

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0459120032

Status:

Active

Overview:

Description:

12.90mm (.508") Pitch EXTreme PowerEdge™, Mixed Power/Signal Card Edge Connector, Double Sided, 4 Segments (Signal, Power, Power, Signal Sequence), Press-Fit

Agency Certification

CSA	LR19980
TUV	30482572
UL	E29179

General

Product Family	Edge Card Connectors
Series	45912
Component Type	Edgecard to PCB
Overview	edge_card_connectors
Product Name	EXTreme PowerEdge™

Physical

Circuits (Loaded)	20
Circuits (maximum)	20
Circuits Detail	8 Signal, 2 Power, 2 Power, 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	High Performance Alloy (HPA), Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
PC Tail Length (in)	0.177 In
PC Tail Length (mm)	4.50 mm
PCB Thickness Recommended (in)	0.093 In
PCB Thickness Recommended (mm)	2.40 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 - Compliant Pin

Electrical

Current - Maximum per Contact	3A, 40A
Voltage - Maximum	250V

Material Info

Reference - Drawing Numbers

Packaging Specification	PK-45714-001
Product Specification	PS-45719-001
Sales Drawing	SD-45912-001

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

45912Series

Mates With

1.58mm (.062") double sided card edge

This document was generated on 06/04/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

6

5

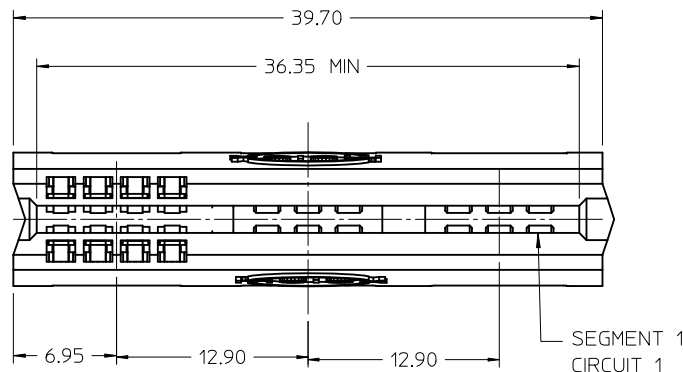
4

3

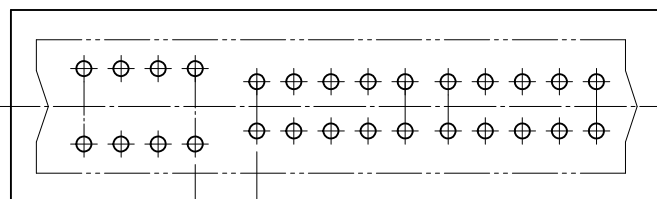
2

1

NOTE:
FINISH (FOR -1008 ONLY)
NICKEL (MATING AREA) 50-150 M.I.
Pd/Ni 100-200 M.I. IN MATING AREA
GOLD FLASH IN MATING AREA
TIN NICKEL (COMPLIANT OR TAIL AREA)
30-60 M.I. NICKEL UNDER 15-60 M.I. TIN



SIGNAL SEGMENT	POWER SEGMENT	POWER SEGMENT
8 7 6 5	10 9 8 7 6	10 9 8 7 6
SEGMENT 3	SEGMENT 2	SEGMENT 1
4 3 2 1	5 4 3 2 1	5 4 3 2 1



-B-

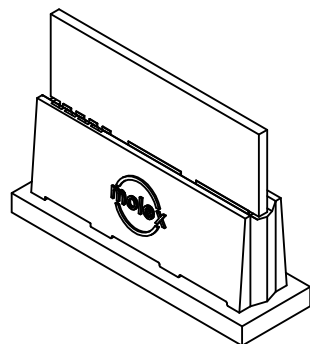
-C-

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

MATERIAL NUMBER	SEGMENT 3	SEGMENT 2	SEGMENT 1	OPTIONAL VOID LOCATION
45912-0007	SIGNAL	POWER	POWER	
45912-0008	POWER	SIGNAL	POWER	
45912-1008 SEE NOTE	POWER	SIGNAL	POWER	
45912-1108	POWER	SIGNAL	POWER	SIGNAL SEG PIN 3
45912-2108	VOID	SIGNAL	POWER	SIGNAL SEG PIN 3
45912-0009	SIGNAL	SIGNAL	POWER	
45912-0010	SIGNAL	POWER	SIGNAL	
45912-0011	POWER	SIGNAL	SIGNAL	
45912-0012	POWER	POWER	SIGNAL	
SEE 45845	SIGNAL	SIGNAL	SIGNAL	
SEE 45714	POWER	POWER	POWER	

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



EC NO: UCP2010-2087 DRWN: JSCHAFER 2010/02/17 CHKD: SAMIEC 2010/03/24 APPR: APATEL 2010/03/25				DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
			mm			INCH	DRAWN BY DATE SAMIEC 2005/04/14		TITLE POWER EDGE ASSEMBLY POWER / SIGNAL MIXED VERTICAL CPI				
4 PLACES			± ---			± ---	CHECKED BY DATE SAMIEC 2005/04/14						
3 PLACES			± ---			± ---	APPROVED BY DATE MARGULIS 2005/04/14						
2 PLACES			± 0.25	± ---	ANGULAR ±1/2°			MATERIAL NUMBER		DOCUMENT NO.		SHEET NO. 2 OF 4	
1 PLACE			± 0.25	± ---				SEE CHART		SD-45912-001			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						SIZE A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

6

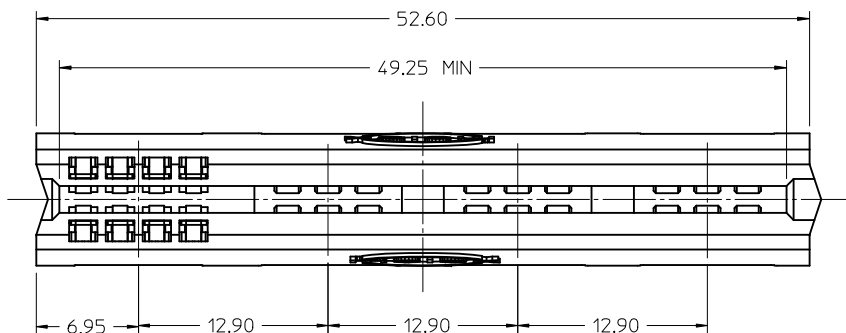
5

4

3

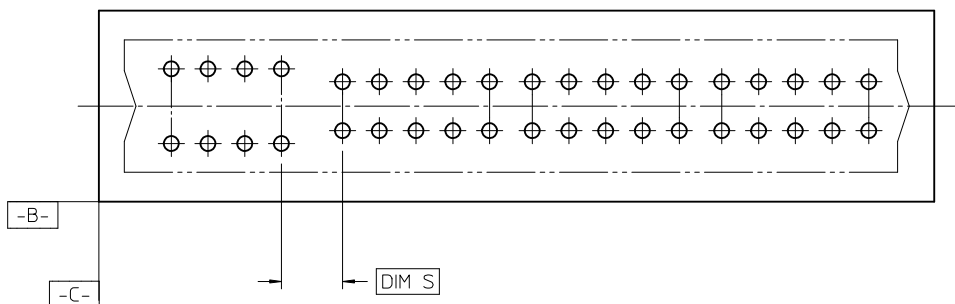
2

1



MATERIAL NUMBER 45912-0025 SHOWN
SEE SHEET ONE FOR OTHER NOTES AND DIM.

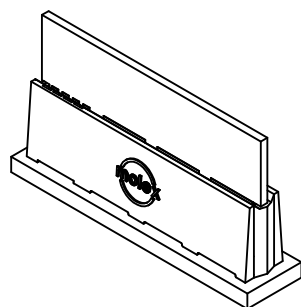
8 7 6 5	10 9 8 7 6	10 9 8 7 6	10 9 8 7 6
SEGMENT 4	SEGMENT 3	SEGMENT 2	SEGMENT 1
4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1



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 4	SEGMENT 3	SEGMENT 2	SEGMENT 1
45912-0025	SIGNAL	POWER	POWER	POWER
45912-0026	POWER	SIGNAL	POWER	POWER
45912-0027	SIGNAL	SIGNAL	POWER	POWER
45912-0028	SIGNAL	POWER	SIGNAL	POWER
45912-0029	POWER	SIGNAL	SIGNAL	POWER
45912-0030	POWER	POWER	SIGNAL	POWER
45912-0031	SIGNAL	SIGNAL	SIGNAL	POWER
45912-0032	SIGNAL	POWER	POWER	SIGNAL
45912-0033	POWER	SIGNAL	POWER	SIGNAL
45912-0034	SIGNAL	SIGNAL	POWER	SIGNAL
45912-0035	SIGNAL	POWER	SIGNAL	SIGNAL
45912-0036	POWER	SIGNAL	SIGNAL	SIGNAL
45912-0037	POWER	POWER	SIGNAL	SIGNAL
45912-0038	POWER	POWER	POWER	SIGNAL



EC NO: UCP2010-2087 DRWN: JSCHAFER 2010/02/17 CHKD: SAMIEC 2010/03/24 APPR: APATEL 2010/03/25				DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm			INCH	DRAWN BY SAMIEC	DATE 2005/04/14	TITLE POWER EDGE ASSEMBLY POWER / SIGNAL MIXED VERTICAL CPI					
4 PLACES			± ---		± ---	CHECKED BY	DATE							
3 PLACES			± ---		± ---									
2 PLACES			± 0.25		± ---	SAMIEC	2005/04/14	MOLEX MOLEX INCORPORATED						
1 PLACE			± 0.25		± ---	APPROVED BY	DATE							
			ANGULAR ±1/2°		MARGULIS	2005/04/14								
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NUMBER SEE CHART		DOCUMENT NO. SD-45912-001		SHEET NO. 3				
						SIZE A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

5

4

3

2

1