

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0457140001](#)  
**Status:** **Active**  
**Overview:** edge card connectors  
**Description:** 12.90mm (.508") Pitch EXTreme PowerEdge™, Connector, 2 Segments (4 Total Contacts), Press-Fit, 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 [45714](#)  
Component Type Edgecard to PCB  
MolexKits Yes  
Overview [edge\\_card\\_connectors](#)  
Product Name Bus Bar Socket, EXTreme PowerEdge™

**Physical**

Circuits (Loaded) 4  
Circuits (maximum) 4  
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) 0.177 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

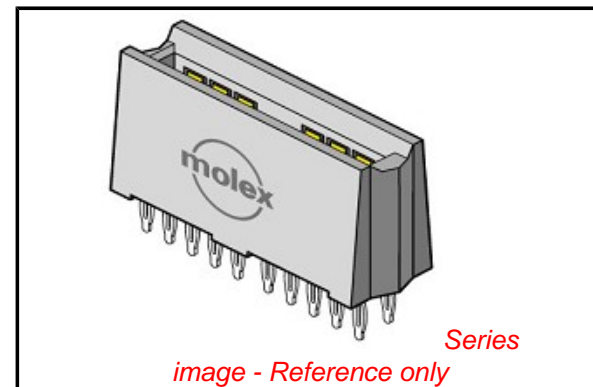
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification PK-45714-001



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
Not Reviewed  
**Halogen-Free Status**  
**Not Reviewed**

**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**

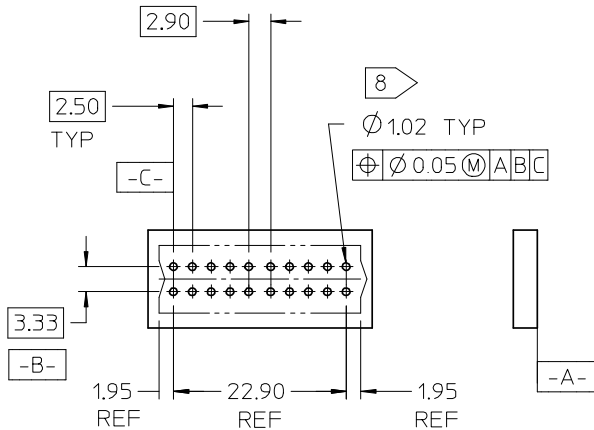
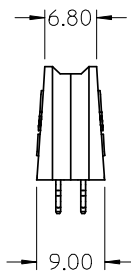
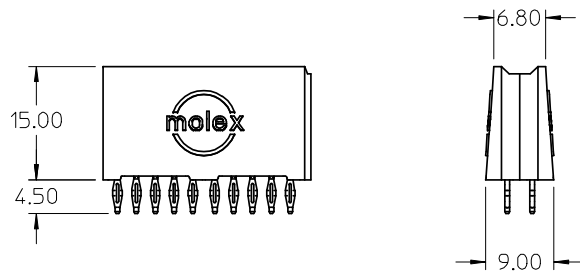
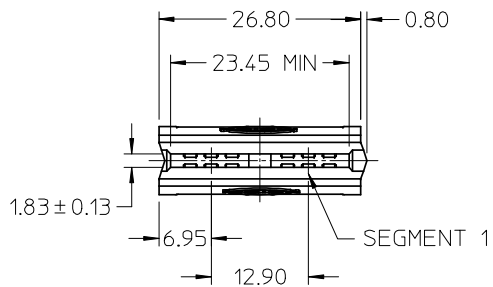
[45714Series](#)

**Mates With**

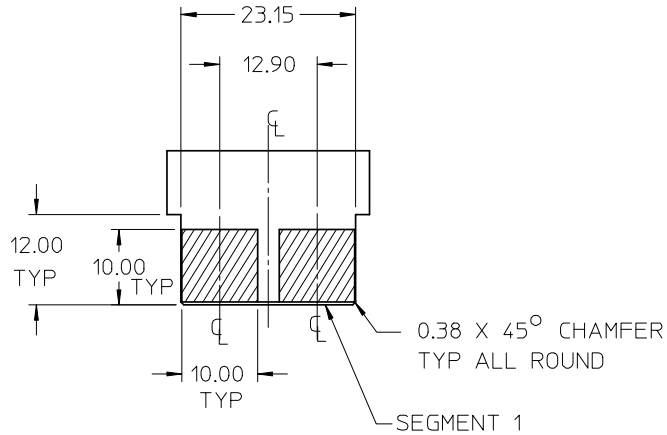
1.58mm (.062") double sided card edge or bus bar tab

This document was generated on 06/04/2010

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PCB LAYOUT: COMPONENT SIDE

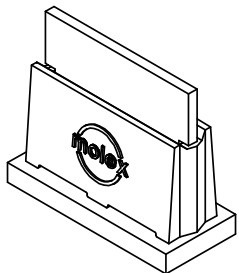


RECOMMENDED EDGE CARD LAYOUT  
TOLERANCE: ±0.05

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-45719-01.
- PACKAGING SPECIFICATION: PK-45714-001.
- PCB THICKNESS: 2.36 MIN
- EDGE CARD THICKNESS: 1.57±0.15
- DIMENSIONS GIVEN ACROSS CENTERLINES ARE SYMMETRICAL ABOUT THOSE CENTERLINES WITHIN HALF TOTAL TOLERANCE.
- PCB HOLE SPECIFICATION: SEE PS-45719-001
- VOIDED SEGMENTS DO NOT HAVE TERMINALS IN THE TOP OR BOTTOM ROW

MATERIAL NUMBER	VOIDED SEGMENT
45714-0001	NONE
45714-2001	1
45714-2002	2



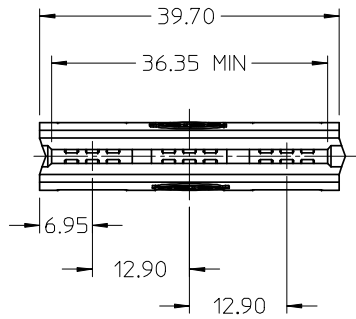
EC NO: UCP2008-2498	DRWN: JSCHAFFER	2008/04/16	CHKD: APATEL	2008/04/25	APPR: APATEL	2008/04/25	DESCRIPTION
D	REV						

GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE	
	mm	INCH	MM ONLY	
4 PLACES	± ---	± ---	DRAWN BY	DATE
3 PLACES	± ---	± ---	MARGULIS	2003/11/11
2 PLACES	± 0.25	± ---	CHECKED BY	DATE
1 PLACE	± 0.25	± ---	MARGULIS	2003/11/11
ANGULAR ±1/2°			APPROVED BY	DATE
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MARGULIS	2003/11/11

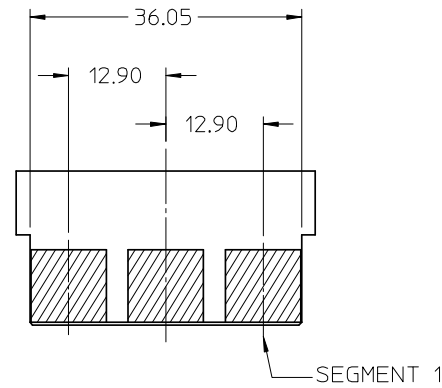
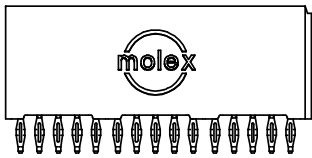
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
1:1	METRIC	
TITLE		
POWER EDGE ASSEMBLY POWER VERTICAL CPI ( 2 SEGMENT PARTS )		
DRAWN BY		Molex MOLEX INCORPORATED
DATE		
CHECKED BY		
DATE		
APPROVED BY		DOCUMENT NO.
DATE		
MARGULIS		SD-45714-001
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
A		

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
1:1	METRIC	
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DRAWN BY		Molex MOLEX INCORPORATED
DATE		
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DOCUMENT NO.	SHEET NO.
SD-45714-001	1 OF 3

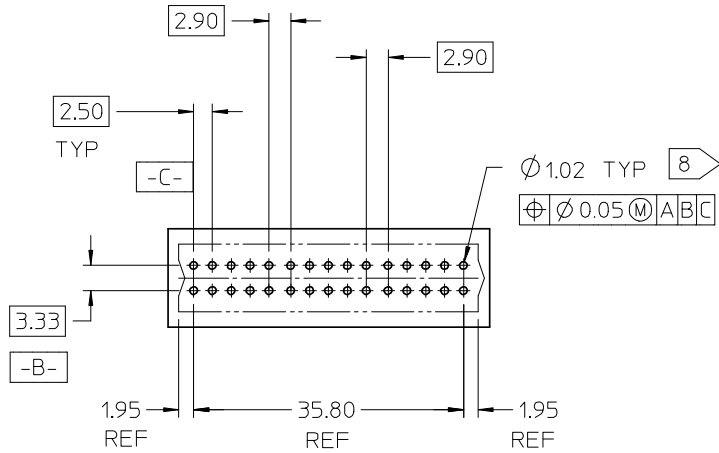


NOTES:  
1. FOR ALL OTHER DIMENSIONS AND NOTES SEE SHEET 1.

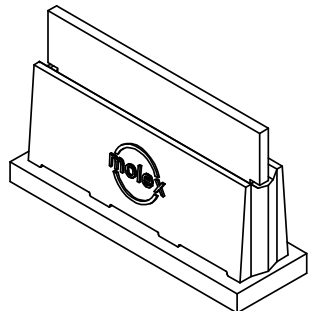


RECOMMENDED EDGE CARD LAYOUT  
EDGE CARD TOLERANCE: ±0.05

MATERIAL NUMBER	VOIDED SEGMENT
45714-0002	NONE
45714-3001	1
45714-3002	2
45714-3003	3
45714-3004	1,2
45714-3005	1,3
45714-3006	2,3



PCB LAYOUT: COMPONENT SIDE



EC NO: UCP2008-2498	DRWN: JSCHAFER	2008/04/16	DESCRIPTION
	CHKD: APATEL	2008/04/22	
	APPR: APATEL	2008/04/25	
D	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 DIMENSIONS		

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
MARGULIS	2003/11/11
CHECKED BY	DATE
MARGULIS	2003/11/11
APPROVED BY	DATE
MARGULIS	2003/11/11
SIZE	A

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
1:1	METRIC	
TITLE		
POWER EDGE ASSEMBLY POWER VERTICAL CPI ( 3 SEGMENT PARTS )		
MOLEX INCORPORATED		
DOCUMENT NO.	SHEET NO.	
SD-45714-001	2	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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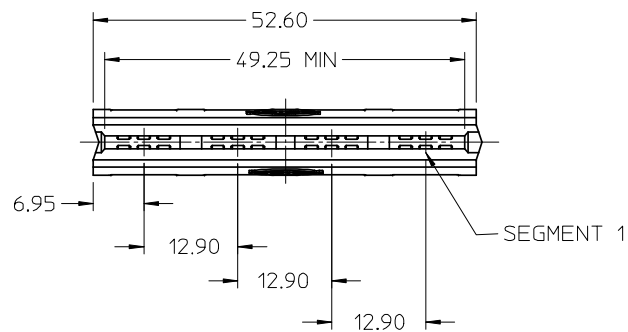
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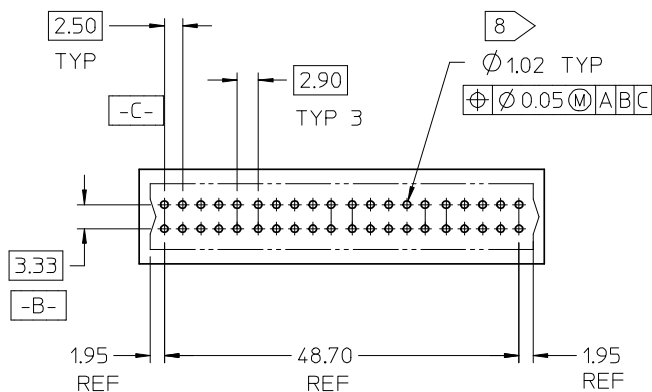
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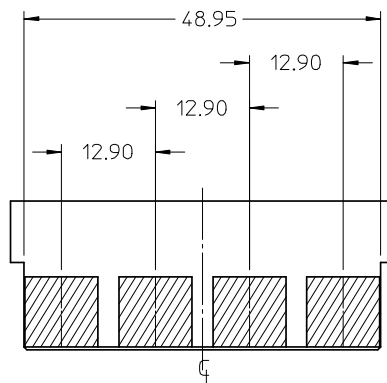
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NOTES:  
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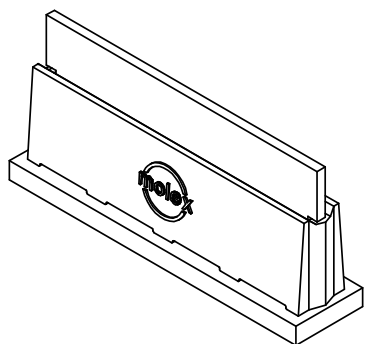


PCB LAYOUT: COMPONENT SIDE



RECOMMENDED EDGE CARD LAYOUT  
EDGE CARD TOLERANCE: ±0.05

MATERIAL NUMBER	VOIDED SEGMENT
45714-0003	NONE
45714-4001	1
45714-4002	2
45714-4003	3
45714-4004	4
45714-4005	1,2
45714-4006	1,3
45714-4007	1,4
45714-4008	2,3
45714-4009	2,4
45714-4010	3,4



EC NO: UCP2008-2498 DRWN: JSCHAFFER 2008/04/16 CHKD: 2008/04/22 APPR: APATEL 2008/04/25	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE <b>POWER EDGE ASSEMBLY          POWER VERTICAL CPI          ( 4 SEGMENT PARTS )</b>			
		4 PLACES	± ---	± ---	MARGULIS	2003/11/11				
		3 PLACES	± ---	± ---	CHECKED BY	DATE	<b>MOLEX INCORPORATED</b>			
		2 PLACES	± 0.25	± ---	MARGULIS	2003/11/11				
1 PLACE	± 0.25	± ---	APPROVED BY	DATE	DOCUMENT NO. <b>SD-45714-001</b>	SHEET NO. 3				
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							

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