

Offering 40.0A per contact and 157.0A per PCB inch, Molex's EXTreme PowerEdge™ low-profile power connector is an excellent choice for applications where space is at a premium and rugged, single-piece mating to a card edge or bus bar is required

The EXTreme PowerEdge™ Connector incorporates proven Molex design elements of high-performance terminal contacts with redundant interface points for optimum mating of double-sided card edge gold fingers. EXTreme PowerEdge™ is available in power only, signal only, and power/signal combinations for design flexibility.

Features and Benefits

- Low-profile design allows high current transfer in narrow spaces
- Mates to a 1.57mm (0.62") PCB card edge or bus bar
- Rated for current interruption hot-plugging requirements
- Rugged power and signal contacts reduce the potential for stubbing or damage
- 2 isolated power contacts or 8 signal contacts per housing segment
- Available in 2, 3, and 4 segment versions
- Press-fit or solder tail PCB mounting
- End-to-end stackable to accommodate additional circuit counts on card edge

Reference Information

Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980
TUV: R 72042763
Designed In: Millimeters

Electrical

Voltage: 250V max in standard contact loading
(Higher voltages may be accommodated through special contact loading – contact Molex)

Current (at 30°C Temperature rise):

Power – 40.0A max.

Signal – 3.0A max.

Contact Resistance (per contact):

	Initial	End of Life
Power (milliohms)	– 0.5	0.6 max change
Signal (milliohms)	– 6.24	15 max change

Dielectric Withstanding Voltage: 1500V

Insulation Resistance: 5000 Megohms min.

Current interruption:

Power – 40.0A and 50V DC

Mechanical

Mating Force (max per contact):

Power Contacts – 8.87N (2.0 lb)

Signal Contacts – 1.4N (0.31 lb)

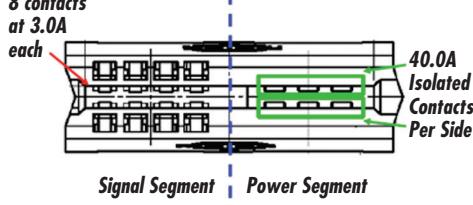
Un-mating Force (max per circuit):

Power Contacts – 4.4N (1.0 lb)

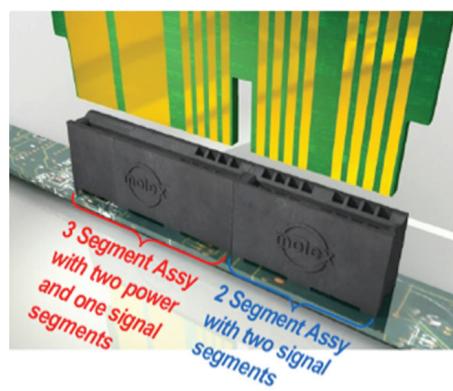
Signal Contacts – 0.14N (0.031 lb)

Durability: 50 cycles

Top View of Mixed Power/Signal Connector



Power & Signal PCB Application



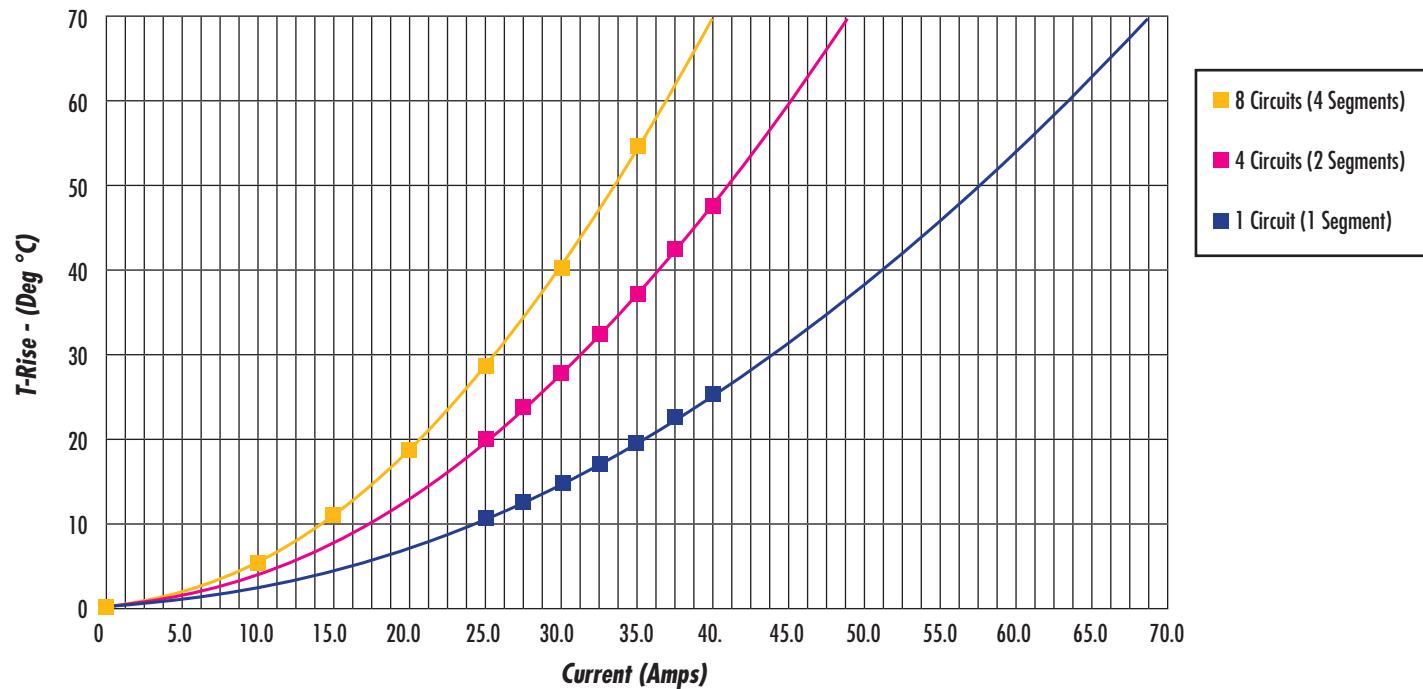
Bus Bar Application



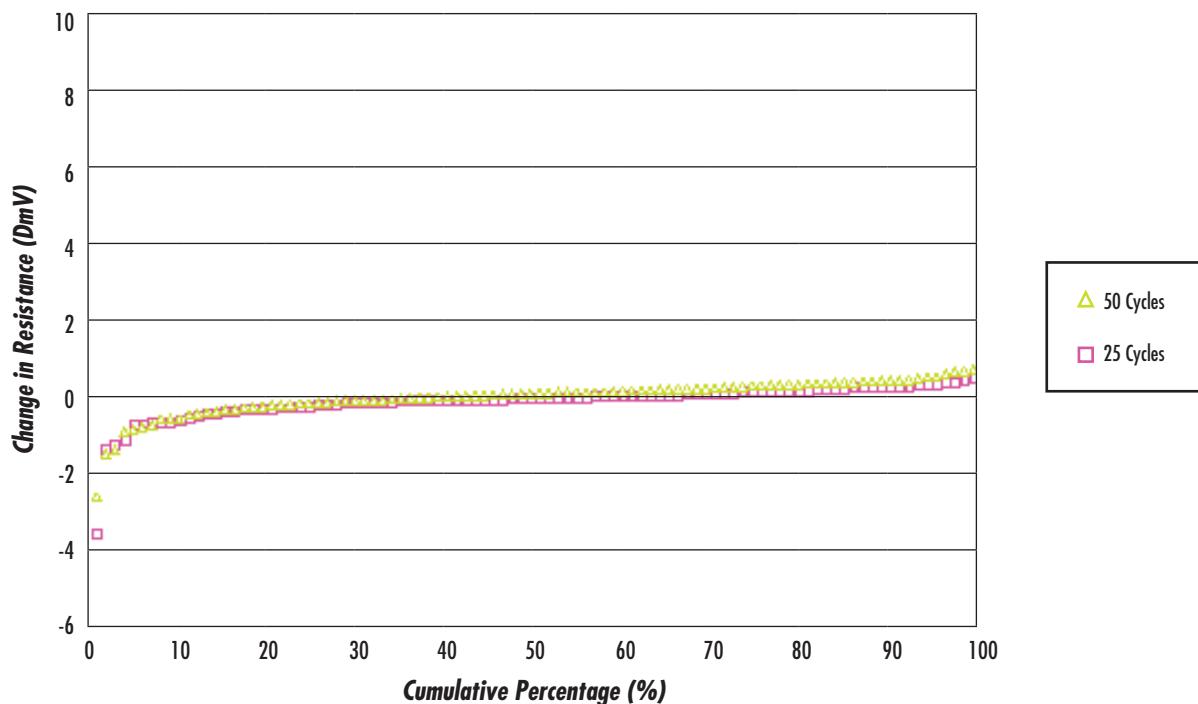
Connector Series Description	Press-Fit Series*	Solder Tail Series*	Number of Segments	Number of Contacts per Segment	Solder Tail Pin Lengths
Power only	45714	45719	2 to 4	2	3.19 and 4.33mm
Signal only	45845	45844	2 to 4	8	3.19 and 4.33mm
Power and Signal	45912	45911	2 to 4	2 Power or 8 Signal	3.19 and 4.33mm

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

EXTREME POWEREDGE™, DUAL SIDED T-Rise Current Chart

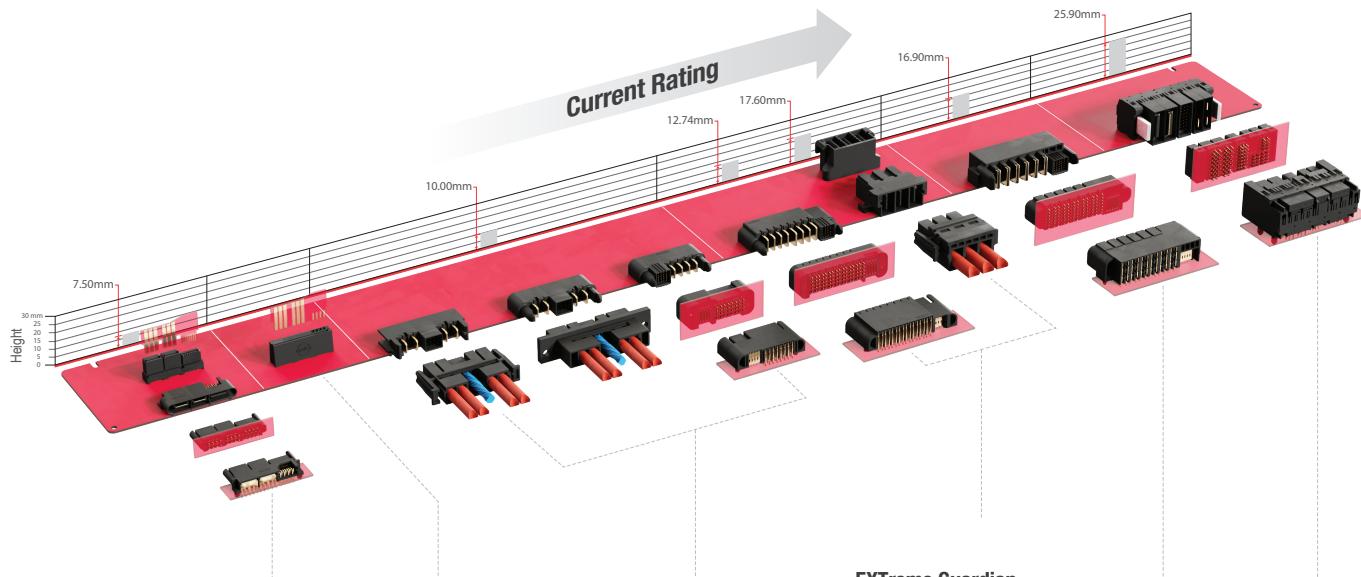


EXTREME POWEREDGE™ CONNECTOR SYSTEM, DURABILITY



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.



**EXTreme
LPHPower**
Current Rating:
30.0A / Blade
50.0A / cm
Profile Height: 7.50mm
Voltage (max): 250V

**EXTreme
PowerEdge**
Current Rating:
40.0A / Blade
62.0A / cm
Voltage (max): 250V

EXTreme Ten60Power
Current Rating:
60.0A / Blade
109.0A / cm
Profile Height: 10.00mm
Voltage (max): 600V

EXTreme Guardian
Board-to-Board
Current Rating:
80.0A / Blade
155.0A / cm
Profile Height: 12.74mm
Voltage (max): 120V
Wire-to-Board
Current Rating:
80.0A / Blade
73.0A / cm
Profile Height: 17.60mm
Voltage (max): 600V

**EXTreme
EnergetiC**
Current Rating:
100.0A / Blade
130.0A / cm
Profile Height: 16.90mm
Voltage (max): 320V

**EXTreme
PowerMass**
Current Rating:
150.0A / Blade
150.0A / cm
Profile Height: 25.90mm
Voltage (max): 600V