFIED)

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

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

|             |            |
|-------------|------------|
| DRAWN BY    | DATE       |
| MARGULIS    | 2003/11/11 |
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SCALE  
1:1DESIGN UNITS  
METRICPOWER EDGE ASSEMBLY  
POWER VERTICAL  
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