

**Get 260A per inch in a low-profile housing for board-to-board or wire-to-board applications with Molex's hybrid high-current power and signal EXTreme Ten60Power™ connectors**

EXTreme Ten60Power is a modular, custom configurable (with no tooling), high-current power and signal connector system in a coplanar and right-angle board-to-board orientation. Designed as a higher-current and lower profile power interconnect than existing connectors, Molex's EXTreme Ten60Power connector provides maximum current-to-length ratio packaged in a low-profile, 10.00mm (.394")-height housing that enhances system airflow within the power system. Both the plug and receptacle utilize reliable, proven Molex power and signal contact designs.

For additional information on Molex's EXTreme Power product offering, visit: [www.molex.com/link/ext-power.html](http://www.molex.com/link/ext-power.html)

**FEATURES AND BENEFITS**

**3-Row (Original) and 5-Row (High-Density Signal) Versions**

- Low-profile design: 10.00mm (.394") height enhances system airflow and provides 260.0A per linear inch
- Power blades are rated up to 60.0A per blade at a 30° T-rise provide 260.0A per linear inch, ensuring maximum current-to-length ratio
- Available in 1 through 10 power-blade modules and 6 through 36 signal modules and either end-mount or top-mount guidance so that modules can be configured to accommodate most any design application
- Modular assembly modules can be arranged in any configuration and added to make larger circuit sizes
- Right-angle and vertical mounting available for either coplanar or perpendicular applications
- Rated for resistance to arc for hot-pluggable applications
- Robust, high-current contact blades in DC (5.50mm) and AC (7.50mm) power pitch spacing provide design flexibility

- Available in 1 through 10 power blade modules and 6 through 36 signal modules and either end-mount or top-mount guidance so modules can be configured to accommodate most any design application
- Multiple mating levels available on power and signal contacts for Last-Mate-First-Break (LMFB) or First-Mate-Last-Break (FMLB)

**3-Row Connector (Original Version)**

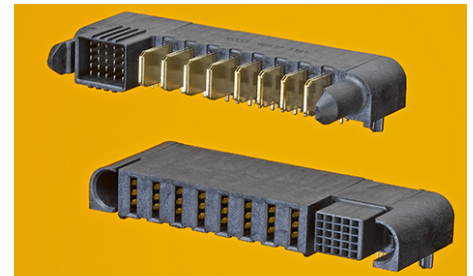
- 2.54 by 2.54mm (.100 by .100") pitch signal spacing provide design flexibility

**5-Row Connector (High-Density Signal Version)**

- 2.00 by 1.65mm (.079 by .065") pitch signal spacing saves over 10.00mm (.394") space when using a 25-signal module versus the original EXTreme Ten60Power High-Current Connector with 24-signal modules and is for use in more critical space-constrained applications
- Through-hole versions available in right-angle plug and receptacles; press-fit versions available in right-angle plug and receptacles and vertical receptacles for design flexibility

**EXTreme Ten60Power™ Hybrid Power and Signal Connectors**

- 46436 Right-Angle Receptacle
- 46562 Vertical Receptacle
- 46437 Right-Angle Plug



*High Density Signal EXTreme Ten60Power™ Connectors, 5 rows*



*EXTreme Ten60Power™ Connectors, 3 rows*

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## SPECIFICATIONS

### Reference Information

Packaging: Tray

UL File No.: E29719

CSA File No.:

LR-19980\_A\_Class 6233-81  
CSA tested to UL-1977 and  
CSA C22.2 No. 182.3-M1987

TUV: R 72081037

Designed In: Millimeters

### Electrical

Voltage:

Power – 600V max.

Signal – 250V max.

Current:

Power – 60.0A max.

Signal – 2.5A max.

Dielectric Withstanding Voltage: 1500V

Insulation Resistance:

5000 Megohms min.

### Mechanical

Pitch:

Original 3-Rows Connectors:

Power – 5.50mm (DC) or 7.50mm

(AC) (.217 or .295")

Signal – 2.54 by 2.45mm

(.100 by .100")

High-Density Signal 5-Rows Connectors:

Power – 5.50mm (DC) or 7.50mm

(AC) (.217 or .295")

Signal – 2.00 by 1.65mm

(.079 by .065")

Mating Force (max. per circuit):

Power Contacts –

Vertical Receptacle – 764g

(1.684 lb) max.

Right-Angle Receptacle – 460g

(1.014 lb) max.

Signal Contacts – 75g (.165 lb)

Un-mating Force (min. per circuit):

Power Contacts –

Vertical Receptacle – 340g

(.749 lb) max.

Right-Angle Receptacle – 235g

(.518 lb) max.

Signal Contacts – 30g (.066 lb)

Durability: 200 cycles

## EXTreme Ten60Power™ Hybrid Power and Signal Connectors

46436 Right-Angle Receptacle

46562 Vertical Receptacle

46437 Right-Angle Plug

### Physical

Housing: 30% glass filled LCP or PBT

Contact:

Power Contacts – Copper (Cu) Alloy

Signal Contacts – Copper (Cu) Alloy

Plating:

Contact Area — Select Gold (Au)

Solder Tail Area — Tin (Sn)

Underplating — Nickel (Ni)

Flammability Rating: 94V-0

RoHS compliant

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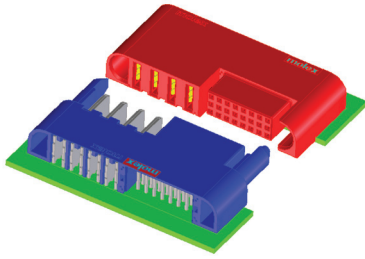
## APPLICATIONS

- Coplanar Board-to-Board Power Applications
- Automotive and Transportation
- Consumer
- Datacommunication
- Telecommunication
- Industrial
- Medical
- Military/Aerospace
- Networking
- Solar

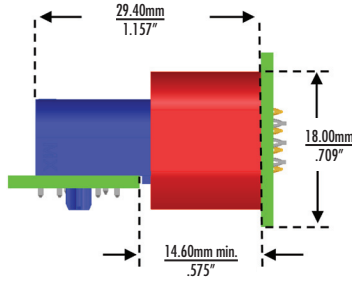


Data Center

## SPECIFICATIONS



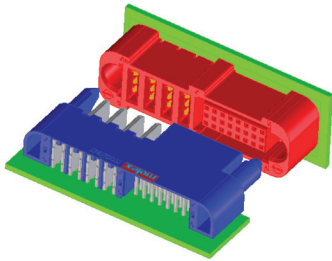
Right-Angle Receptacle  
Board-to-Board Application



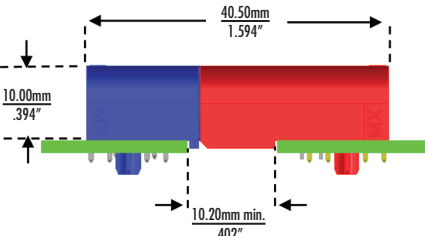
Right-Angle Board-to-Board Dimensions

## EXTreme Ten60Power™ Hybrid Power and Signal Connectors

- 46436 Right-Angle Receptacle
- 46562 Vertical Receptacle
- 46437 Right-Angle Plug



Vertical Receptacle  
Board-to-Board Application

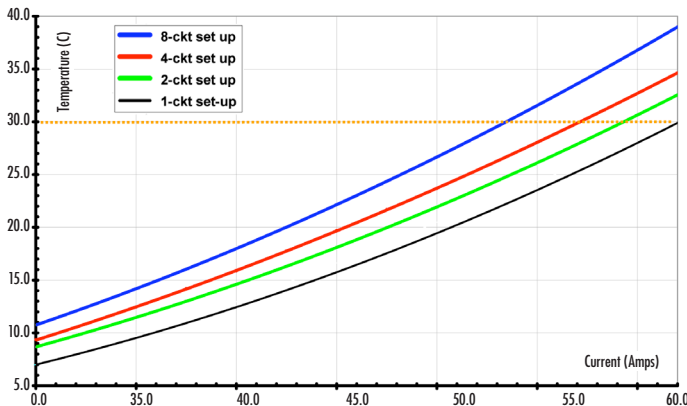


Coplanar Board-to-Board Dimensions

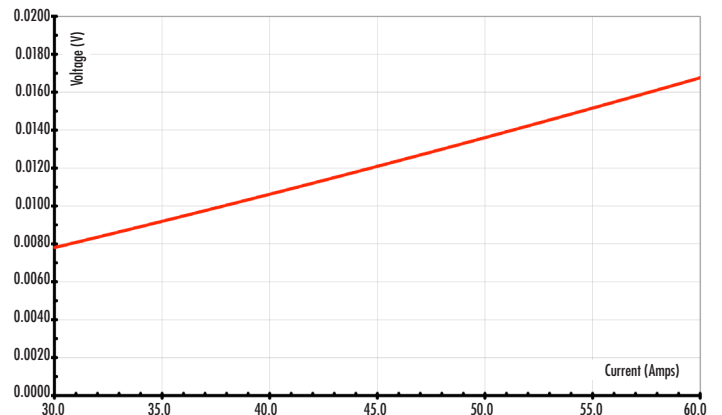


Optional Top Guides on Power Modules  
reduces the overall length by 13.60mm (.535")

### TEMPERATURE RISE VS. CURRENT PER EIA-364-70



### V-DROP (MAX) V. CURRENT PER EIA-364-70



## ORDERING INFORMATION

EXTreme Ten60 connectors are custom configurable with multiple design options. To obtain sales drawings, 3D models, samples or pricing for unique requirements, please complete the Standard Part Order (SPO) Form, which can be down loaded from [www.molex.com/link/ten60.html](http://www.molex.com/link/ten60.html). Please find below the Series Numbers for search capability on molex.com

Series No.	Component
46436	Right-Angle Receptacle
46562	Vertical Receptacle
46437	Right-Angle Plug

[www.molex.com/link/ten60.html](http://www.molex.com/link/ten60.html)

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