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Part Number: [0459858131](#)
Status: **Active**
Overview: [extreme_lphpower](#)
Description: 1.27mm (.050"), 12.00mm (.472") Pitch, EXTreme LPHPower™ Header, Right Angle, 8 Power Contacts, 20 Signal Contacts, Select Gold (Au) Plating, for 3.18mm (.125") Thick PC Board

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

Agency Certification

CSA	LR19980
TUV	30683046
UL	E29179

General

Product Family	PCB Headers
Series	45985
Application	Board-to-Board
Overview	extreme_lphpower
Product Name	EXTreme LPHPower™

Physical

Breakaway	No
Circuits (Loaded)	28
Circuits (maximum)	28
Circuits Detail	8 Power, 20 Signal
Color - Resin	Black
Durability (mating cycles max)	250
First Mate / Last Break	Yes
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	No
Material - Metal	Brass, 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)	0.177 In
PC Tail Length (mm)	4.50 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.125 In
PCB Thickness Recommended (mm)	3.18 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.050 In, 0.472 In
Pitch - Mating Interface (mm)	1.27 mm, 12.00 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.75
Plating min: Termination (µin)	150, 50
Plating min: Termination (µm)	1.25, 3.75
Polarized to Mating Part	Yes

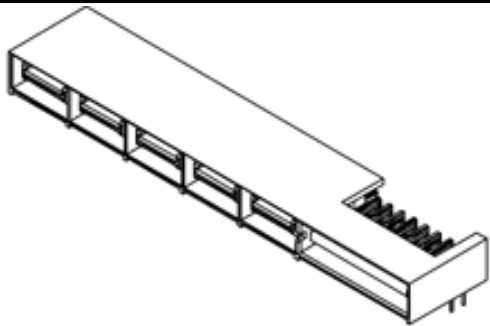


image - Reference only

Series

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

[45985Series](#)

Mates With

[45984](#) EXTreme LPHPower™ PCB Receptacles

Polarized to PCB	Yes
Shrouded	Fully
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	23A
Voltage - Maximum	250V AC (RMS)/DC

Solder Process Data

Duration at Max. Process Temperature (seconds)	20
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

Material Info

Reference - Drawing Numbers

Packaging Specification	PK-45984-001
Product Specification	PS-45984-001
Sales Drawing	SD-45985-800

This document was generated on 05/25/2010

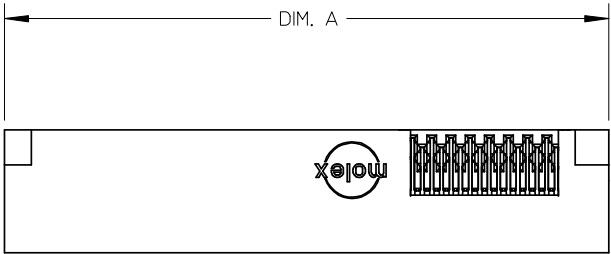
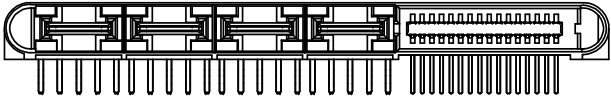
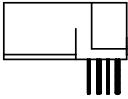
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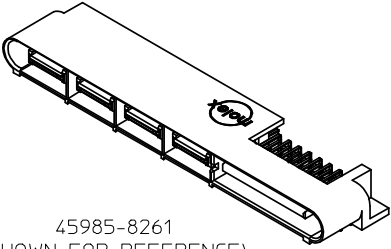
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GUIDE OPTIONS

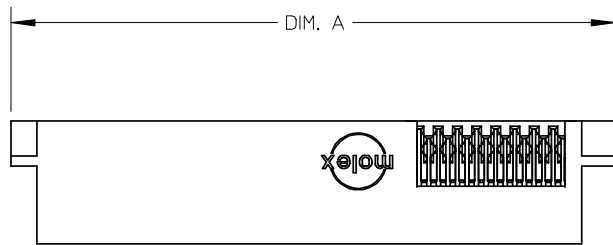
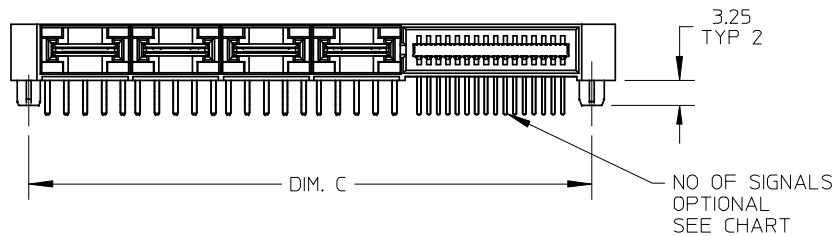
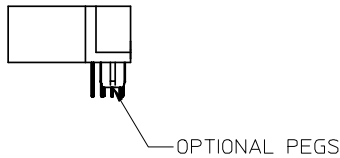
NO OF SIGNAL	MATERIAL NUMBER	DIM A REF	DIM P	PCB THK
12	45985-8211	67.66	4.50	3.18
16	45985-8221	70.20		
20	45985-8231	72.74		
24	45985-8241	75.28		
28	45985-8251	77.82		
32	45985-8261	80.36	3.90	2.36
36	45985-8271	82.90		
40	45985-8281	85.44		
12	45985-8212	67.26		
16	45985-8222	70.20		
20	45985-8232	72.74		
24	45985-8242	75.28		
28	45985-8252	77.82		
32	45985-8262	80.36	2.90	1.57
36	45985-8272	82.90		
40	45985-8282	85.44		
12	45985-8213	67.66		
16	45985-8223	70.20		
20	45985-8233	72.74		
24	45985-8243	75.28		
28	45985-8253	77.82		
32	45985-8263	80.36		
36	45985-8273	82.90		
40	45985-8283	85.44		

NOTE:
1. SEE SHEET 1 FOR DIMENSIONS NOT SHOWN.



45985-8261
(SHOWN FOR REFERENCE)
SEE CHART

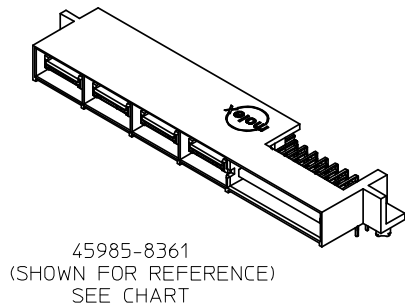
REVISED EC NO: UCP2007-3140 DRWN:MBANDURA CHKD: APPR:APATEL	2008/03/03 2008/03/04 2008/03/06	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION		
				mm	INCH	DRAWN BY SCHAFER	DATE 2005/05/17	TITLE LPH PLUG ASSEMBLY RT ANGLE 8 CIRCUIT POWER CONNECTOR	 MOLEX INCORPORATED			
			4 PLACES	± ---	± ---	CHECKED BY SAMIEC	DATE 2005/05/17					
			3 PLACES	± ---	± ---	APPROVED BY MARGULIS	DATE 2005/05/18					
			2 PLACES	± 0.25	± ---							
			1 PLACE	± ---	± ---							
			ANGULAR ±1/2°			MATERIAL NO. SEE CHART		DOCUMENT NO. SD-45985-800		SHEET NO. 2 OF 5		
			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					



MOUNTING PEG OPTIONS

NO OF SIGNAL	MATERIAL NUMBER	DIM A REF	DIM C	DIM P	PCB THK
12	45985-8311	67.66	61.98	4.50	3.18
16	45985-8321	70.20	64.52		
20	45985-8331	72.74	67.06		
24	45985-8341	75.28	69.60		
28	45985-8351	77.82	72.14		
32	45985-8361	80.36	74.68		
36	45985-8371	82.90	77.22		
40	45985-8381	85.44	79.76		
12	45985-8312	67.66	61.98	3.90	2.36
16	45985-8322	70.20	64.52		
20	45985-8332	72.74	67.06		
24	45985-8342	75.28	69.60		
28	45985-8352	77.82	72.14		
32	45985-8362	80.36	74.68		
36	45985-8372	82.90	77.22		
40	45985-8382	85.44	79.76		
12	45985-8313	67.66	61.98	2.90	1.57
16	45985-8323	70.20	64.52		
20	45985-8333	72.74	67.06		
24	45985-8343	75.28	69.60		
28	45985-8353	77.82	72.14		
32	45985-8363	80.36	74.68		
36	45985-8373	82.90	77.22		
40	45985-8383	85.44	79.76		

NOTE:
1. SEE SHEET 1 FOR DIMENSIONS NOT SHOWN.



45985-8361
(SHOWN FOR REFERENCE)
SEE CHART

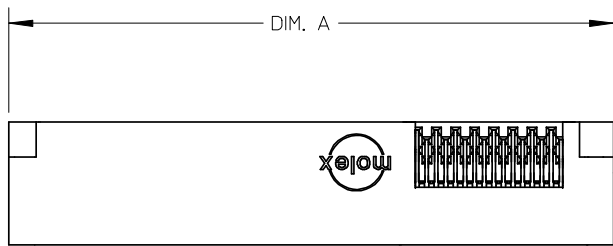
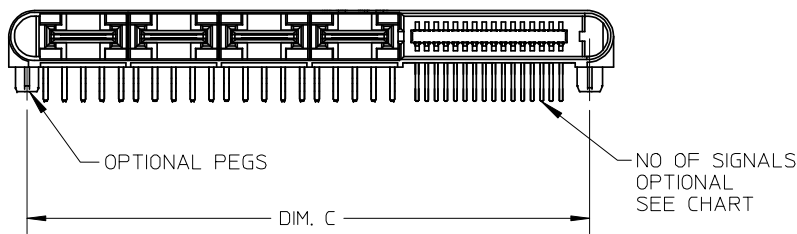
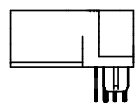
REVISED EC NO: UCP2007-3140 DRWN:MBANDURA CHKD: APPR:APATEL REV C	DESCRIPTION 2008/03/03 2008/03/04 2008/03/06	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY SCHAFER	DATE 2005/05/17	TITLE LPH PLUG ASSEMBLY RT ANGLE 8 CIRCUIT POWER CONNECTOR	MOLEX INCORPORATED	SHEET NO. 3 OF 5	
		4 PLACES	± ---	± ---	CHECKED BY SAMIEC	DATE 2005/05/17				
		3 PLACES	± ---	± ---	APPROVED BY MARGULIS					DATE 2005/05/18
		2 PLACES	± 0.25	± ---						
		1 PLACE	± ---	± ---						
		ANGULAR ±1/2°								
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO. SEE CHART		DOCUMENT NO. SD-45985-800			
		SIZE A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

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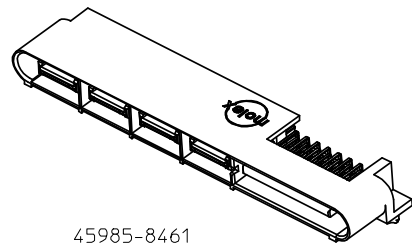
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GUIDE & MOUNTING PEG OPTIONS

NO OF SIGNAL	MATERIAL NUMBER	DIM A REF	DIM C	DIM P	PCB THK
12	45985-8411	67.66	61.98	4.50	3.18
16	45985-8421	70.20	64.52		
20	45985-8431	72.74	67.06		
24	45985-8441	75.28	69.60		
28	45985-8451	77.82	72.14		
32	45985-8461	80.36	74.68		
36	45985-8471	82.90	77.22	3.90	2.36
40	45985-8481	85.44	79.76		
12	45985-8412	67.66	61.98		
16	45985-8422	70.20	64.52		
20	45985-8432	72.74	67.06		
24	45985-8442	75.28	69.60		
28	45985-8452	77.82	72.14		
32	45985-8462	80.36	74.68	2.90	1.57
36	45985-8472	82.90	77.22		
40	45985-8482	85.44	79.76		
12	45985-8413	67.66	61.98		
16	45985-8423	70.20	64.52		
20	45985-8433	72.74	67.06		
24	45985-8443	75.28	69.60		
28	45985-8453	77.82	72.14		
32	45985-8463	80.36	74.68		
36	45985-8473	82.90	77.22		
40	45985-8483	85.44	79.76		

NOTE:
1. SEE SHEET 1 FOR DIMENSIONS NOT SHOWN.



45985-8461
(SHOWN FOR REFERENCE)
SEE CHART

REVISED EC NO: UCP2007-3140 DRWN:MBANDURA CHKD: APPR:APATEL	2008/03/03 2008/03/04 2008/03/06	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	TITLE LPH PLUG ASSEMBLY RT ANGLE 8 CIRCUIT POWER CONNECTOR				
				mm	INCH	DRAWN BY SCHAFER	DATE 2005/05/17								
			4 PLACES	± ---	± ---	CHECKED BY SAMIEC	DATE 2005/05/17								
			3 PLACES	± ---	± ---	APPROVED BY MARGULIS	DATE 2005/05/18								
			2 PLACES	± 0.25	± ---	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-45985-800		SHEET NO. 4 OF 5					
			1 PLACE	± ---	± ---	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
			ANGULAR ±1/2°												
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS												

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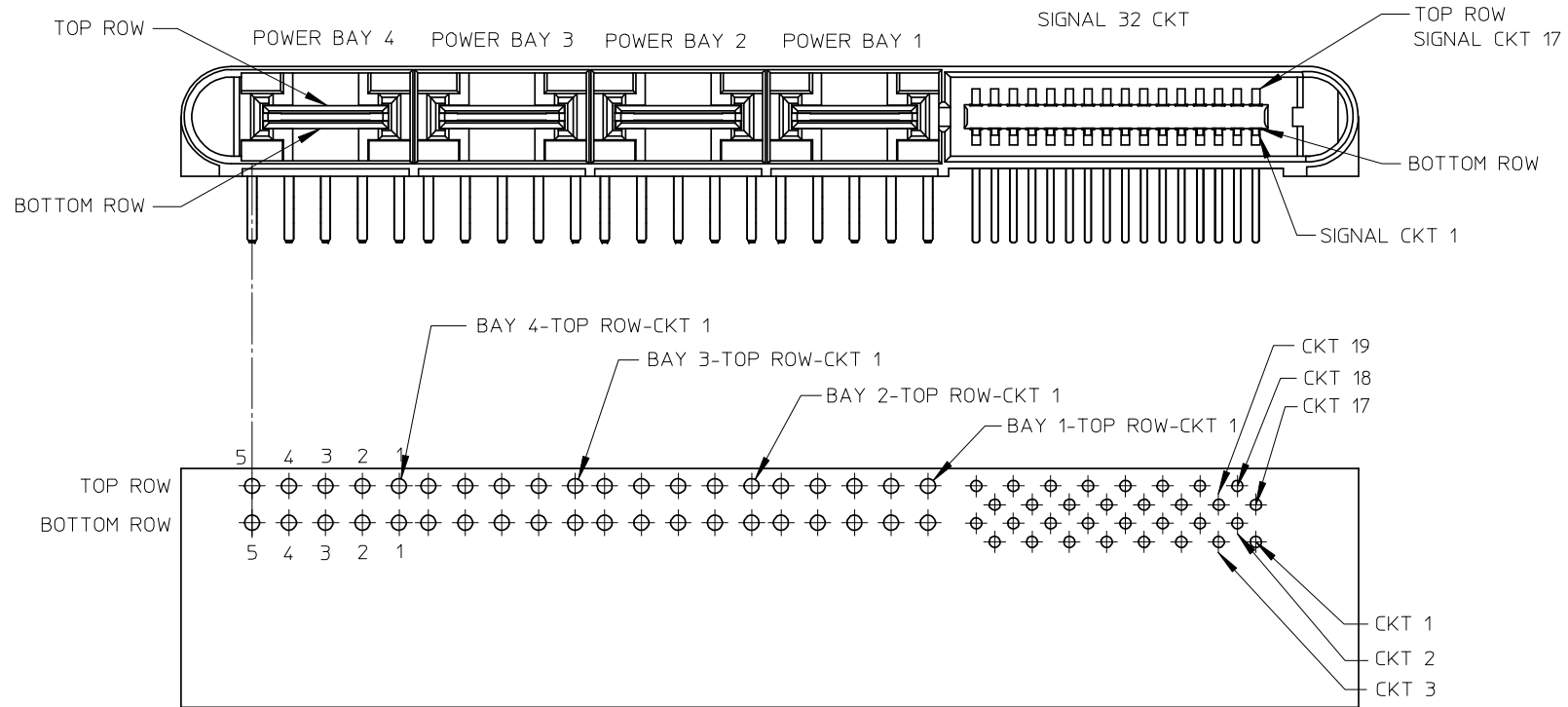
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CIRCUIT IDENTIFICATION



PCB LAYOUT: COMPONENT SIDE

REVISED EC NO: UCP2007-3140 DRWN:MBANDURA CHKD: APPR:APATEL REV	DESCRIPTION 2008/03/03 2008/03/04 2008/03/06	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY SCHAFFER	DATE 2005/05/17	TITLE LPH PLUG ASSEMBLY RT ANGLE 8 CIRCUIT POWER CONNECTOR				
		4 PLACES	± ---	± ---	CHECKED BY	DATE					
		3 PLACES	± ---	± ---	SAMIEC	2005/05/17					
		2 PLACES	± 0.25	± ---	APPROVED BY	DATE	MOLEX INCORPORATED				
		1 PLACE	± ---	± ---	MARGULIS	2005/05/18					
		ANGULAR ±1/2°			MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE CHARTS		SD-45985-800		5 OF 5				
			SIZE A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							