

FEATURES AND BENEFITS

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

Physical

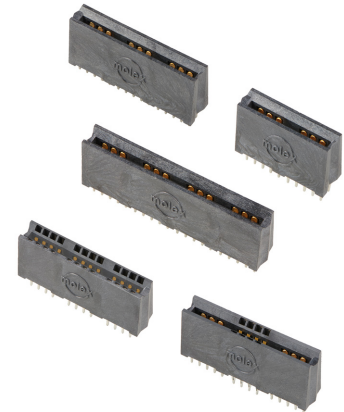
Housing: LCP
Contact:
Power Contacts - Copper Alloy
Signal Contacts — Copper Alloy
Plating:
Contact Area — Select Gold
Solder Tail Area — Tin
Underplating — Nickel
Flammability Rating: UL 94V-0

Documents

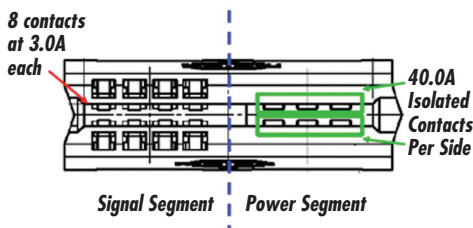
Sales Drawings: SD-45714-XXXX, SD-45719-XXXX,
SD-45844-XXXX, SD-45845-XXXX, SD-45911-XXXX,
SD-45912-XXXX
Product Specs: PS-45719-001

EXTreme PowerEdge™ Card Edge Hybrid Power Connector

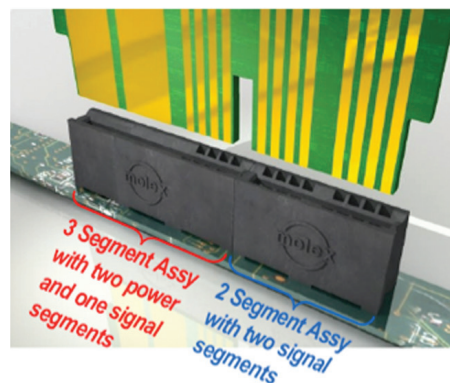
45911, 45912 Power and Signal
45719, 45714 Power Only
45845, 45844 Signal Only



Top View of Mixed Power/Signal Connector



Power & Signal PCB Application



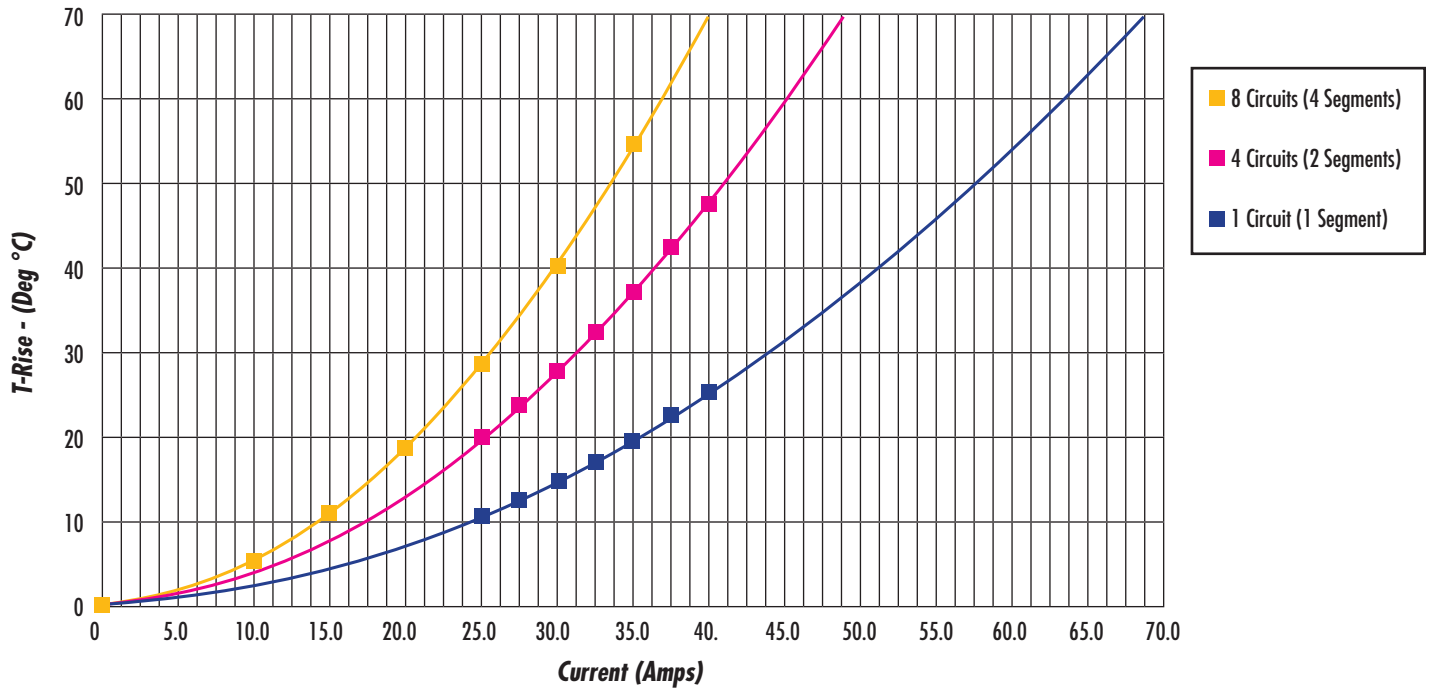
Bus Bar Application



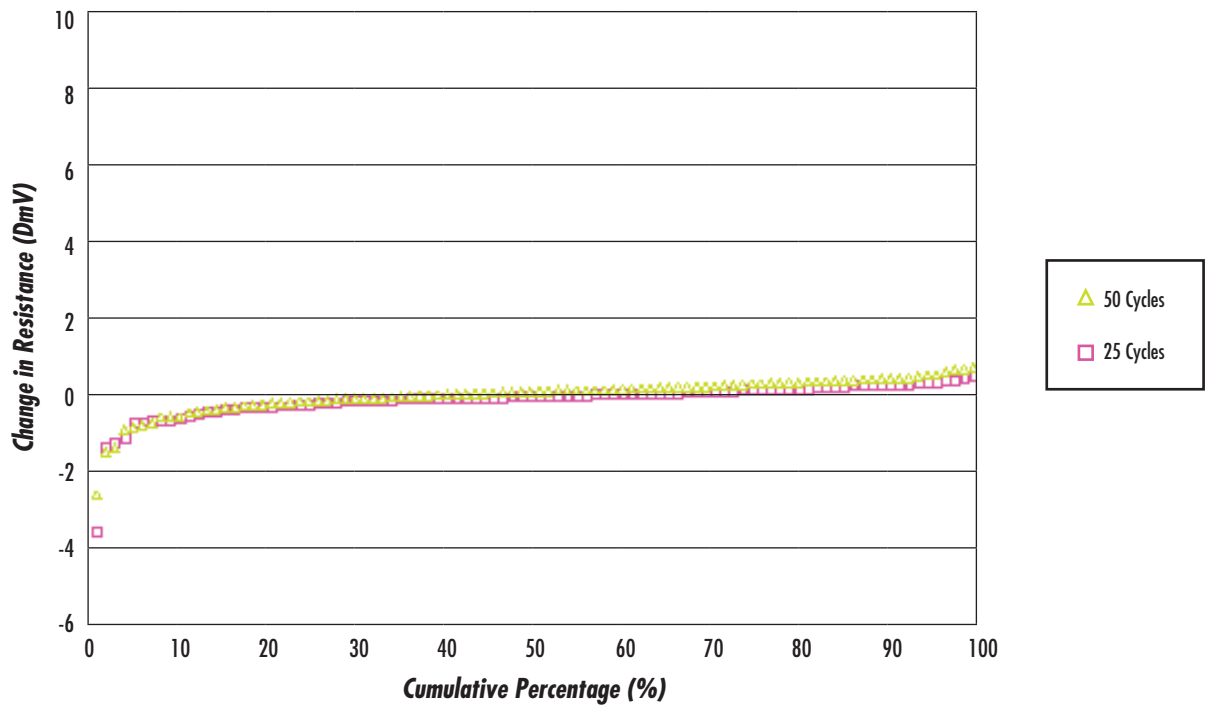
Connector Series Description	Press-Fit Series*	Solder Tail Series*	Number of Segments	Number of Contacts per Segment	Solder Tail Pin Lengths
Power only	45714	45719	2 to 4	2	3.19 and 4.33mm
Signal only	45845	45844	2 to 4	8	3.19 and 4.33mm
Power and Signal	45912	45911	2 to 4	2 Power or 8 Signal	3.19 and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

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

EXTREME POWEREDGE™, DUAL SIDED
T-Rise Current Chart

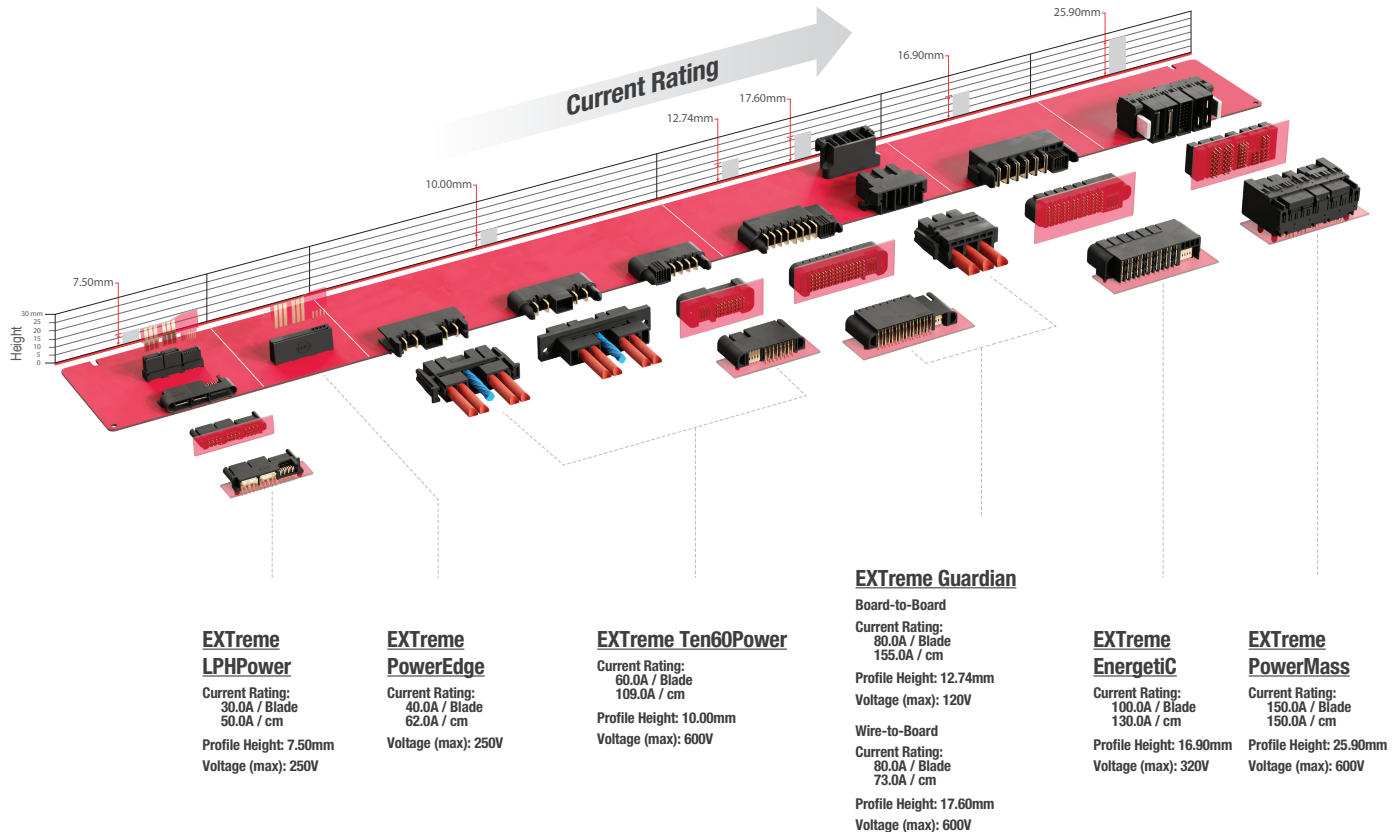


EXTREME POWEREDGE™ CONNECTOR SYSTEM, DURABILITY



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.



www.molex.com/link/ext-power.html

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 one company > a world of innovation