

EXTreme ZPower[™] **Connector 10.30mm (.405") Parallel Board Spacing**

76001 Series



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 (hiah-pressure) contact areas create a reliable (gas-tight) mating surface

SPECIFICATIONS

Reference Information

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

Electrical

Voltage: 250V max		
Current (@ 30°C Tempe	erature rise)	
10 Circuit — 50.0A ma		
6 Circuit — 30.0A max	•	
Contact Resistance (per	blade):	
	Initial	End of Life
Power (milliohms) —	015	010 max Change

wer (milliohms) Dielectric Withstanding Voltage: 1500V DC Insulation Resistance: 5000 Megaohms min.

Mechanical

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.

where power connection between parallel boards or bus bars is necessary in a condensed space.

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

> 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

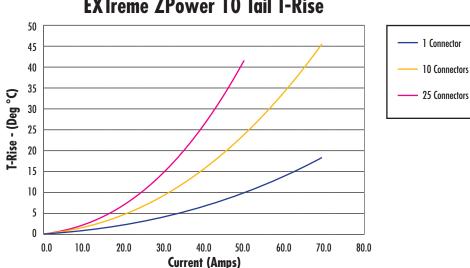
Housing: LCP Contact: Copper (Cu) Alloy Plating: Contact Area — 30µ" Gold min. or 100µ" Select Matte Tin min. Solder Tail Area — 100u" Select Matte Tin min. Underplatina — 50µ" Nickel min. Flammability Rating: UL 94V-0

Documents Sales Drawinas: 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" Gold or Tin 0.093" 0.125"	0.093″ min.
76001	6 Tail Connector	30.0A			

*Complete part numbers can be found at www.molex.com/link/ext-power.html



EXTreme ZPower 10 Tail T-Rise



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.

