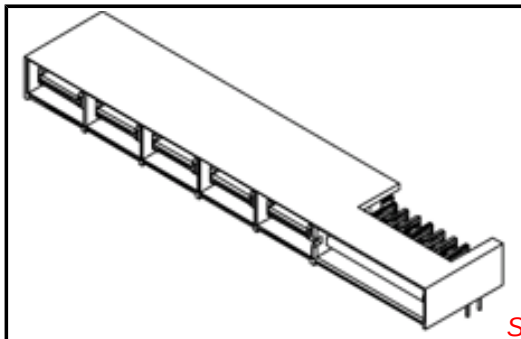
molex
one company > a world of innovation

This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0459851932
Status: Active
Overview: extreme_lphpower
Description: 12.00mm (0.472") Pitch, EXTreme LPHPower™ Header, Right Angle, 10 Power Contacts, Select Gold (Au) Plating, for 1.57mm (.062") Thick PC Board with Guide



Series image - Reference only

Documents:

3D Model
Drawing (PDF)
Product Specification PS-45984-001 (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
Comments	10 Power Blades
Overview	extreme_lphpower
Product Name	EXTreme LPHPower™

Physical

Breakaway	No
Circuits (Loaded)	10
Circuits (maximum)	10
Circuits Detail	10 Power, No 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	Yes
Keying to Mating Part	None
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

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
45985Series

Mates With
45984 EXTreme LPHPower™ PCB Receptacles

Plating min: Termination (µm)	3.75
Polarized to Mating Part	Yes
Polarized to PCB	No
Shrouded	Closed Ends
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
Voltage - Maximum	250V AC (RMS)/DC

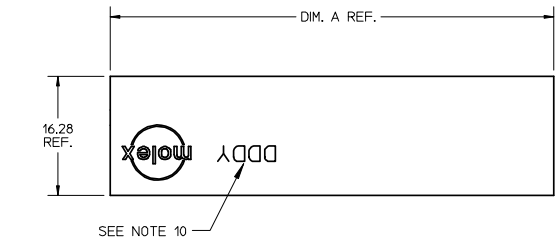
Solder Process Data

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

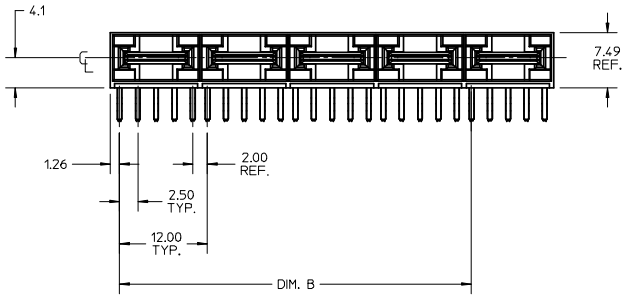
Material Info

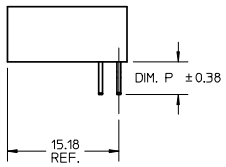
Reference - Drawing Numbers

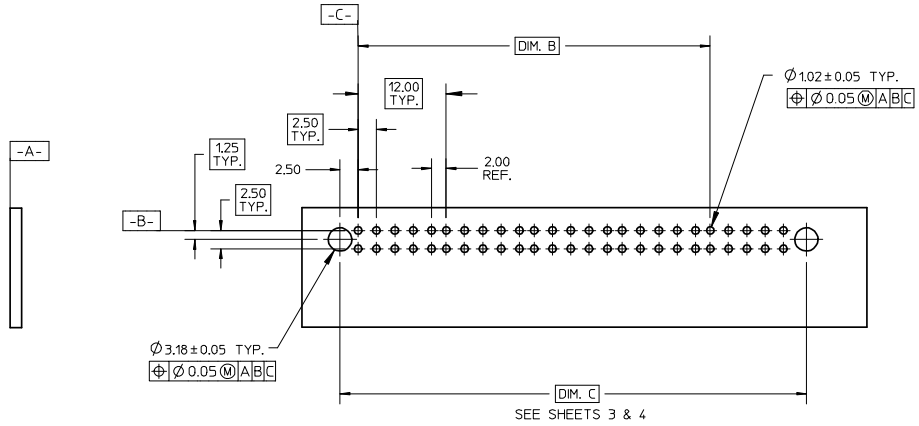
Packaging Specification	PK-45984-001
Product Specification	PS-45984-001
Sales Drawing	SD-45985-102



CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM P
4	45985-4911	24.60	12.00	4.50
6	45985-6911	36.60	24.00	
8	45985-8911	48.60	36.00	
10	45985-1911	60.60	48.00	
4	45985-4921	24.60	12.00	3.90
6	45985-6921	36.60	24.00	
8	45985-8921	48.60	36.00	
10	45985-1921	60.60	48.00	
4	45985-4931	24.60	12.00	2.90
6	45985-6931	36.60	24.00	
8	45985-8931	48.60	36.00	
10	45985-1931	60.60	48.00	







PCB LAYOUT: COMPONENT SIDE
THICKNESS: SEE CHART

NOTES:
1. MATERIAL: LCP, 94V-0, BLACK
   MATERIAL: TERMINAL: COPPER ALLOY
2. FINISH: SELECT GOLD: 0.76 µM/30 MI MIN, IN CONTACT AREA,
   SELECT TIN: 3.81 µM/150 MI MIN, IN PC TAIL AREA
   BOTH OVER NICKEL: 1.27 µM/50 MI MIN.
3. PRODUCT SPECIFICATION: PS-45984-001
4. PACKAGING SPECIFICATION: TRAY PER PK-45984-001
5. SEE SHEET 5 FOR CIRCUIT IDENTIFICATION.
6. PARTS ARE RoHS COMPLIANT.
7. PEG HOLES ARE OPTIONAL. SEE SHEET 3 & 4.
8. MATES TO MOLEX 45984 SERIES RECEPTACLE.
9. PARTS CONFORM TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.
10. DATE CODE (3-DIGIT DAY, 1-DIGIT YEAR) TO BE LOCATED AND PRINTED AS SHOWN.

RELEASED
EC NO: UCP2007-3140 2008/03/03
DRWN:MBANDURA 2008/03/04
CH'KD: 2008/03/06
APPR:APATEL
DESCRIPTION
B
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BANDURA DATE: 5/16/2006
CHECKED BY: BANDURA DATE: 5/27/2006
APPROVED BY: PATEL DATE:

TITLE: LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR

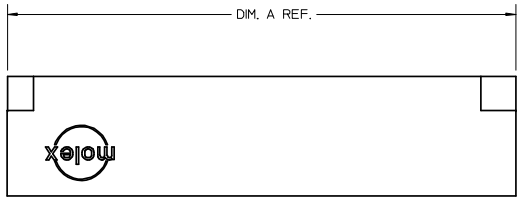
MOLEX INCORPORATED

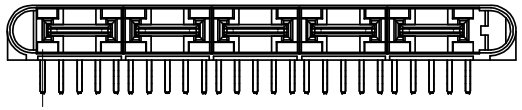
MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45985-102
SHEET NO.: 1 OF 5

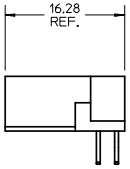
SIZE B

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

CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM P
4	45985-4912	33.36	12.00	4.50
6	45985-6912	45.36	24.00	
8	45985-8912	57.36	36.00	
10	45985-1912	69.36	48.00	
4	45985-4922	33.36	12.00	3.90
6	45985-6922	45.36	24.00	
8	45985-8922	57.36	36.00	
10	45985-1922	69.36	48.00	
4	45985-4932	33.36	12.00	2.90
6	45985-6932	45.36	24.00	
8	45985-8932	57.36	36.00	
10	45985-1932	69.36	48.00	







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

RELEASED
EC NO: UCP2007-3140
DRWN:MBANDURA 2008/03/03
CH'KD: 2008/03/04
APPR:APATEL 2008/03/06
DESCRIPTION
B
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BANDURA DATE: 5/16/2006
CHECKED BY: BANDURA DATE: 5/27/2006
APPROVED BY: PATEL DATE:

TITLE: LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR

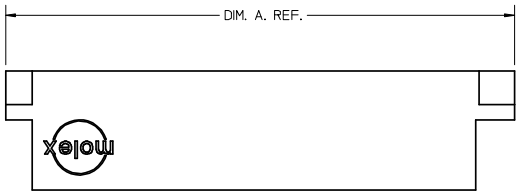
MOLEX INCORPORATED

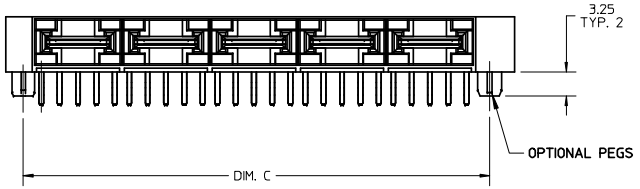
MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45985-102
SHEET NO.: 2 OF 5

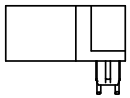
SIZE: B

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

CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM C	DIM P
4	45985-4913	33.36	12.00	27.60	4.50
6	45985-6913	45.36	24.00	39.60	
8	45985-8913	57.36	36.00	51.60	
10	45985-1913	69.36	48.00	63.60	
4	45985-4923	33.36	12.00	27.60	3.90
6	45985-6923	45.36	24.00	39.60	
8	45985-8923	57.36	36.00	51.60	
10	45985-1923	69.36	48.00	63.60	
4	45985-4933	33.36	12.00	27.60	2.90
6	45985-6933	45.36	24.00	39.60	
8	45985-8933	57.36	36.00	51.60	
10	45985-1933	69.36	48.00	63.60	







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

RELEASED
EC NO: UCP2007-3140 2008/03/03
DRWN:MBANDURA 2008/03/04
CH'KD: 2008/03/06
APPR:APATEL
DESCRIPTION
B
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BANDURA DATE: 5/16/2006
CHECKED BY: BANDURA DATE: 5/27/2006
APPROVED BY: PATEL DATE:

TITLE: LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR

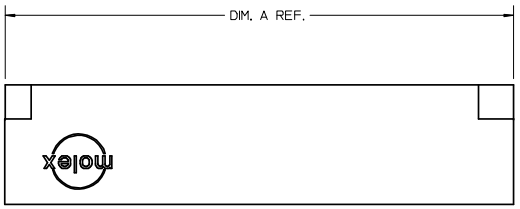
MOLEX INCORPORATED

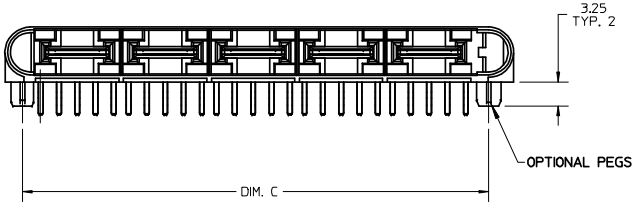
MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45985-102
SHEET NO.: 3 OF 5

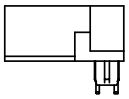
SIZE: B

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

CKT SIZE	MATERIAL NUMBER	DIM. A REF	DIM B	DIM C	DIM P
4	45985-4914	33.36	12.00	27.60	4.50
6	45985-6914	45.36	24.00	39.60	
8	45985-8914	57.36	36.00	51.60	
10	45985-1914	69.36	48.00	63.60	
4	45985-4924	33.36	12.00	27.60	3.90
6	45985-6924	45.36	24.00	39.60	
8	45985-8924	57.36	36.00	51.60	
10	45985-1924	69.36	48.00	63.60	
4	45985-4934	33.36	12.00	27.60	2.90
6	45985-6934	45.36	24.00	39.60	
8	45985-8934	57.36	36.00	51.60	
10	45985-1934	69.36	48.00	63.60	







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

RELEASED
EC NO: UCP2007-3140 2008/03/03
DRWN:MBANDURA 2008/03/04
CH'KD: 2008/03/06
APPR:APATEL
DESCRIPTION
B
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: BANDURA DATE: 5/16/2006
CHECKED BY: BANDURA DATE: 5/27/2006
APPROVED BY: PATEL DATE:

TITLE: LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR

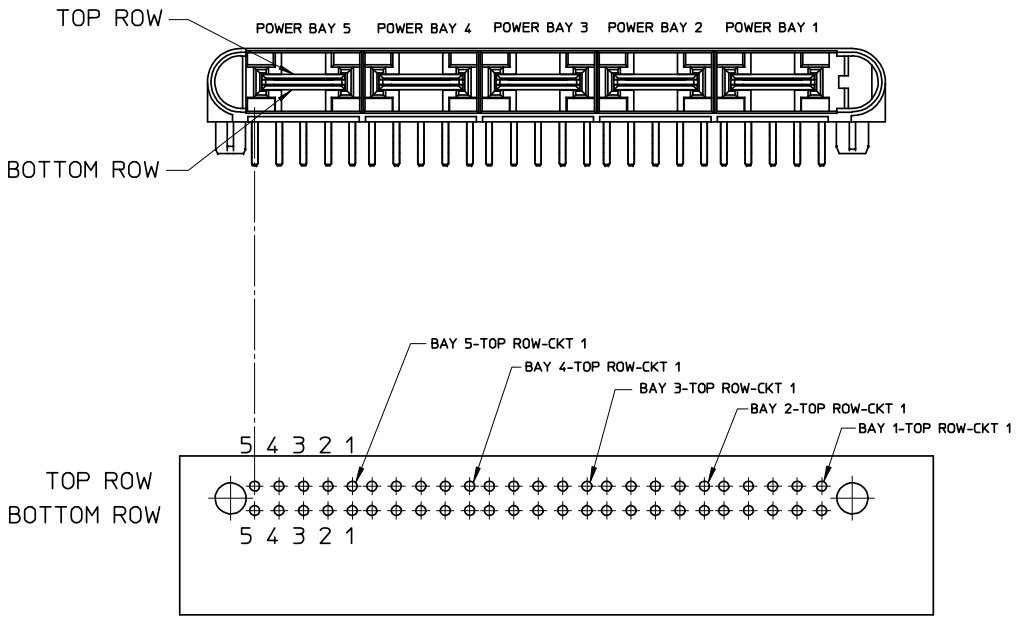
MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45985-102
SHEET NO.: 4 OF 5

SIZE B

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

CIRCUIT IDENTIFICATION



PCB LAYOUT: COMPONENT SIDE

REV	DESCRIPTION	
B	RELEASED	2008/03/03
	EC NO: UCP2007-3140	
	DRWN:MBANDURA	2008/03/04
	CHKD:	
	APPR:APATEL	2008/03/06

GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.25	± ---
1 PLACE	± ---	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	MM ONLY
SCALE	1:1
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY / DATE	BANDURA 5/16/2006
CHECKED BY / DATE	BANDURA 5/27/2006
APPROVED BY / DATE	PATEL
TITLE	LPH PLUG ASSEMBLY RIGHT ANGLE POWER CONNECTOR
	MOLEX INCORPORATED
MATERIAL NO.	SEE CHART
DOCUMENT NO.	SD-45985-102
SHEET NO.	5 OF 5
SIZE	B

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