FEATURES AND SPECIFICATIONS

EXTreme LPHPower™ Low-Profile Hybrid Power Connector

45984 Right Angle Receptacle
46114 Vertical Receptacle
45985 Right Angle Plug

The **EXTreme LPHPower™ Connector** is a mixed, high-current power and signal connector system that picks up where traditional connectors leave off. Designed with power blades parallel to the PC board, its extremely low-profile height of only 7.50mm (.295") allows greater system airflow while taking up 53% less space than traditional connectors with the same current rating. Designed as a new generation of power interconnect, Molex's EXTreme LPHPower™ connector provides up to 127.0A per linear inch of space, has two isolated power blades in each housing bay and can be mated in a right angle, co-planar or vertical orientation. EXTreme LPHPower™ can be mated in a traditional two-piece connector system, or as a one-piece receptacle-to-cardedge / bus bar application.

Features and Benefits

- Low-profile design, 7.50mm height enhances system airflow and provides 127.0A per linear inch
- Receptacle sides mates to either our standard LPH plug or an industry standard 1.57mm PBC gold finger card edge
- Rated for current interruption hot-plugging requirements
- Rugged signal and power contacts reduce the potential for stubbing or damage
- Two isolated power contacts per housing bay (top and bottom)
- Tested per EIA-364-1000.01
- Last-mate/first-break available on power contacts

SPECIFICATIONS

Reference Information
Packaging: Tray or Tube
UL File No.: E29179
CSA File No.: LR19980
TUV: 30683046.001
Designed In: Millimeters

Electrical
Voltage: 250V max
Current (at 30° C Temperature rise):
Power – 30.0A max.
Signal – 1.0A max.
Contact Resistance (per contact):

	Initial	End of Life
Power (milliohms)	0.50	0.64
Signal (milliohms)	6.24	8.34

Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 5000 Megohms min.
Current interruption:
Power – 30.0A and 48V DC
Signal – 1.0A at 30V

Mechanical
Mating Force (max. per circuit):
Power Contacts – 6.87N (1.54 lb)
Signal Contacts – 1.08N (0.24 lb)
Un-mating Force (max per circuit):
Power Contacts – 5.88N (1.32 lb)
Signal Contacts – 0.02N (0.03 lb)
Durability: 250 cycles
(Receptacle and Plug)

Physical
Housing: LCP
Contact:
Power Contacts - Copper (Cu) Alloy
Signal Contacts – Phosphor Bronze
Plating:
Contact Area — Select Gold
Solder Tail Area — Tin
Underplating — Nickel
Flammability Rating: UL-94V-0

Documents
Sales Drawings: SD-45984-XXX, SD-45985-XXX, SD-46114-XXX, SD-46112-XXX, SD-46113-XXX
Product Specs:
Right Angle — PS-45984-001
Vertical — PS-46114-001
Application Tooling:
Vertical ATS — 62100-6300, 62201-8671, 62201-8672

ORDERING INFORMATION

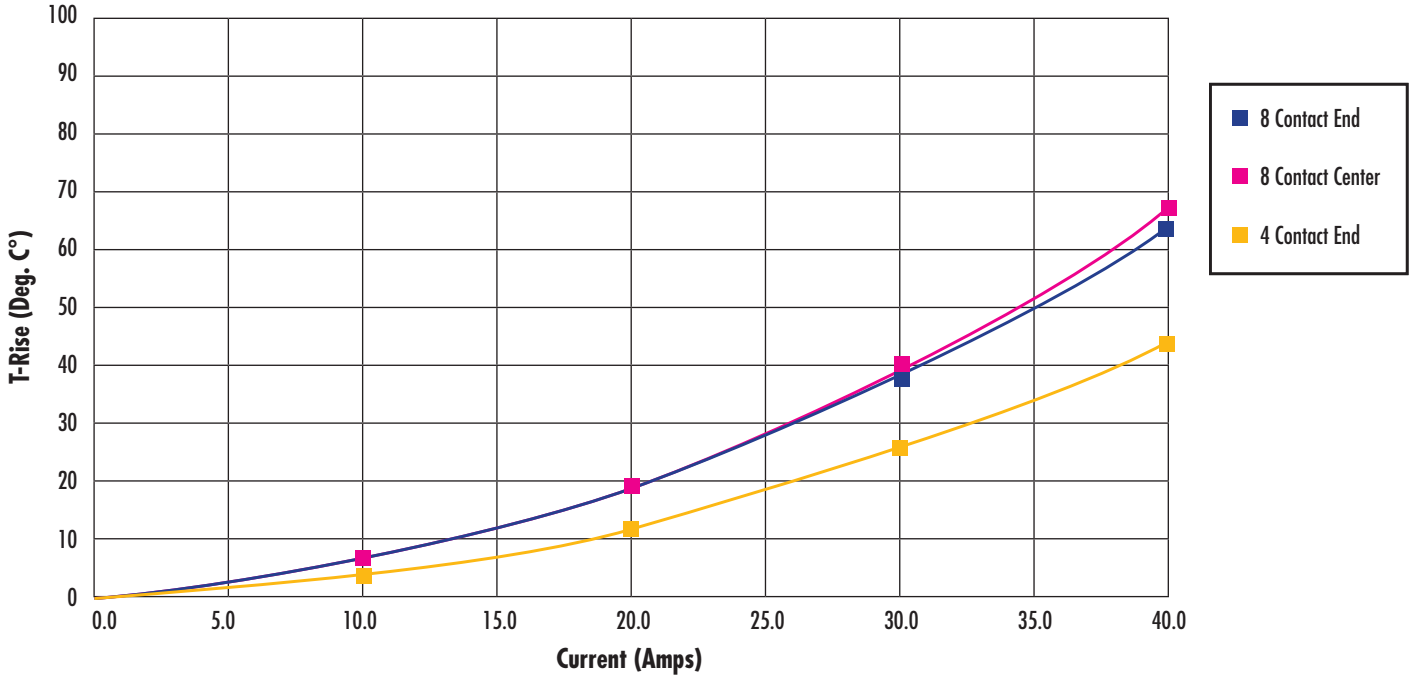
Series*	Description	Power Circuit	Signal Circuit	Guide	Board Peg	PCB Thickness
45984	Right Angle Receptacle	4 to 10	12 to 40	Optional	Optional	1.57, 2.36, 6.35mm (.062, .093, .250")
46114, 46112, 46113	Vertical Receptacle	2 to 14	12 to 40	Optional	N/A	1.57mm min. (.062")
45985	Right Angle Plug	4 to 10	12 to 40	Optional	Optional	1.57, 2.36, 6.35mm (.062, .093, .250")

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

EXTreme LPHPower™ Low-Profile Hybrid Power Connector

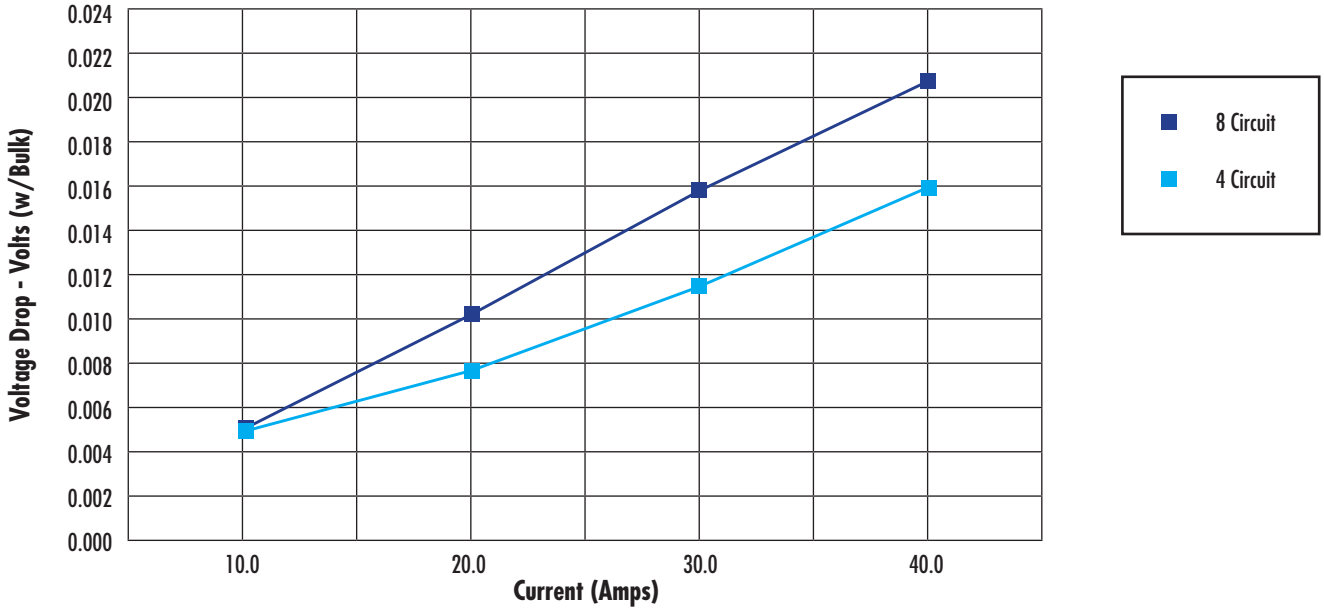
EXTreme LPHPower™

8 Contact and 4 Contact T-Rise Current Chart



EXTreme LPHPower™

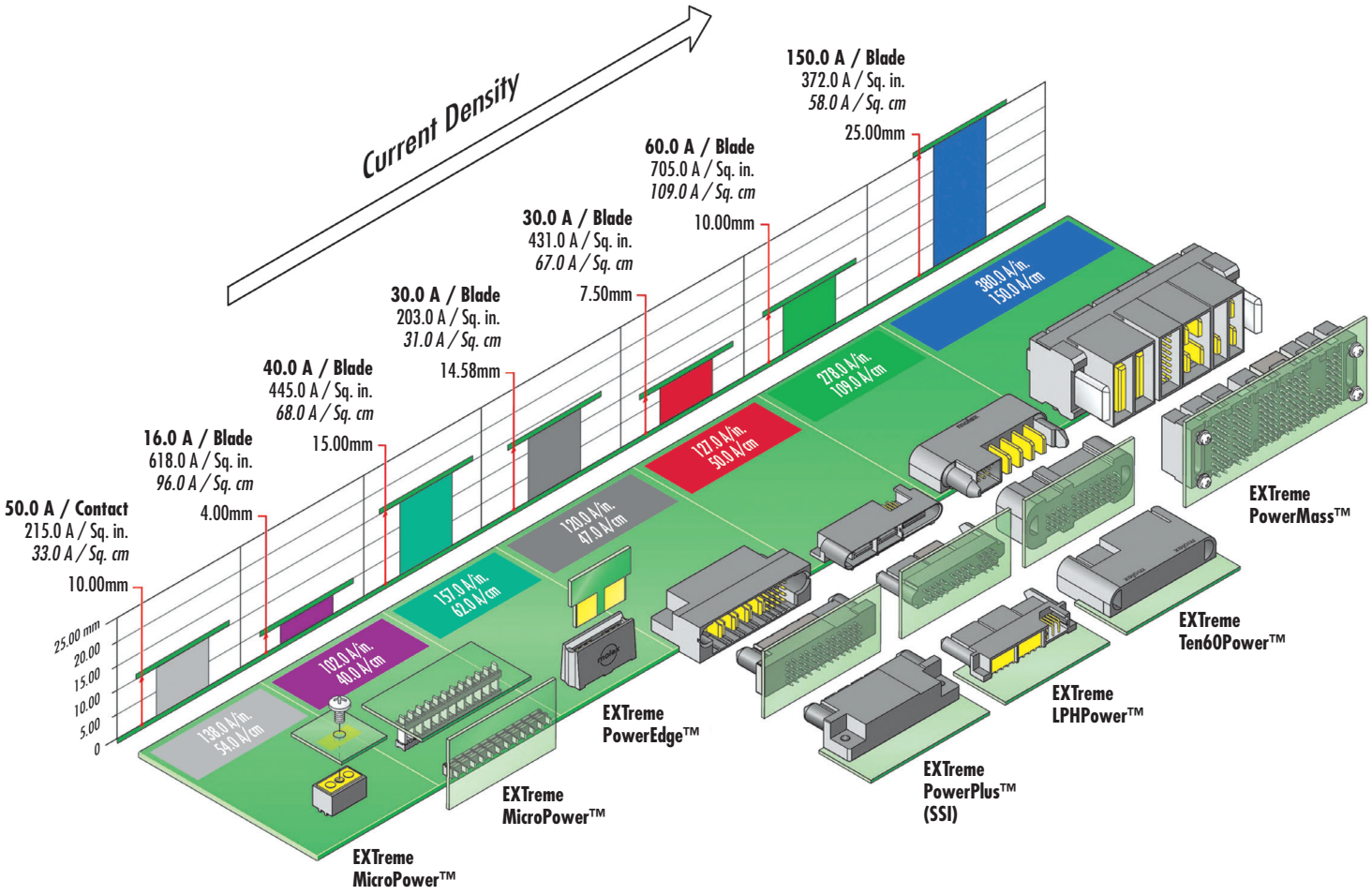
Voltage Drop Vs. Current
8 Circuit and 4 Circuit



EXTreme Power® Products

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.



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