This document was generated on 06/04/2010

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Part Number: 0459110051
Status: Active
Overview:
Description: 12.90mm (.508") Pitch EXTreme PowerEdge™, Mixed Power/Signal Card Edge Connector, Double Sided, 4 Segments (Signal, Signal, Power, Power Sequence), Through Hole Solder for 1.57mm (.062") Thick PC Board

Agency Certification

CSA	LR 19980
TUV	30482572.001
UL	E29179

General

Product Family	Edge Card Connectors
Series	45911
Component Type	Edgecard to PCB
Overview	edge_card_connectors
Product Name	EXTreme PowerEdge™

Physical

Circuits (Loaded)	20
Circuits (maximum)	20
Circuits Detail	8 Signal, 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)	0.126 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

Material Info

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

China RoHS

Need more information on product environmental compliance?

Email 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

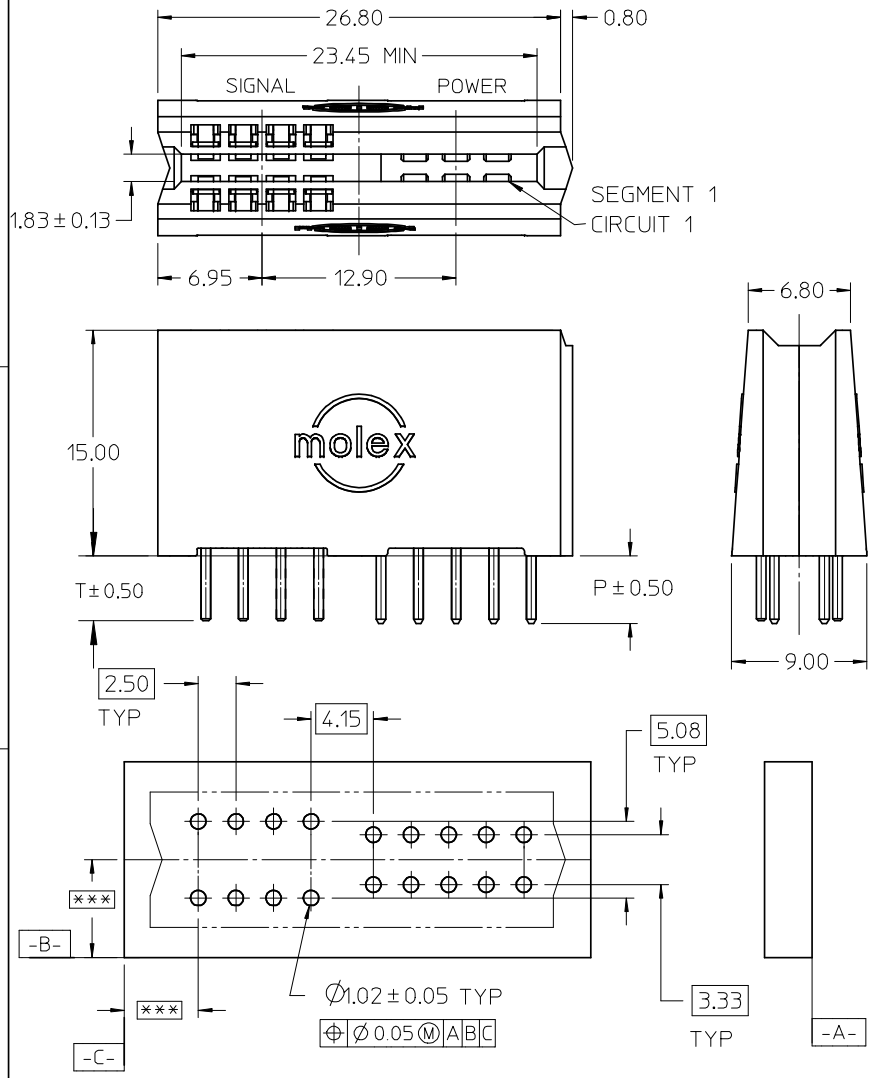
Mates With
1.58mm (.062") double sided card edge

Reference - Drawing Numbers

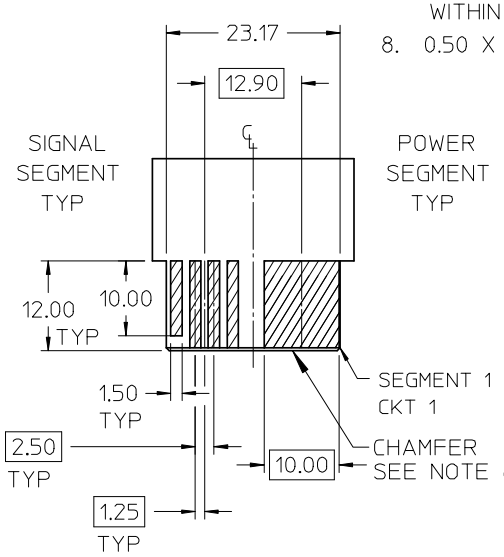
Packaging Specification	PK-45714-001
Product Specification	PS-45719-001
Sales Drawing	SD-45911-001

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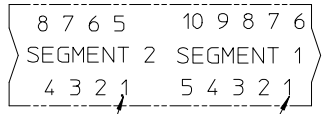
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PCB LAYOUT: COMPONENT SIDE
*** = TO BE DETERMINED BY CUSTOMER

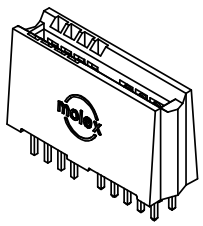


EDGE CARD LAYOUT:
TOLERANCE: ±0.05



NOTES:
1. MATERIAL: HOUSING - LCP, UL94V-0, BLACK
   MATERIAL: TERMINALS - COPPER ALLOY
2. FINISH: SELECT GOLD: 30 MI MIN IN CONTACT AREA
   SELECT TIN: 150 MI MIN IN PC TAIL AREA
   BOTH OVER NICKEL: 50 MI MIN
3. PRODUCT SPECIFICATION: PS-45719-001.
4. PACKAGING SPECIFICATION: PK-45714-001.
5. PCB THICKNESS: SEE CHART
6. EDGE CARD THICKNESS: 1.57±0.15
7. DIMENSIONS GIVEN ACROSS CENTERLINES ARE SYMMETRICAL ABOUT THOSE CENTERLINES WITHIN HALF THE TOTAL TOLERANCE.
8. 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 / 4.33	3.18 2.36
45911-0002	POWER	SIGNAL		
45911-0003	SIGNAL	POWER	3.19 / 3.19	1.57
45911-0004	POWER	SIGNAL		
SEE 45844	SIGNAL	SIGNAL	---	---
SEE 45719	POWER	POWER	---	---



REVSE SLOT TOLRNCE
EC NO: UCP2008-2498 2008/04/16
DRWN: JSCHAFER 2008/04/22
CH'KD: APPR: APATEL 2008/04/25
DESCRIPTION
REV
G

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: MM ONLY
SCALE: 2:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: SAMIEC DATE: 2005/04/14
CHECKED BY: SAMIEC DATE: 2005/04/14
APPROVED BY: MARGULIS DATE: 2005/04/14

TITLE: POWER EDGE ASSEMBLY
POWER / SIGNAL MIXED
VERTICAL SOLDER TAIL

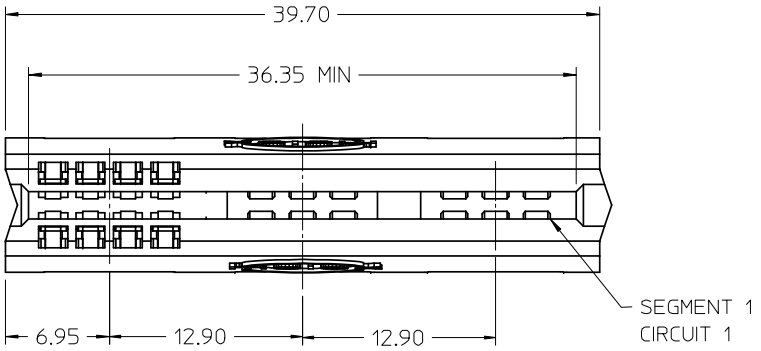
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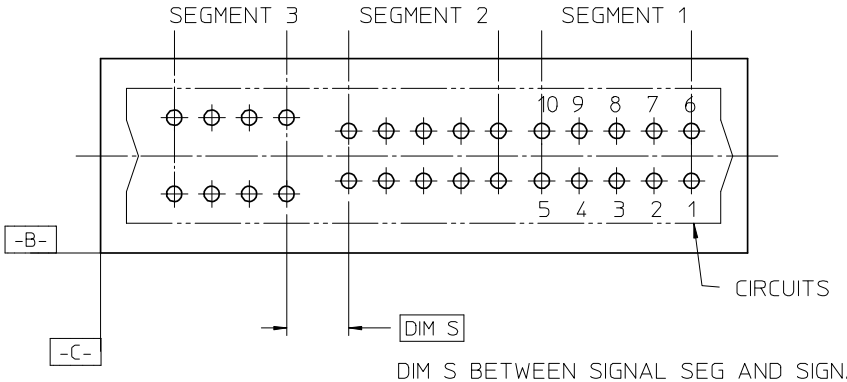
MATERIAL NUMBER: SEE CHART
DOCUMENT NO.: SD-45911-001
SHEET NO.: 1 OF 4

SIZE A

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

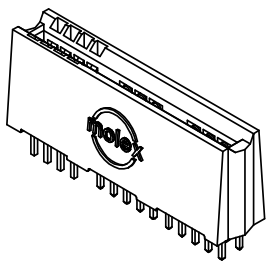




DIM S BETWEEN SIGNAL SEG AND SIGNAL SEG: 5.40
DIM S BETWEEN POWER SEG AND POWER SEG: 2.90
DIM S BETWEEN SIGNAL SEG AND POWER SEG: 4.15

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
45911-0008	POWER	SIGNAL	POWER		2.36
45911-0009	SIGNAL	SIGNAL	POWER		
45911-0010	SIGNAL	POWER	SIGNAL		
45911-0011	POWER	SIGNAL	SIGNAL		
45911-0012	POWER	POWER	SIGNAL		
45911-0013	SIGNAL	POWER	POWER	3.19 / 3.19	1.57
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 2008/04/16
DRWN: JSCHAFER 2008/04/22
CH'KD: 2008/04/25
APPR: APATEL
DESCRIPTION
REV: G

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: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: SAMIEC DATE: 2005/04/14
CHECKED BY: SAMIEC DATE: 2005/04/14
APPROVED BY: MARGULIS DATE: 2005/04/14

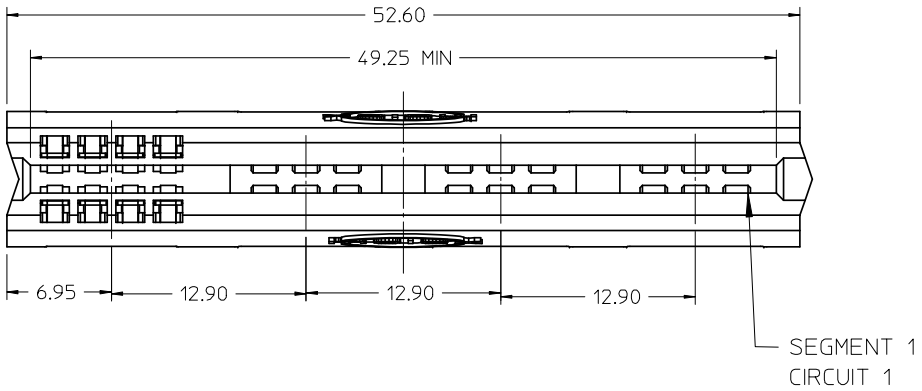
TITLE: POWER EDGE ASSEMBLY POWER / SIGNAL MIXED VERTICAL SOLDER TAIL

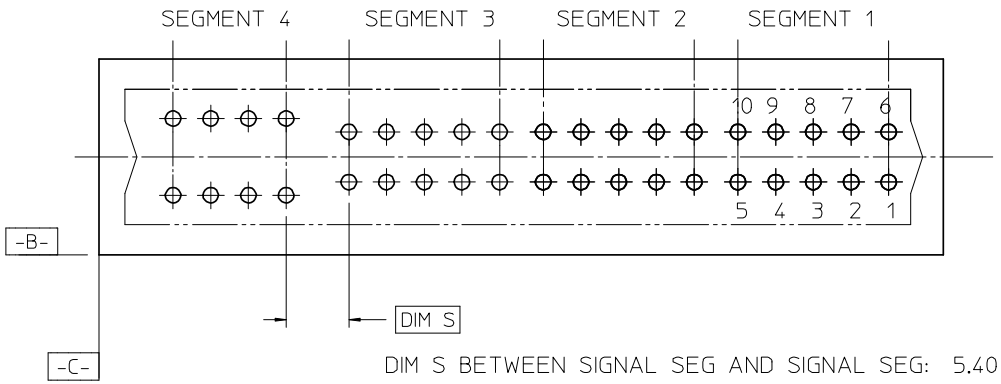
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MATERIAL NUMBER: SEE CHART
DOCUMENT NO.: SD-45911-001
SHEET NO.: 2 OF 4

SIZE: A

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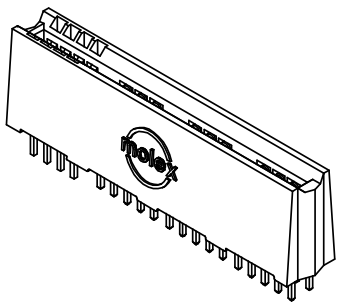




DIM S BETWEEN SIGNAL SEG AND SIGNAL SEG: 5.40
DIM S BETWEEN POWER SEG AND POWER SEG: 2.90
DIM S BETWEEN SIGNAL SEG AND POWER SEG: 4.15

SEE CHART ON SHEET 4
FOR MATERIAL NUMBERS

PCB LAYOUT: COMPONENT SIDE



EC NO: UCP2008-2498 2008/04/16
DRWN:JSCHAFER 2008/04/22
CH'KD: 2008/04/25
APPR:APATEL
DESCRIPTION
REV G

QUALITY SYMBOLS

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
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3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± 0.25	± ---

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 2:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: SAMIEC DATE: 2005/04/14
CHECKED BY: SAMIEC DATE: 2005/04/14
APPROVED BY: MARGULIS DATE: 2005/04/14

TITLE
POWER EDGE ASSEMBLY
POWER / SIGNAL MIXED
VERTICAL SOLDER TAIL

MOLEX INCORPORATED

MATERIAL NUMBER: SEE CHART ON SHEET 4
DOCUMENT NO.: SD-45911-001
SHEET NO.: 3

SIZE A

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MATERIAL NUMBER	SEGMENT 4	SEGMENT 3	SEGMENT 2	SEGMENT 1	DIM P / DIM T	PCB THK
45911-0025	SIGNAL	POWER	POWER	POWER		
45911-0026	POWER	SIGNAL	POWER	POWER		
45911-0027	SIGNAL	SIGNAL	POWER	POWER		
45911-0028	SIGNAL	POWER	SIGNAL	POWER		
45911-0029	POWER	SIGNAL	SIGNAL	POWER		
45911-0030	POWER	POWER	SIGNAL	POWER	4.50 / 4.33	3.18
45911-0031	SIGNAL	SIGNAL	SIGNAL	POWER		2.36
45911-0032	SIGNAL	POWER	POWER	SIGNAL		
45911-0033	POWER	SIGNAL	POWER	SIGNAL		
45911-0034	SIGNAL	SIGNAL	POWER	SIGNAL		
45911-0035	SIGNAL	POWER	SIGNAL	SIGNAL		
45911-0036	POWER	SIGNAL	SIGNAL	SIGNAL		
45911-0037	POWER	POWER	SIGNAL	SIGNAL		
45911-0038	POWER	POWER	POWER	SIGNAL		

MATERIAL NUMBER	SEGMENT 4	SEGMENT 3	SEGMENT 2	SEGMENT 1	DIM P / DIM T	PCB THK
45911-0039	SIGNAL	POWER	POWER	POWER		
45911-0040	POWER	SIGNAL	POWER	POWER		
45911-0041	SIGNAL	SIGNAL	POWER	POWER		
45911-0042	SIGNAL	POWER	SIGNAL	POWER		
45911-0043	POWER	SIGNAL	SIGNAL	POWER		
45911-0044	POWER	POWER	SIGNAL	POWER	3.19 / 3.19	1.57
45911-0045	SIGNAL	SIGNAL	SIGNAL	POWER		
45911-0046	SIGNAL	POWER	POWER	SIGNAL		
45911-0047	POWER	SIGNAL	POWER	SIGNAL		
45911-0048	SIGNAL	SIGNAL	POWER	SIGNAL		
45911-0049	SIGNAL	POWER	SIGNAL	SIGNAL		
45911-0050	POWER	SIGNAL	SIGNAL	SIGNAL		
45911-0051	POWER	POWER	SIGNAL	SIGNAL		
45911-0052	POWER	POWER	POWER	SIGNAL		

EC NO: UCP2008-2498 2008/04/25
DRWN:JSCHAFER
CH'KD:
APPR:APATEL

REV	DESCRIPTION
G	

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
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

		DATE
DRAWN BY	SAMIEC	2005/04/14
CHECKED BY	SAMIEC	2005/04/14
	MARGULIS	2005/04/14

TITLE: POWER EDGE ASSEMBLY POWER / SIGNAL MIXED VERTICAL SOLDER TAIL

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MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45911-001
SHEET NO.: 4 OF 4

SIZE: A

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