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**Part Number:** [0459110030](#)  
**Status:** **Active**  
**Overview:** edge card connectors  
**Description:** 12.90mm (.508") Pitch EXTreme PowerEdge™, Mixed Power/Signal Card Edge Connector, Double Sided, 4 Segments (Power, Signal, Power, Power Sequence), Through Hole Solder for 2.36mm (.093") or 3.18mm (.125") 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	<a href="#">45911</a>
Component Type	Edgecard to PCB
Overview	<a href="#">edge_card_connectors</a>
Product Name	EXTreme PowerEdge™

**Physical**

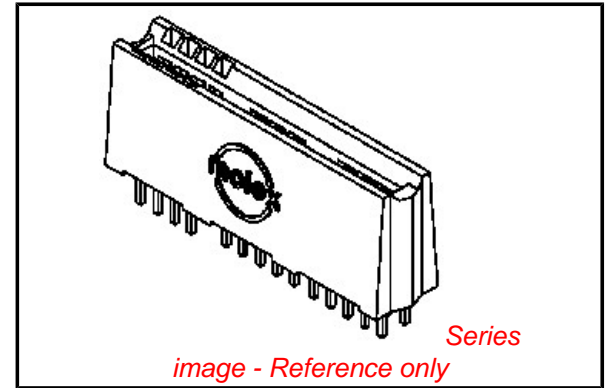
Circuits (Loaded)	14
Circuits (maximum)	14
Circuits Detail	2 Power, 8 Signal, 2 Power, 2 Power
Color - Resin	Black
Durability (mating cycles max)	250
Entry Angle	Vertical (Top Entry)
Flammability	94V-0
Keying to Mating Part	N/A
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
PC Tail Length (in)	0.182 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

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SEGMENT 2  
CIRCUIT 1

SEGMENT 1  
CIRCUIT 1

- 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.



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

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

EDGE CARD LAYOUT:  
TOLERANCE: ±0.05



REVISE G	REV	DESCRIPTION
	2008/04/16	2008/04/16
	2008/04/22	2008/04/22
	2008/04/25	2008/04/25

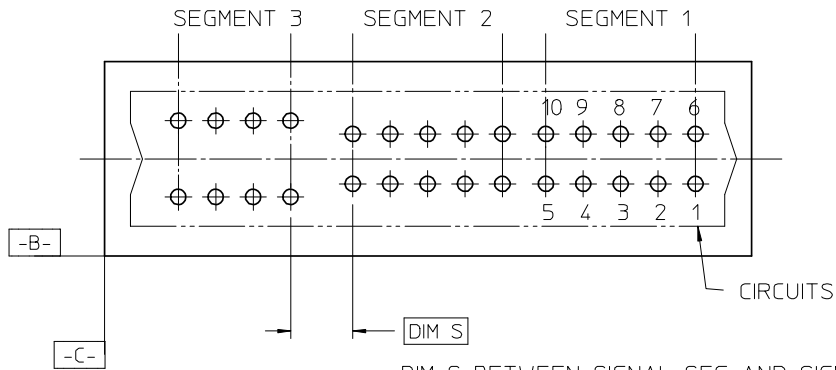
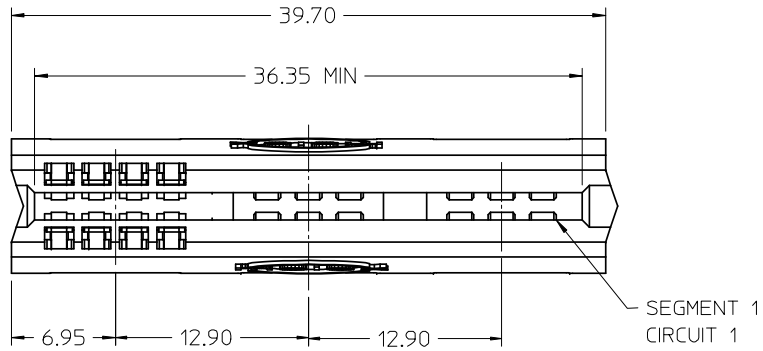
QUALITY SYMBOLS
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GENERAL TOLERANCES (UNLESS SPECIFIED)		
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± 0.25	± ---
ANGULAR ±1/2°		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

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

SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE POWER EDGE ASSEMBLY POWER / SIGNAL MIXED VERTICAL SOLDER TAIL		
MOLEX INCORPORATED		
MATERIAL NUMBER SEE CHART	DOCUMENT NO. SD-45911-001	SHEET NO. 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 DIM T	PCB THK
45911-0007	SIGNAL	POWER	POWER	4.50 4.33	3.18 2.36
45911-0008	POWER	SIGNAL	POWER		
45911-0009	SIGNAL	SIGNAL	POWER		
45911-0010	SIGNAL	POWER	SIGNAL		
45911-0011	POWER	SIGNAL	SIGNAL	3.19 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 DRWN: JSCHAFER 2008/04/16 CHKD: 2008/04/22 APPR: APATEL 2008/04/25 REV G	QUALITY SYMBOLS DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY SAMIEC	DATE 2005/04/14	TITLE POWER EDGE ASSEMBLY POWER / SIGNAL MIXED 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 SEE CHART		DOCUMENT NO. SD-45911-001	SHEET NO. 2 OF 4	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



SEGMENT 1  
CIRCUIT 1

SEE CHART ON SHEET 4  
FOR MATERIAL NUMBERS

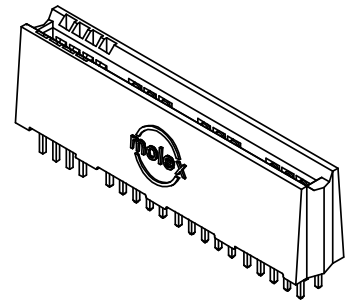


-B-

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

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

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