

## FEATURES AND BENEFITS

**Z-Power is a high-current, rigid, board-to-board and wire-to-board mezzanine style interconnect designed to transfer power loads from one PCB to another**

The EXTreme ZPower™ Connector utilizes a unique, interface for mezzanine style power connections. Anchored to the base board with press-fit power pins, the top board is screwed securely down from the top. EXTreme ZPower™ not only transfers power between boards, but can double as an effective stand-off. Available with both 30.0 and 50.0A versions, EXTreme ZPower™ can be used in a variety of applications and industries where power connection between parallel boards or bus bars is necessary in a condensed space.

### Features and Benefits

- Patented internal terminal design allows a rigid, secure interface while helping to isolate press-fit pins from the load of shock and vibration
- Screw-contact interface can accept standard wire-crimp, ring-lug terminals for wire-to-board applications (Tin plating for use with ring lug terminal connection)
- Captured internal nut for ease of assembly
- High normal force, high-reliability interface
- One piece ridged board-to-board high current interconnect
- Hertzian (high-pressure) contact areas create a reliable (gas-tight) mating surface

### Reference Information

Packaging: Tray  
 CSA/CUS File No.: 1792321  
 Designed In: Millimeters

### Electrical

Voltage: 250V max  
 Current (@ 30°C Temperature rise):  
 10 Circuit — 50.0A max.  
 6 Circuit — 30.0A max.  
 Contact Resistance (per blade):

	Initial	End of Life
Power (milliohms) —	0.15	0.10 max. Change
Dielectric Withstanding Voltage: 1500V DC		
Insulation Resistance: 5000 Megaohms min.		

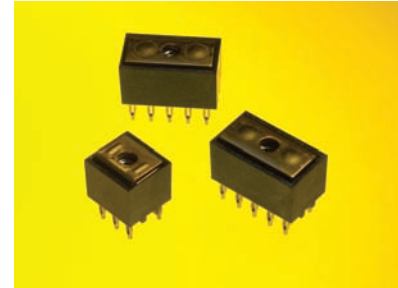
### Mechanical

Insertion Force to PCB: 9.07N (20lbf) per tail  
 Recommended Torque: 0.75 N-m (6.6 inch-lbs)  
 Durability: 5 cycles mate/un-mate (separable interface)

### Physical

Housing: LCP  
 Contact: Copper (Cu) Alloy  
 Plating:  
 Contact Area — 30µ" Gold min.  
                   or 100µ" Select Matte Tin min.  
 Solder Tail Area — 100µ" Select Matte Tin min.  
 Underplating — 50µ" Nickel min.  
 Flammability Rating: UL 94V-0

## EXTreme ZPower™ Connector 10.30mm (.405") Parallel Board Spacing 76001



### Documents

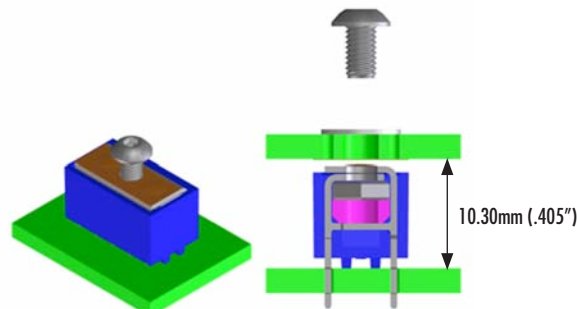
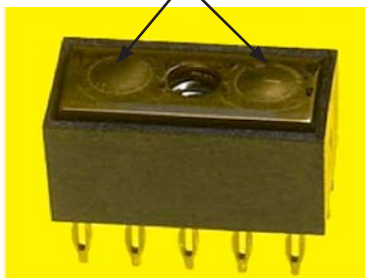
Sales Drawings:  
 50 ampere: SD-76001-001  
 30 ampere: SD-76001-002  
 Product Spec: PS-76001-999  
 Application Spec: AS-76001-001

## ORDERING INFORMATION

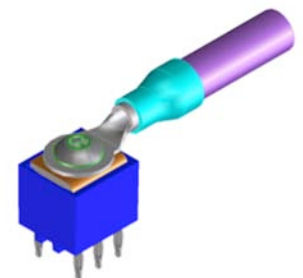
Series*	Description	Current	Plating	Mating PCB Thickness	Press-Fit PCB Thickness
76001	10 Tail Connector	50.0A	Gold or Tin	0.063"	0.093" min.
76001	6 Tail Connector	30.0A		0.093" 0.125"	

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

### High Pressure Contacts



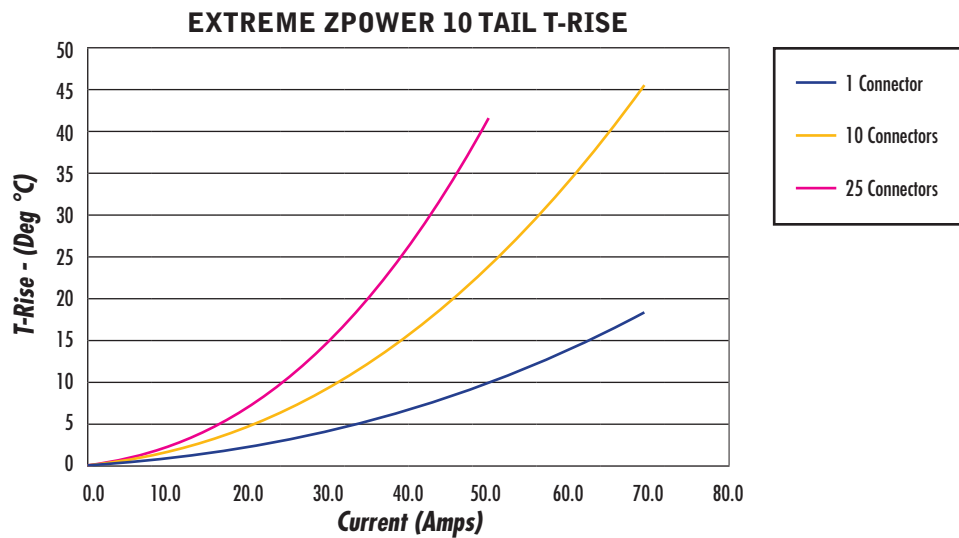
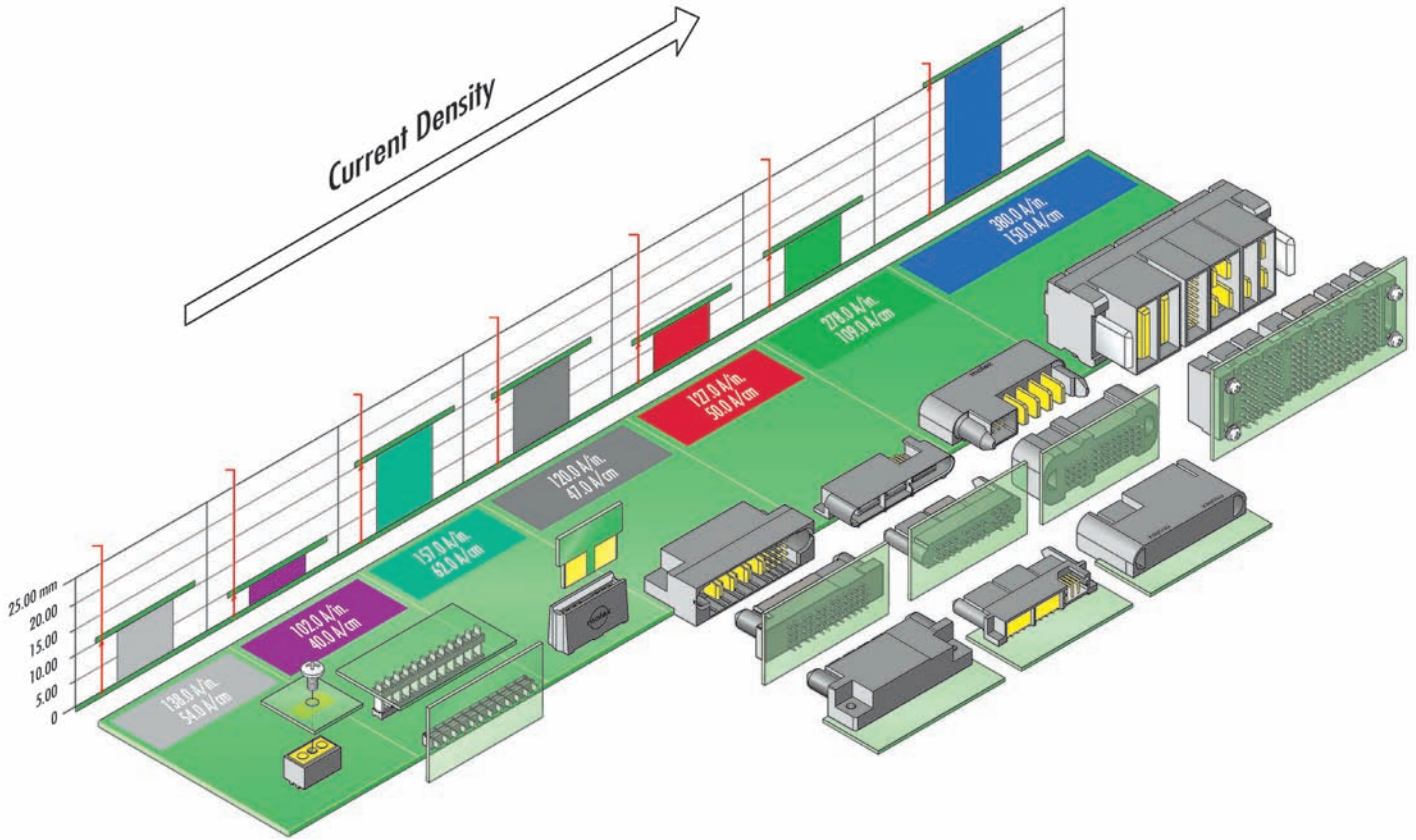
**Board-to-Board Application**



**Wire-to-Board Application**

## 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)

**molex**<sup>®</sup>  
one company > a world of innovation