

## FEATURES AND SPECIFICATIONS



# EXTreme Ten60Power™ High-Current Connector Board-to-Board

The **EXTreme Ten60 Power™ Connector** features the highest square-inch current density of any power connector system that Molex has developed. A low 10.00mm (.394") profile, coupled with high-capacity power blades, allows this interconnect to target smaller power supply architectures that deliver very high current in limited spaces where airflow can otherwise be restricted by larger connectors. Optional guides can be placed on each end at traditional side locations, or on top of the connector to save valuable PC board real estate. Power and signal modules can be placed in any location.

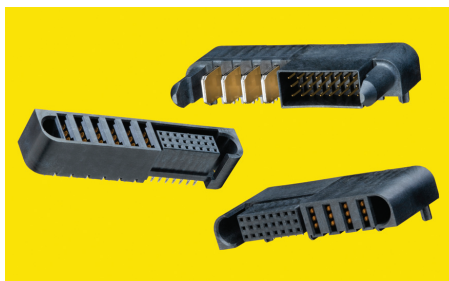
### Features and Benefits

- Low-profile design of 10.00mm height enhances system airflow and provides 278.0A per linear inch
- Modular assembly for virtually any design configuration including wire-to-board options
- Right-angle and vertical mounting available for either coplanar or perpendicular applications
- Robust, high-current contact blades for DC (5.50mm pitch) and AC (7.50mm pitch) spacing options
- Rated for current interruption
- Connectors comply to EIA-364-1001.01 and MFG test procedures
- Last-mate/first-break available on both power and signal contacts
- 60.0A per power blade

**46436** Right Angle Receptacle

**46562** Vertical Receptacle

**46437** Right Angle Plug



## SPECIFICATIONS

### Reference Information

Packaging: Tray  
UL File No.: E29179  
CSA File No.: LR19880  
TUV: R 72081037  
Designed In: Millimeters

### Electrical

Voltage:  
Power - 600V max.  
Current (at 30°C Temperature rise):  
Power - 60.0A max.  
Signal - 2.5A max.  
Contact Resistance (per contact):

	Initial	End of Life
Power (milliohms) -	0.50	0.75 max change
Signal (milliohms) -	6.50	15.00 max change

Dielectric Withstanding Voltage: 1500V  
Insulation Resistance: 5000 Megohms min.

Current interruptions rating:  
Power - Contact Molex  
Signal - Contact Molex

### Mechanical

Pitch:  
Power - 5.50 or 7.50mm  
Signal - 2.54 by 2.45mm  
Mating Force (max. per circuit):  
Power Contacts - 500g (1.102 lb)  
Signal Contacts - 102g (.225 lb)  
Un-mating Force (min. per circuit):  
Power Contacts - 400g (.882 lb)  
Signal Contacts - 30g (.066 lb)  
Durability: 100 cycles

### Physical

Housing: 30% glass filled LCP  
Contact:  
Power Contacts - Copper Alloy  
Signal Contacts - Copper Alloy  
Plating:  
Contact Area - Select Gold  
Solder Tail Area - Tin  
Underplating - Nickel  
Flammability Rating: UL 94V-0  
RoHS compliant

### Documents

Sales Drawings: SD-46436-XXX, SD-46562-XXX  
SD-46437-XXX  
Product Specs: PS-46436-100

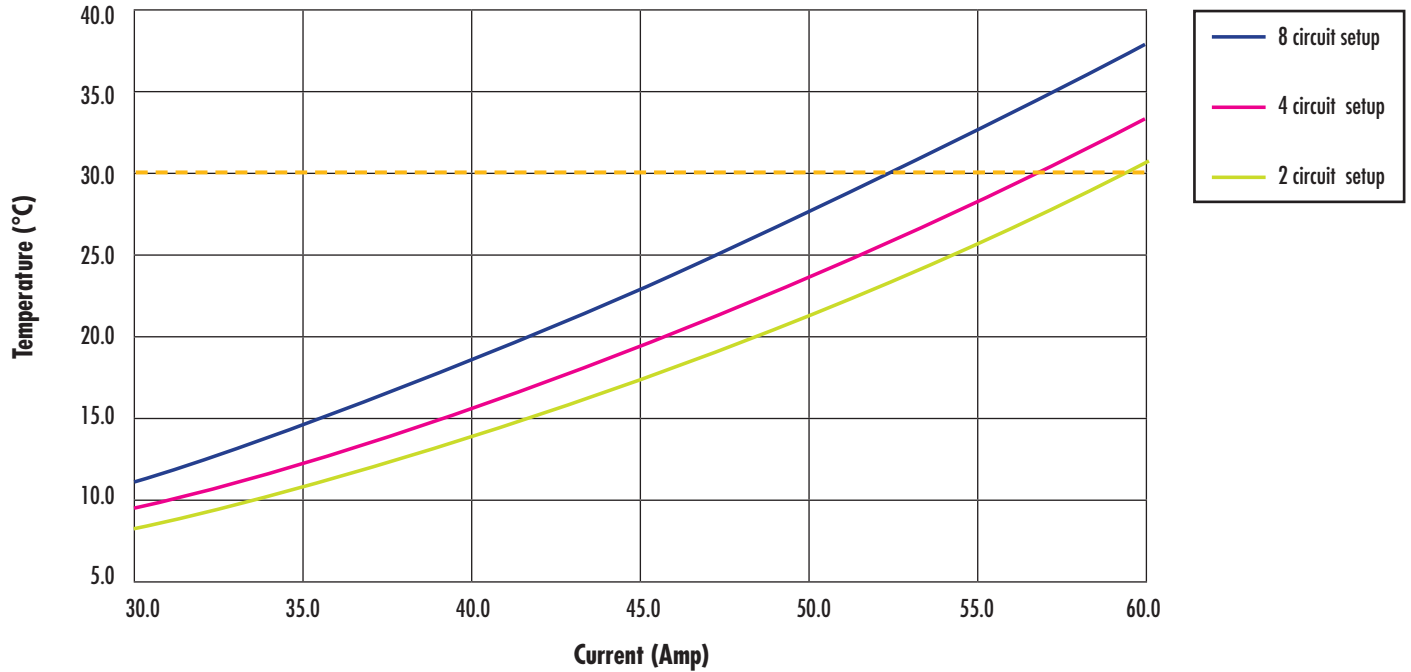
## ORDERING INFORMATION

Series*	Description	Power Circuits	Signal Circuits	Guide	Board Peg	PCB Thickness
46436	Right Angle Receptacle	1 to 10	6 to 36	Side or Top Options available	Optional	1.57 to 3.81mm (.062 to .150")
46562	Vertical Receptacle					
46437	Plug					

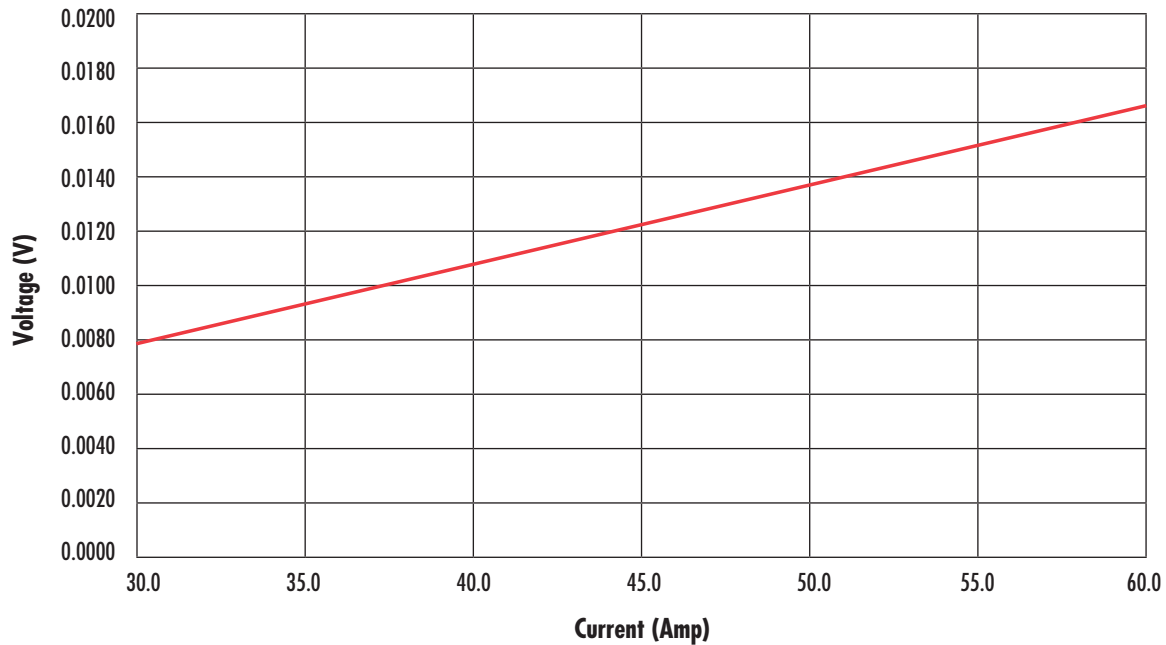
\*Complete part numbers can be found at [www.molex.com/link/ext-power.html](http://www.molex.com/link/ext-power.html)



**Temperature Rise vs. Current per EIA-364-70**



**V-drop (max) vs. Current per EIA-364-70**



**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.

