

Part Number: 459856911

**Product Description :** EXTreme LPHPower Plug, Right-Angle, 6 Power Contacts, Select Gold (Au)

Plating, for 3.18mm Thick PC Board

Series Number: 45985

**Status**: Active

**Product Category:** Board-to-Board Connectors



#### **Documents & Resources**

#### **Drawings**

459856911 sd.pdf

**3D Models and Design Files** 

STEP AP242

**SOLIDWORKS** 

Creo

Symbol and Footprint (Multi-Format)

<u>SYM-45985-6911-001.zip</u>

**Specifications** 

PS-45984-001-001.pdf

# **Product Environment Compliance**

#### **Compliance**

GADSL/IMDS	Not Relevant
China RoHS	⊚ per SJ/T 11365-2006
EU ELV	Not Relevant
Low-Halogen Status	Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2025)4165-DC (25 June 2025)
EU RoHS	Compliant per EU 2015/863

#### **Compliance Statements**

EU RoHS

- REACH SVHC
- Low-Halogen

## **Industry Documents**

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474
- chemSHERPA (xml)

#### **Substances of Interest**

PFAS

## **EU RoHS Certificate of Compliance**

## **Additional Product Compliance Information**

#### **Part Details**

#### **General**

Status	Active
Category	Board-to-Board Connectors
Series	45985
Description	EXTreme LPHPower Plug, Right- Angle, 6 Power Contacts, Select Gold (Au) Plating, for 3.18mm Thick PC Board
Application	Board-to-Board, Power
Component Type	PCB Header
Product Name	EXTreme LPHPower
UPC	800756720487

## Agency

CSA	LR19980
UL	E29179

#### **Electrical**

Current - Maximum per Contact	27.0A
Voltage - Maximum	250V AC (RMS)/DC (Power)

## **Physical**

Breakaway
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Circuits (Loaded) 6 Circuits (maximum) 6 Color - Resin Black Durability (mating cycles max) 250 First Mate / Last Break No Flammability 94V-0 Glow-Wire Capable No Guide to Mating Part None Lock to Mating Part None Material - Metal High Performance Alloy (HPA) Material - Plating Mating Gold Material - Plating Termination Tin Material - Resin High Temperature Thermoplastic Net Weight 6.476/g Number of Rows 2 Orientation Right Angle Packaging Type Tray PCB Locator No PCB Retention None PCB Thickness - Recommended 3.18mm PC Tail Length 4.50mm Pitch - Mating Interface 12.00mm Pitch - Termination Interface 2.00mm, 2.50mm Plating min - Mating 0.762µm Plating min - Termination 3.810µm Polarized to Mating Part Yes Polarized to PCB No (p)ower-(s)ignal Configuration 6p - 0s Shrouded Fully Stackable No Temperature Range - Operating Termination Interface 5tyle Through Hole		
Color - Resin Black Durability (mating cycles max) 250  First Mate / Last Break No Flammability 94V-0 Glow-Wire Capable No Guide to Mating Part None Lock to Mating Part None Material - Metal High Performance Alloy (HPA) Material - Plating Mating Gold Material - Plating Termination Tin Material - Resin High Temperature Thermoplastic Net Weight 6.476/g Number of Rows 2 Orientation Right Angle Packaging Type Tray PCB Locator No PCB Retention None PCB Thickness - Recommended 3.18mm PC Tail Length 4.50mm Pitch - Mating Interface 12.00mm Plating min - Mating 0.762µm Plating min - Termination 3.810µm Polarized to Mating Part Yes Polarized to PCB No (p)ower-(s)ignal Configuration 6p - 0s Shrouded Fully Stackable No Temperature Range - Operating -40° to +105°C	Circuits (Loaded)	6
Durability (mating cycles max)  First Mate / Last Break  Flammability  94V-0  Glow-Wire Capable  No  Guide to Mating Part  None  Lock to Mating Part  None  Material - Metal  Material - Plating Mating  Material - Resin  Met Weight  Net Weight  Packaging Type  PCB Locator  PCB Retention  PCB Thickness - Recommended  Pitch - Termination Interface  Plating min - Mating  Polarized to PCB  (p)ower-(s)ignal Configuration  Finst Material - No  Polarized Resin  Polarized To Perating Mating  Right Angle  12.00mm  12.00mm  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Fension  Polarized To Perating  Padv-0  No  Polarized To Perating  Padv-0  No  Polarized To Perating  Polarized To Perating  Padv-0  No  Publich - No  Polarized To Perating  Padv-0  Publich - No  Perating Min	Circuits (maximum)	6
First Mate / Last Break  Flammability  Glow-Wire Capable  No  Guide to Mating Part  None  Lock to Mating Part  None  Material - Metal  Material - Plating Mating  Nore  Newight  Newight  Newight  Newight  Newight  Newight  Newight  Packaging Type  PCB Locator  PCB Thickness - Recommended  Pitch - Termination Interface  Plating min - Mating  Polarized to PCB  No  Possessessessessessessessessessessessesse	Color - Resin	Black
Flammability Glow-Wire Capable No Guide to Mating Part None Keying to Mating Part Lock to Mating Part None Material - Metal Material - Plating Mating Material - Plating Termination Material - Resin High Temperature Thermoplastic Net Weight None Packaging Type Tray PCB Locator PCB Retention None PCB Thickness - Recommended PC Tail Length Pitch - Mating Interface Plating min - Mating Plating min - Termination Plating min - Termination Shrouded Fully Stackable Temperature Range - Operating No PACH OF CAPACH OF CAPACH No PACH OF CAPACH No PACH OF CAPACH NO POB Thickness - Recommended PITCH - Termination Interface Pitch - Termination Interface Plating min - Termination Polarized to Mating Part Polarized to PCB No	Durability (mating cycles max)	250
Glow-Wire Capable Guide to Mating Part No Keying to Mating Part None Lock to Mating Part None Material - Metal Material - Plating Mating Material - Plating Termination Material - Resin Material - Resin High Temperature Thermoplastic Net Weight None Packaging Type Prackaging Type Pracka	First Mate / Last Break	No
Guide to Mating Part  Keying to Mating Part  Lock to Mating Part  Mone  Material - Metal  Material - Plating Mating  Material - Resin  Migh Temperature Thermoplastic  Right Angle  Packaging Type  Tray  PCB Locator  No  PCB Retention  PCB Retention  PCB Thickness - Recommended  3.18mm  PC Tail Length  4.50mm  Pitch - Mating Interface  Pitch - Termination Interface  Plating min - Mating  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Yes  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Stackable  No  Temperature Range - Operating  -40° to +105°C	Flammability	94V-0
Keying to Mating Part Lock to Mating Part None  Material - Metal Material - Plating Mating Material - Plating Termination Material - Resin High Temperature Thermoplastic Net Weight Society of Material - Resin Material - Resin High Temperature Thermoplastic Net Weight Society of Material - Resin Material - Resin High Temperature Thermoplastic  Net Weight Society of Material - Resin None Porientation Right Angle Packaging Type Tray PCB Locator No PCB Retention PCB Retention PCB Thickness - Recommended PCB Thickness - Recommended PCB Thickness - Recommended Pitch - Mating Interface Pitch - Mating Interface Pitch - Termination Interface Plating min - Mating Plating min - Mating Plating min - Termination Polarized to Mating Part Polarized to PCB No (p)ower-(s)ignal Configuration Shrouded Fully Stackable No Temperature Range - Operating -40° to +105°C	Glow-Wire Capable	No
Lock to Mating Part  Material - Metal  Material - Plating Mating  Material - Plating Termination  Material - Resin  Net Weight  Number of Rows  Orientation  PCB Locator  PCB Thickness - Recommended  Pitch - Termination Interface  Pitch - Termination Interface  Plating min - Mating  Polarized to PCB  (p)ower-(s)ignal Configuration  Material - Metal  High Performance Alloy (HPA)  Fith Temperature Thermoplastic  A.476/g  No  Right Angle  Tray  No  Right Angle  Tray  No  A.50mm  None  PCB Thickness - Recommended  3.18mm  PC Tail Length  4.50mm  Pitch - Mating Interface  2.00mm, 2.50mm  Plating min - Termination  3.810µm  Yes  Polarized to PCB  No  (p)ower-(s)ignal Configuration  6p - 0s  Shrouded  Fully  Stackable  No  Temperature Range - Operating  -40° to +105°C	Guide to Mating Part	No
Material - Metal High Performance Alloy (HPA)  Material - Plating Mating Gold  Material - Plating Termination Tin  Material - Resin High Temperature Thermoplastic  Net Weight 6.476/g  Number of Rows 2  Orientation Right Angle  Packaging Type Tray  PCB Locator No  PCB Retention None  PCB Thickness - Recommended 3.18mm  PC Tail Length 4.50mm  Pitch - Mating Interface 12.00mm  Pitch - Termination Interface 2.00mm, 2.50mm  Plating min - Mating 0.762µm  Plating min - Termination 3.810µm  Polarized to Mating Part Yes  Polarized to PCB No  (p)ower-(s)ignal Configuration 6p - 0s  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	Keying to Mating Part	None
Material - Plating Mating  Material - Plating Termination  Material - Resin  High Temperature Thermoplastic  Net Weight  Orientation  Right Angle  Packaging Type  PCB Locator  PCB Retention  PCB Thickness - Recommended  Pitch - Mating Interface  Pitch - Termination Interface  Plating min - Termination  Polarized to PCB  (p)ower-(s)ignal Configuration  Tin  High Temperature Thermoplastic  Find  High Temperature Thermoplastic  Find  High Temperature Thermoplastic  A.476/g  Right Angle  Tray  Polarized  A.50mm  None  PCB Retention  None  PCB Thickness - Recommended  3.18mm  PC Tail Length  4.50mm  Pitch - Mating Interface  2.00mm, 2.50mm  Plating min - Mating  O.762µm  Plating min - Termination  3.810µm  Polarized to Mating Part  Yes  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Fully  Stackable  No  Temperature Range - Operating  -40° to +105°C	Lock to Mating Part	None
Material - Plating Termination  Material - Resin  High Temperature Thermoplastic  Net Weight  Orientation  Packaging Type  PCB Locator  PCB Retention  PCB Thickness - Recommended  Pitch - Mating Interface  Plating min - Mating  Plating min - Termination  Polarized to PCB  (p)ower-(s)ignal Configuration  Tin  High Temperature Thermoplastic  A.476/g  Right Angle  Prackaging Type  Tray  No  Right Angle  Prackaging Type  Tray  No  No  No  1.2.00mm  2.1.8mm  4.50mm  Polarized to Mating Part  Yes  Polarized to Mating Part  Yes  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Stackable  No  Temperature Range - Operating  No  -40° to +105°C	Material - Metal	High Performance Alloy (HPA)
Material - Resin High Temperature Thermoplastic  Net Weight 6.476/g  Number of Rows 2  Orientation Right Angle  Packaging Type Tray  PCB Locator No  PCB Retention None  PCB Thickness - Recommended 3.18mm  PC Tail Length 4.50mm  Pitch - Mating Interface 12.00mm  Pitch - Termination Interface 2.00mm, 2.50mm  Plating min - Mating 0.762µm  Plating min - Termination 3.810µm  Polarized to Mating Part Yes  Polarized to PCB No  (p)ower-(s)ignal Configuration 6p - 0s  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	Material - Plating Mating	Gold
Net Weight  Number of Rows  Orientation  Packaging Type  PCB Locator  PCB Retention  PCB Thickness - Recommended  Pitch - Mating Interface  Plating min - Mating  Plating min - Termination  Polarized to PCB  (p)ower-(s)ignal Configuration  Sinch a sinch and sinch and so the sinc	Material - Plating Termination	Tin
Number of Rows  Orientation  Right Angle  Packaging Type  Tray  PCB Locator  No  PCB Retention  PCB Thickness - Recommended  PC Tail Length  Pitch - Mating Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Temperature Range - Operating  Right Angle  2.00  Right Angle  Tray  Right Angle  2.00  Ro  No  9.12  2.00  3.18  4.50  12.00  9.762  9.762  9.762  Polarized to Mating Part  Yes  Polarized to Mating Part  Yes  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Shrouded  Fully  Stackable  No  -40° to +105°C	Material - Resin	High Temperature Thermoplastic
Orientation Right Angle Packaging Type Tray PCB Locator No PCB Retention None PCB Thickness - Recommended 3.18mm PC Tail Length 4.50mm Pitch - Mating Interface 12.00mm Pitch - Termination Interface 2.00mm, 2.50mm Plating min - Mating 0.762µm Plating min - Termination 3.810µm Polarized to Mating Part Yes Polarized to PCB No (p)ower-(s)ignal Configuration 6p - 0s Shrouded Fully Stackable No Temperature Range - Operating -40° to +105°C	Net Weight	6.476/g
Packaging Type PCB Locator No PCB Retention None PCB Thickness - Recommended PC Tail Length Pitch - Mating Interface Plating min - Mating Plating min - Termination Polarized to Mating Part Polarized to PCB No (p)ower-(s)ignal Configuration Stackable Temperature Range - Operating  No  No  No No No No No No No No No No	Number of Rows	2
PCB Locator PCB Retention None PCB Thickness - Recommended PC Tail Length Pitch - Mating Interface Plating min - Mating Plating min - Termination Polarized to Mating Part Polarized to PCB No (p)ower-(s)ignal Configuration Stackable Temperature Range - Operating PCB Retention None Round R	Orientation	Right Angle
PCB Retention  PCB Thickness - Recommended  PC Tail Length  PC Tail Length  Pitch - Mating Interface  Pitch - Termination Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  (p)ower-(s)ignal Configuration  Stackable  Temperature Range - Operating  None  3.18mm  4.50mm  2.00mm, 2.50mm  0.762µm  3.810µm  Yes  No  Fully  No  Fully  Stackable  No  -40° to +105°C	Packaging Type	Tray
PCB Thickness - Recommended  PC Tail Length  Pitch - Mating Interface  Pitch - Termination Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Stackable  Temperature Range - Operating  3.18mm  4.50mm  9.762µm  3.810µm  Yes  No  6p - 0s  Fully  No  7emperature Range - Operating  -40° to +105°C	PCB Locator	No
PC Tail Length  Pitch - Mating Interface  Pitch - Termination Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  (p)ower-(s)ignal Configuration  Stackable  Temperature Range - Operating  12.00mm  2.00mm, 2.50mm  0.762µm  7.8810µm  7.8810µm  7.88  Polarized to Mating Part  Yes  No  (p)ower-(s)ignal Configuration  Fully  No  -40° to +105°C	PCB Retention	None
Pitch - Mating Interface 12.00mm  Pitch - Termination Interface 2.00mm, 2.50mm  Plating min - Mating 0.762µm  Plating min - Termination 3.810µm  Polarized to Mating Part Yes  Polarized to PCB No  (p)ower-(s)ignal Configuration 6p - 0s  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	PCB Thickness - Recommended	3.18mm
Pitch - Termination Interface  Plating min - Mating  Plating min - Termination  Polarized to Mating Part  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Stackable  Temperature Range - Operating  2.00mm, 2.50mm  0.762µm  3.810µm  Yes  No  Fes  No  Fully  No  -40° to +105°C	PC Tail Length	4.50mm
Plating min - Mating 0.762µm  Plating min - Termination 3.810µm  Polarized to Mating Part Yes  Polarized to PCB No  (p)ower-(s)ignal Configuration 6p - 0s  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	Pitch - Mating Interface	12.00mm
Plating min - Termination  Polarized to Mating Part  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Shrouded  Stackable  Temperature Range - Operating  3.810µm  Yes  No  No  -40° to +105°C	Pitch - Termination Interface	2.00mm, 2.50mm
Polarized to Mating Part  Polarized to PCB  No  (p)ower-(s)ignal Configuration  Shrouded  Stackable  No  Temperature Range - Operating  Yes  No  No  -40° to +105°C	Plating min - Mating	0.762µm
Polarized to PCB No  (p)ower-(s)ignal Configuration 6p - 0s  Shrouded Fully  Stackable No  Temperature Range - Operating -40° to +105°C	Plating min - Termination	3.810µm
(p)ower-(s)ignal Configuration6p - 0sShroudedFullyStackableNoTemperature Range - Operating-40° to +105°C	Polarized to Mating Part	Yes
Shrouded Fully Stackable No Temperature Range - Operating -40° to +105°C	Polarized to PCB	No
Stackable No Temperature Range - Operating -40° to +105°C	(p)ower-(s)ignal Configuration	6p - 0s
Temperature Range - Operating -40° to +105°C	Shrouded	Fully
	Stackable	No
Termination Interface Style Through Hole	Temperature Range - Operating	-40° to +105°C
	Termination Interface Style	Through Hole

Max-Duration	15
Lead-Free Process Capability	SMC&WAVE
Max-Cycle	3
Max-Temp	230

# Mates With / Use With

# Mates with Part(s)

Description	Part Number
EXTreme LPHPower Right-Angle PCB Receptacles	<u>45984</u>
12.00mm Pitch EXTreme LPHPower Vertical PCB Receptacles	<u>46112</u>

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