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Part Number: [0459841931](#)
Status: **Active**
Overview: [extreme_lphpower](#)
Description: EXTreme LPHPower™ Receptacle Header, Right Angle, 10 Power Contacts, Select Gold (Au) Plating, for 1.57mm (.062") Thick PC Board

Documents:

[3D Model](#) [Product Specification PS-45984-001 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

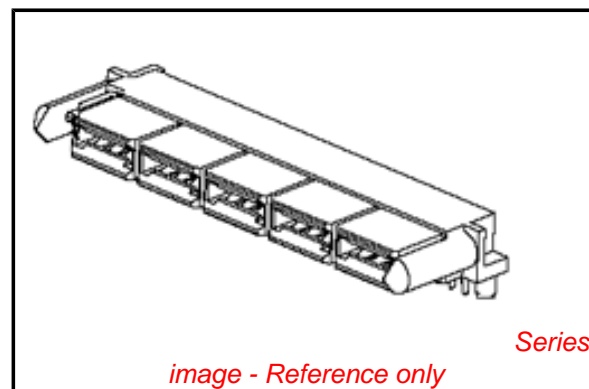
CSA LR19980
 UL E29179

General

Product Family PCB Receptacles
 Series [45984](#)
 Application Board-to-Board
 Comments 10 Power Blades
 Overview [extreme_lphpower](#)
 Product Name EXTreme LPHPower™

Physical

Circuits (Loaded) 10
 Circuits (maximum) 10
 Circuits Detail 10 Power, No Signal
 Color - Resin Black
 Durability (mating cycles max) 250
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part No
 Keying to Mating Part Yes
 Lock to Mating Part No
 Material - Metal High Performance Alloy (HPA)
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Right Angle
 PC Tail Length (in) 0.114 In
 PC Tail Length (mm) 2.90 mm
 PCB Locator No
 PCB Retention None
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.57 mm
 Packaging Type Tray
 Pitch - Mating Interface (in) 0.472 In
 Pitch - Mating Interface (mm) 12.00 mm
 Pitch - Term. Interface (in) 0.079 In, 0.098 In
 Pitch - Term. Interface (mm) 2.00 mm, 2.50 mm
 Plating min: Mating (µin) 30
 Plating min: Mating (µm) 0.75
 Plating min: Termination (µin) 150
 Plating min: Termination (µm) 3.75
 Polarized to Mating Part Yes
 Polarized to PCB No



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
 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

[45984Series](#)

Mates With

[45985 EXTreme LPHPower™ Headers](#)

Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	20A
Grounding to PCB	No
Voltage - Maximum	250V AC (RMS)/DC

Solder Process Data

Duration at Max. Process Temperature (seconds)	15
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	230

Material Info

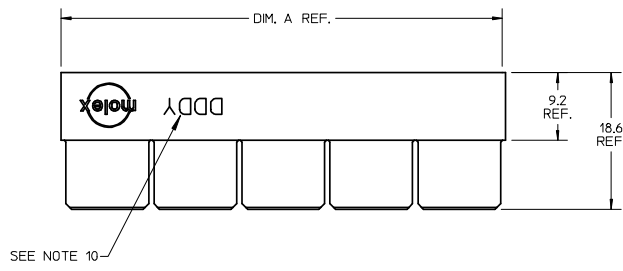
Reference - Drawing Numbers

Packaging Specification	PK-45984-001
Product Specification	PS-45984-001
Sales Drawing	SD-45984-102

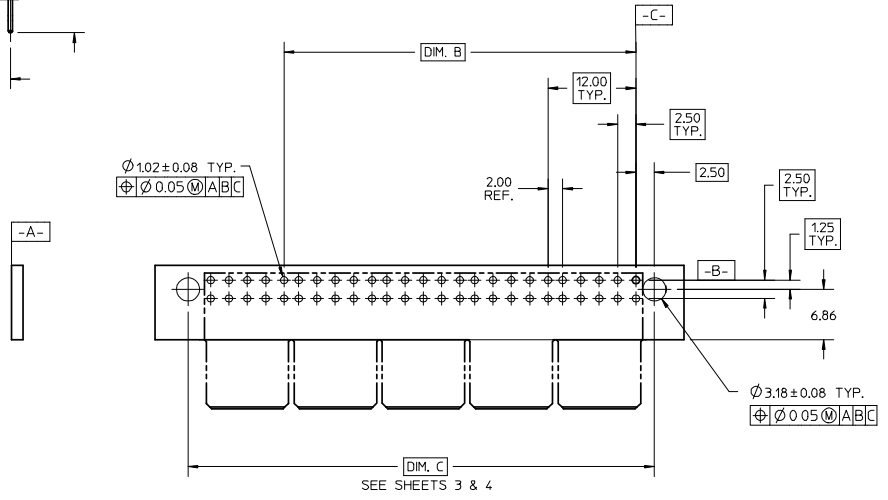
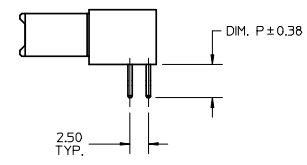
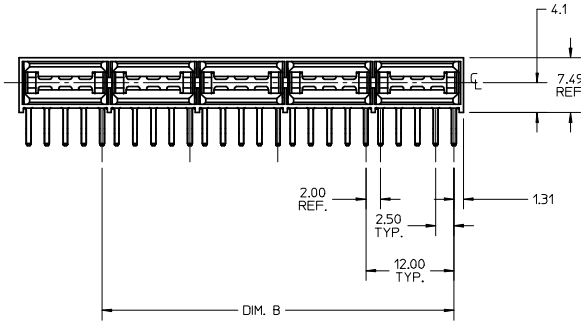
This document was generated on 05/21/2010

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10 9 8 7 6 5 4 3 2 1



SEE NOTE 10



PCB LAYOUT: COMPONENT SIDE
(PEG HOLES OPTIONAL)

CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM P
4	45984-4911	24.60	12.00	4.50
6	45984-6911	36.60	24.00	
8	45984-8911	48.60	36.00	
10	45984-1911	60.60	48.00	3.60
4	45984-4921	24.60	12.00	
6	45984-6921	36.60	24.00	
8	45984-8921	48.60	36.00	2.90
10	45984-1921	60.60	48.00	
4	45984-4931	24.60	12.00	
6	45984-6931	36.60	24.00	
8	45984-8931	48.60	36.00	
10	45984-1931	60.60	48.00	

- NOTES:
1. MATERIAL - HOUSING: LCP, 94V-0, BLACK
MATERIAL - POWER CONTACT: COPPER ALLOY
 2. FINISH: SELECT GOLD (WITH EB-1: 0.76 μ M/30 MI MIN. IN CONTACT AREA
SELECT TIN: 3.81 μ M/150 MI MIN. IN PC TAIL AREA
BOTH OVER NICKEL: 1.27 μ M/50 MI MIN. PER ES-88-229.
TERMINALS ARE LUBRICATED WITH EB-1 LUBRICANT.
 3. PRODUCT SPECIFICATION: PS-45984-001
 4. PACKAGING SPECIFICATION: TRAY PER PK-45984-001
 5. SEE SHEET 5 FOR CKT IDENTIFICATION
 6. PARTS ARE RoHS COMPLIANT.
 7. PEG HOLES ARE OPTIONAL. SEE SHEET 3 & 4.
 8. MATES TO .1571,062 CARD EDGE OR MOLEX SERIES 45985.
 9. PARTS CONFORM TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.
 10. DATE CODE (3-DIGIT DAY, 1-DIGIT YEAR) TO BE PRINTED AND LOCATED AS SHOWN.

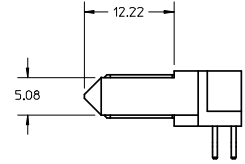
RELEASED EC NO: UCP2007-3140 DRW: BANDURA 2008/03/03 CHKD: 2008/03/04 APPR: APATEL 2008/03/06	DESCRIPTION LPH RECEPTACLE ASSEMBLY RIGHT ANGLE POWER CONNECTOR	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
		$\nabla=0$ $\sphericalangle=0$	mm INCH	MM ONLY	1:1	METRIC	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°	DRAWN BY DATE BANDURA 5/16/2006 CHECKED BY DATE BANDURA 5/16/2006 APPROVED BY DATE PATEL	TITLE	LPH RECEPTACLE ASSEMBLY RIGHT ANGLE POWER CONNECTOR		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE CHART SIZE B	MOLEX INCORPORATED DOCUMENT NO. SD-45984-102	SHEET NO. 1 OF 5		

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1



OPTIONAL GUIDES

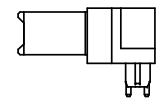


CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM P
4	45984-4912	31.01	12.00	4.50
6	45984-6912	43.01	24.00	
8	45984-8912	55.01	36.00	
10	45984-1912	67.01	48.00	3.60
4	45984-4922	31.01	12.00	
6	45984-6922	43.01	24.00	
8	45984-8922	55.01	36.00	2.90
10	45984-1922	67.01	48.00	
4	45984-4932	31.01	12.00	
6	45984-6932	43.01	24.00	
8	45984-8932	55.01	36.00	
10	45984-1932	67.01	48.00	

RELEASED EC NO: UCP2007-3140 DRWN: BANDURA 2008/03/03 CHKD: 2008/03/04 APPR: APATEL 2008/03/06	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		$\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°	MM ONLY	1:1	METRIC	BANDURA 5/16/2006 BANDURA 5/16/2006 PATEL	TITLE LPH RECEPTACLE ASSEMBLY RIGHT ANGLE POWER CONNECTOR MOLEX INCORPORATED DOCUMENT NO. SD-45984-102 SHEET NO. 2 OF 5
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART	MATERIAL NO.	APPROVED BY	DATE		
			SIZE B					

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1



CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM C	DIM P
4	45984-4913	31.01	12.00	27.60	4.50
6	45984-6913	43.01	24.00	39.60	
8	45984-8913	55.01	36.00	51.60	
10	45984-1913	67.01	48.00	63.60	3.60
4	45984-4923	31.01	12.00	27.60	
6	45984-6923	43.01	24.00	39.60	
8	45984-8923	55.01	36.00	51.60	2.90
10	45984-1923	67.01	48.00	63.60	
4	45984-4933	31.01	12.00	27.60	
6	45984-6933	43.01	24.00	39.60	
8	45984-8933	55.01	36.00	51.60	
10	45984-1933	67.01	48.00	63.60	

RELEASED EC NO: UCP2007-3140 DRWN: BANDURA 2008/03/03 CHKD: 2008/03/04 APPR: APATEL 2008/03/06	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		$\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°	MM ONLY	1:1	METRIC	BANDURA 5/16/2006 BANDURA 5/16/2006 PATEL	LPH RECEPTACLE ASSEMBLY RIGHT ANGLE POWER CONNECTOR
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
		SEE CHART		SD-45984-102	3 OF 5			

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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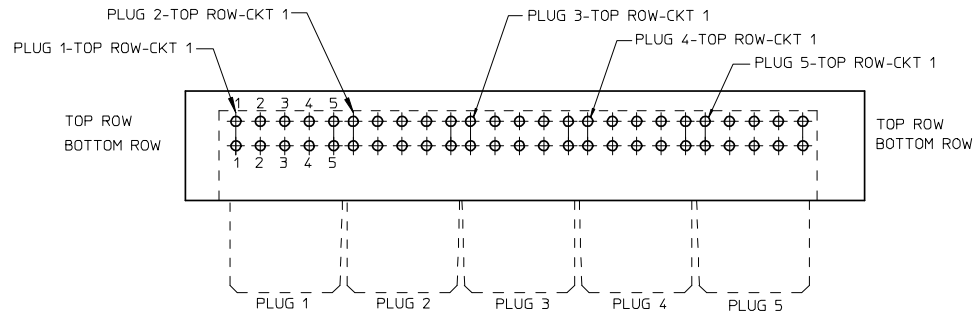
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CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM C	DIM P
4	45984-4914	31.01	12.00	27.60	4.50
6	45984-6914	43.01	24.00	39.60	
8	45984-8914	55.01	36.00	51.60	
10	45984-1914	67.01	48.00	63.60	3.60
4	45984-4924	31.01	12.00	27.60	
6	45984-6924	43.01	24.00	39.60	
8	45984-8924	55.01	36.00	51.60	2.90
10	45984-1924	67.01	48.00	63.60	
4	45984-4934	31.01	12.00	27.60	
6	45984-6934	43.01	24.00	39.60	
8	45984-8934	55.01	36.00	51.60	
10	45984-1934	67.01	48.00	63.60	

RELEASED EC NO: UCP2007-3140 DRAWN: BANDURA 2008/03/03 CHKD: 2008/03/04 APPR: APATEL 2008/03/06	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	DRAWN BY BANDURA	DATE 5/16/2006	TITLE LPH RECEPTACLE ASSEMBLY RIGHT ANGLE POWER CONNECTOR				
		3 PLACES ± --- ± ---	CHECKED BY BANDURA	DATE 5/16/2006					
		2 PLACES ± 0.25 ± ---	APPROVED BY PATEL		MOLEX INCORPORATED				
1 PLACE ± --- ± ---	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-45984-102	SHEET NO. 4 OF 5					
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							

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**PCB LAYOUT: COMPONENT SIDE
SEE SHEET 1 FOR DIMENSIONS**

RELEASED EC NO: UCP2007-3140 DRWN: BANDURA 2008/03/03 CHKD: 2008/03/04 APPR: APATEL 2008/03/06	DESCRIPTION REV B	QUALITY SYMBOLS ▽=0 ▽7=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± --- ± --- ANGULAR ± 1/2°	DIMENSION STYLE MM ONLY DRAWN BY BANDURA DATE 5/16/2006 CHECKED BY BANDURA DATE 5/16/2006 APPROVED BY PATEL	SCALE 1:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE LPH RECEPTACLE ASSEMBLY RIGHT ANGLE POWER CONNECTOR	MOLEX INCORPORATED DOCUMENT NO. SD-45984-102 SHEET NO. 5 OF 5
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. SEE CHART	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
					SIZE B		