

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0459120029

Status:

Active

Overview:

Description:

12.90mm (.508") Pitch EXTreme PowerEdge™, Mixed Power/Signal Card Edge Connector, Double Sided, 4 Segments (Power, Signal, Signal, Power 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	2 Power, 8 Signal, 8 Signal, 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	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

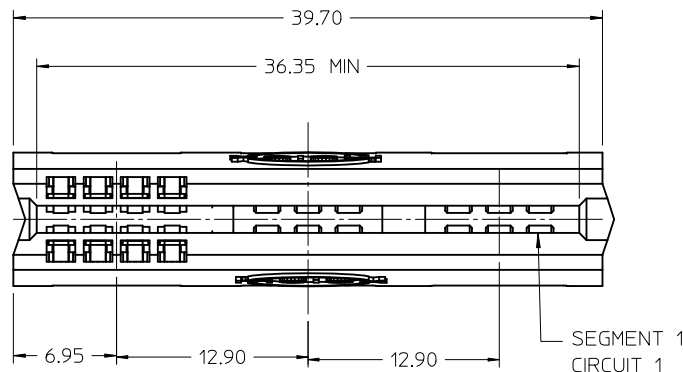
4

3

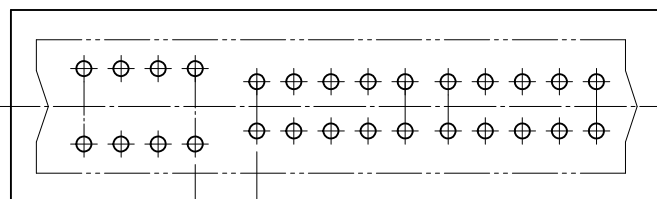
2

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

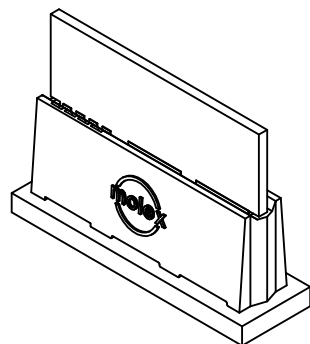


DIM S BETWEEN SIGNAL SEG AND SIGNAL SEG: 5.40
DIM S BETWEEN POWER SEG AND POWER SEG: 2.90
DIM S BETWEEN SIGNAL SEG AND POWER SEG: 4.15

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

6

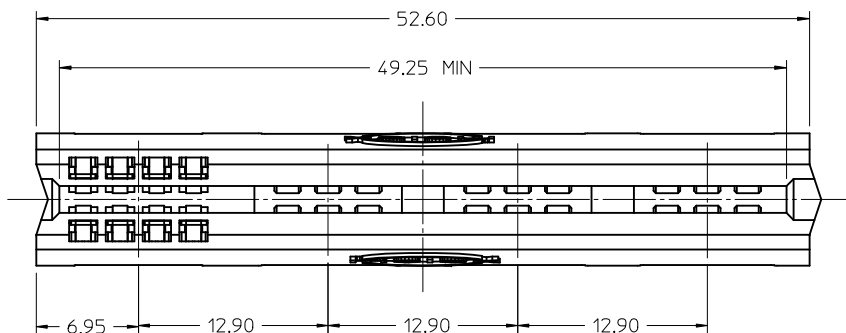
5

4

3

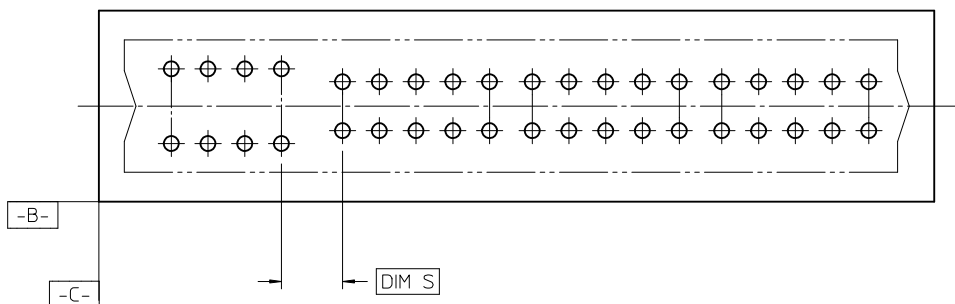
2

1



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

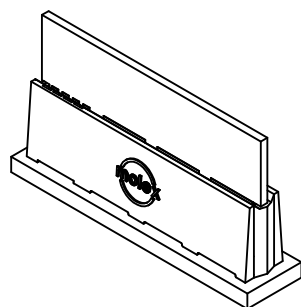
8 7 6 5	10 9 8 7 6	10 9 8 7 6	10 9 8 7 6
SEGMENT 4	SEGMENT 3	SEGMENT 2	SEGMENT 1
4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1



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	2010/02/17	2010/03/24	2010/03/25
DRWN: JSCHAFER	CHKD: SAMIEC	APPR: APATEL	
REV			

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	
DRAWN BY	DATE
SAMIEC	2005/04/14
CHECKED BY	DATE
SAMIEC	2005/04/14
APPROVED BY	DATE
MARGULIS	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 CPI			
 MOLEX INCORPORATED			
DOCUMENT NO. SD-45912-001			SHEET NO. 3

5

4

3

2

1