

## FEATURES AND SPECIFICATIONS

[查询"45984"供应商](#)



## EXTreme LPHPower™ Low-Profile Hybrid Power Connector

**45984** Right Angle  
Receptacle

**46114** Vertical Receptacle

**45985** Right Angle Plug

The **EXTreme LPHPower™ Connector** is a mixed, high-current power and signal connector system that picks up where traditional connectors leave off. Designed with power blades parallel to the PC board, its extremely low-profile height of only 7.50mm (.295") allows greater system airflow while taking up 53% less space than traditional connectors with the same current rating. Designed as a new generation of power interconnect, Molex's EXTreme LPHPower™ connector provides up to 127.0A per linear inch of space, has two isolated power blades in each housing bay and can be mated in a right angle, co-planar or vertical orientation. EXTreme LPHPower™ can be mated in a traditional two-piece connector system, or as a one-piece receptacle-to-cardedge / bus bar application.

### Features and Benefits

- Low-profile design, 7.50mm height enhances system airflow and provides 127.0A per linear inch
- Receptacle sides mates to either our standard LPH plug or an industry standard 1.57mm PBC gold finger card edge
- Rated for current interruption hot-plugging requirements
- Rugged signal and power contacts reduce the potential for stubbing or damage
- Two isolated power contacts per housing bay (top and bottom)
- Tested per EIA-364-1000.01
- Last-mate/first-break available on power contacts



## SPECIFICATIONS

### Reference Information

Packaging: Tray or Tube  
UL File No.: E29179  
CSA File No.: LR19980  
TUV: 30683046.001  
Designed In: Millimeters

### Electrical

Voltage: 250V max  
Current (at 30° C Temperature rise):  
Power – 30.0A max.  
Signal – 1.0A max.  
Contact Resistance (per contact):

	Initial	End of Life
Power (milliohms)	0.50	0.64
Signal (milliohms)	6.24	8.34

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 5000 Megohms min.

Current interruption:

Power – 30.0A and 48V DC  
Signal – 1.0A at 30V

### Mechanical

Mating Force (max. per circuit):  
Power Contacts – 6.87N (1.54 lb)  
Signal Contacts – 1.08N (0.24 lb)  
Un-mating Force (max per circuit):  
Power Contacts – 5.88N (1.32 lb)  
Signal Contacts – 0.02N (0.03 lb)  
Durability: 250 cycles  
(Receptacle and Plug)

### Physical

Housing: LCP  
Contact:  
Power Contacts - Copper (Cu) Alloy  
Signal Contacts – Phosphor Bronze

### Plating:

Contact Area — Select Gold  
Solder Tail Area — Tin  
Underplating — Nickel  
Flammability Rating: UL-94V-0

### Documents

Sales Drawings: SD-45984-XXX, SD-45985-XXX,  
SD-46114-XXX, SD-46112-XXX, SD-46113-XXX  
Product Specs:  
Right Angle — PS-45984-001  
Vertical — PS-46114-001  
Application Tooling:  
Vertical ATS — 62100-6300, 62201-8671,  
62201-8672

## ORDERING INFORMATION

Series*	Description	Power Circuit	Signal Circuit	Guide	Board Peg	PCB Thickness
45984	Right Angle Receptacle	4 to 10	12 to 40	Optional	Optional	1.57, 2.36, 6.35mm (.062, .093, .250")
46114, 46112, 46113	Vertical Receptacle	2 to 14	12 to 40	Optional	N/A	1.57mm min. (.062")
45985	Right Angle Plug	4 to 10	12 to 40	Optional	Optional	1.57, 2.36, 6.35mm (.062, .093, .250")

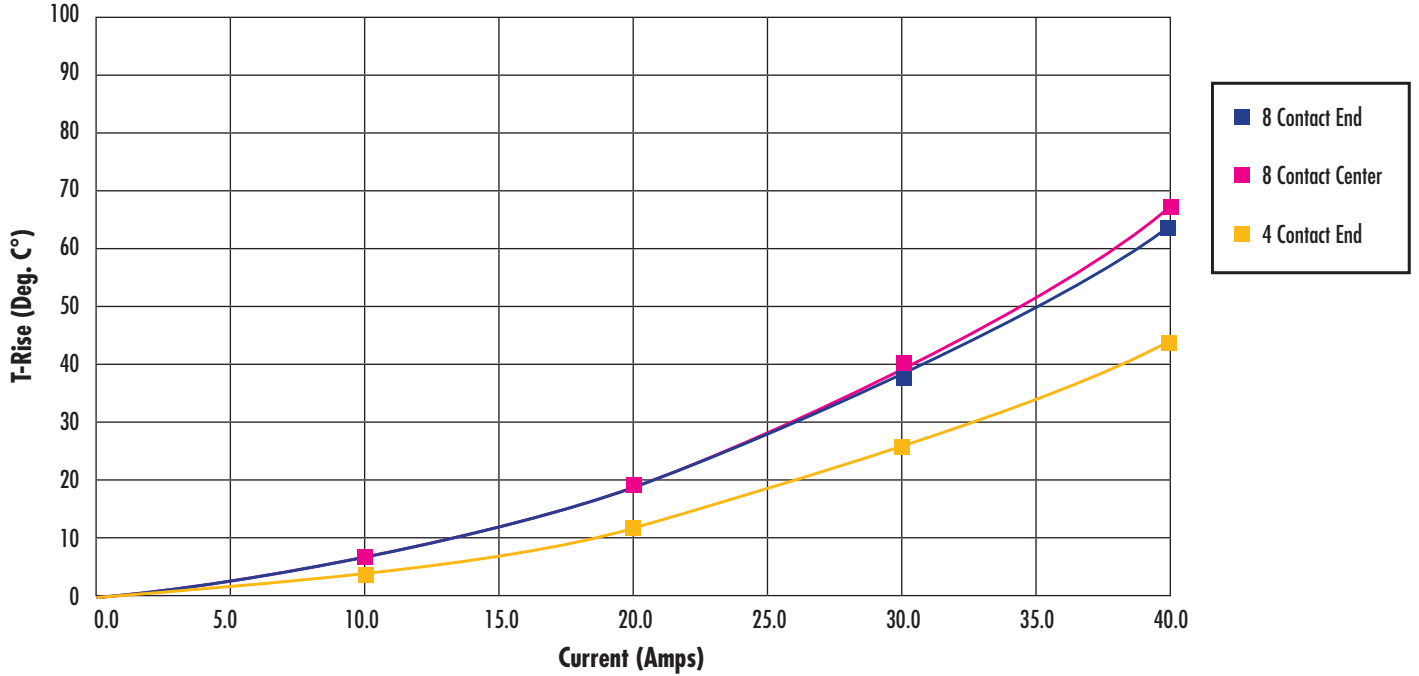
\*Complete part numbers can be found at [www.molex.com/link/ext-power.html](http://www.molex.com/link/ext-power.html)





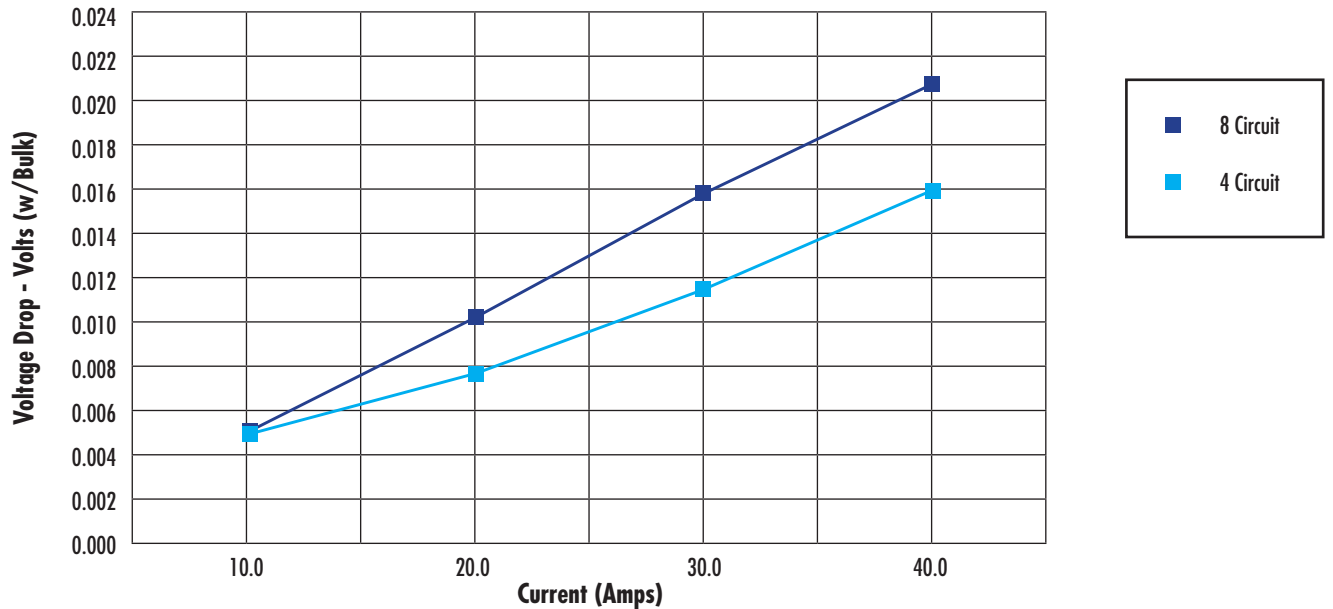
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**EXTreme LPHPower™**  
**8 Contact and 4 Contact T-Rise Current Chart**



**EXTreme LPHPower™**

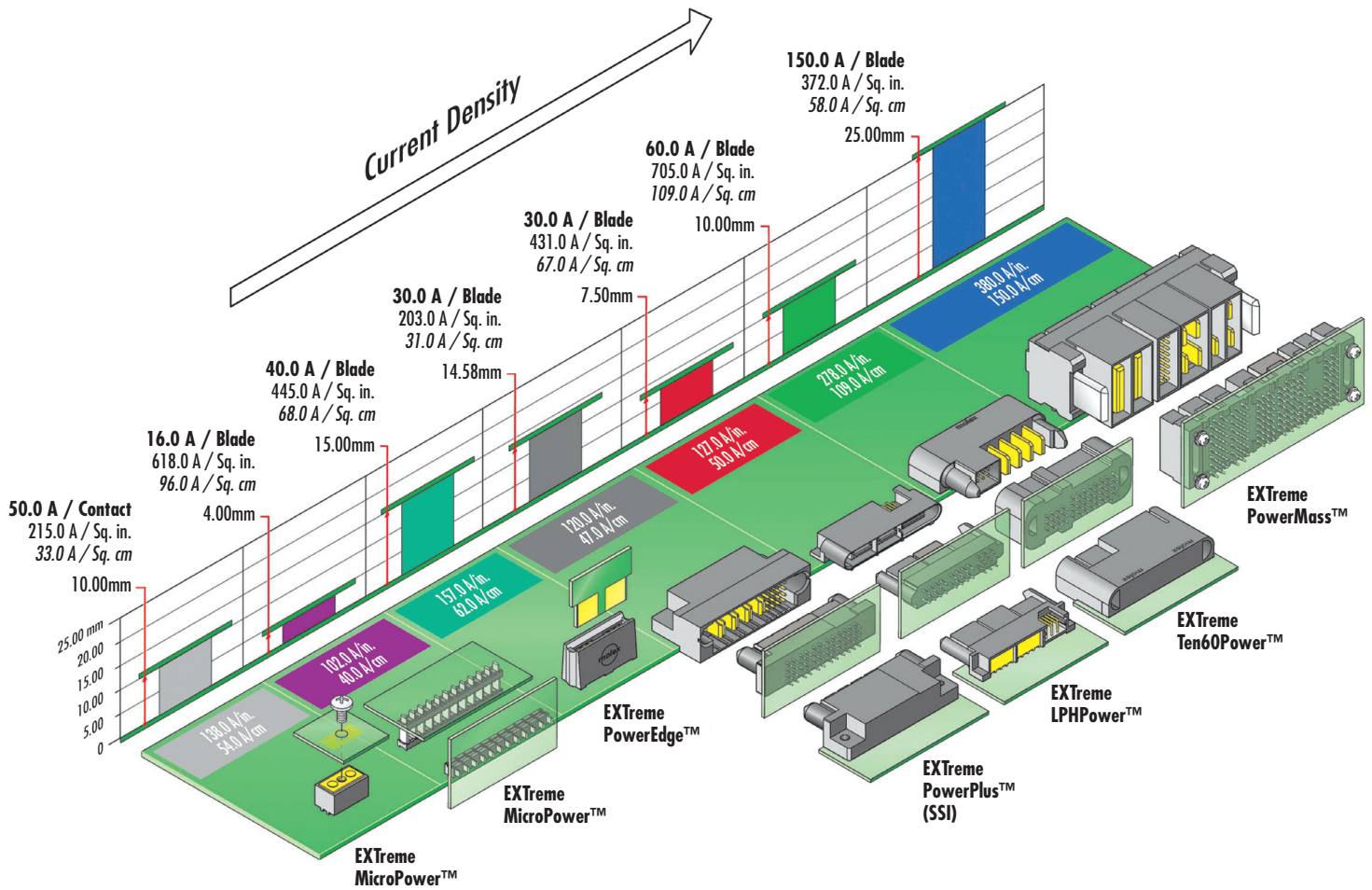
**Voltage Drop Vs. Current**  
**8 Circuit and 4 Circuit**



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**EXTreme Power® Products**

The need for high-current power interconnect solutions in increasingly smaller space continues to rise rapidly. Solving this power equation on new architectures and system platforms has been a major focus for Molex product development teams. The new Molex EXTreme Power® family of products is the direct result of listening intently to our customers' electrical and mechanical design challenges. Since no two applications are the same, the Molex EXTreme Power® offering is comprised of several product families that cover a wide range of current densities, mechanical envelopes, mating terminations and configuration choices that give system designers the ability to maximize their power interconnect needs.



[www.molex.com/link/ext-power.html](http://www.molex.com/link/ext-power.html)