

EXTreme Guardian™ Power Connector System

11.00mm Pitch with 80.0A per Blade

Exceed high-current and reliability requirements with EXTreme Guardian™ Power Connector System, providing EMI/RFI shielding with overmolded and non-overmolded cable harness options in vertical and right-angle configurations for design flexibility

Features and Benefits

System Wide

Current-dense design with high-current terminals and small pitch Provides one of the greatest current-density options amongst high-current wire-to-board connectors

Gold-plated terminals Greater corrosion resistance compared to other materials, which optimizes electrical conductivity

Fully isolated receptacle terminals and header blades Protection against potential damage during handling and mating

Terminal interface with 6 independent points of contact Offers redundant, secondary current paths for long-term performance and reliability

Terminals

Relatively small 11.00mm pitch Provides a very high 185.0A per linear inch in high-current applications

Low-halogen Environmentally friendly

Receptacles

Housings accept large gauge wire (up to 6 AWG) Provides for a large current-carrying capacity

Positive locking housing Ensures secure retention when receptacle and header are mated. Delivers an audible click to provide feedback that connector is fully mated

Housing lead-in chambers Provide terminal gatherability for easy mating to header

Terminal position assurance (TPA) Prevents backing out of terminals during mating and unmating

Headers

Locating pegs on the housing Enable accurate through-hole positioning to PCB

Right-angle header has 2 contact blade lengths Allows for varied mating sequences

Through-hole solder retention design Offers a robust, reliable manufacturing option

Solder tails in multiple lengths Support multiple PCB thicknesses

Compliant, press-fit tails available Lowers processing costs. Allows for no max PCB thickness

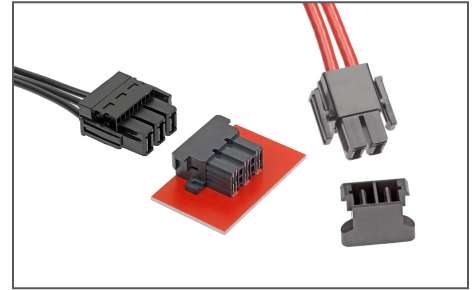
Packaging

Reel packaged terminals Increases terminal protection during processing and handling. Allows for greater manufacturing speeds

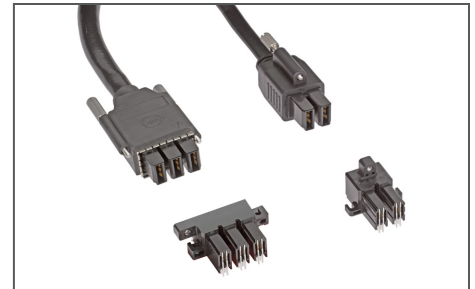
Bulk packaging Helps minimize packaging waste for TPAs

Trays Protects headers, tails and receptacles from accidental handling damage

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EXTreme Guardian™ Non-Overmolded Power Assembly: L, Right Angle ; R, Vertical



EXTreme Guardian™ Overmolded Power Assembly

Applications

Data Communication Equipment

High-end servers

Telecommunication Equipment

Cellular base stations

Hubs

Servers

Routers

Switches

Aerospace and Defense

Power Supplies

UPS (Uninterruptable Power Supply)

Other Markets

Solar

Medical

Electric vehicles

Commercial applications that require small form factor interconnects delivering up to 200.0A



Solar-Powered Cellular Base Station

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Specifications

Reference Information

Packaging: Tray, Reel or Bulk
UL File No.: E29179
CSA File No.: LR19980 (1779070)
Mates With: PCB Headers (Series 46817, 151035, 151053) mate with Overmolded Cable Assemblies (Series 68790 or 111119)
Use With: Power Harness Crimp Receptacles (Series 46818, 151034) use High-Power Terminals (Series 46819) and TPA Clips (Series 151076)
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Compliant: No

Electrical

Voltage (max.): 600V AC/DC
Current (max.): 80.0A per blade
Dielectric Withstanding Voltage: 2,200V AC

Mechanical

Contact Retention to Housing (average): 26.61N
Mating Force (max.): 36.60N
Unmating Force (max.): 34.39N
Durability (min.): 25 cycles

Physical

Housing: Polyester, 94V-0
Contact: Copper (Cu) Alloy
Plating:
Contact Area — Gold (Au)
Solder Tail Area — Tin (Sn)
Underplating — Nickel (Ni)
PCB Thickness: 1.40mm min.
Operating Temperature: -40 to +105°C

Ordering Information

PCB Headers (Series 46817, 151035, 151053)

Series No.	Orientation	Overmolded	PCB Thickness (mm)	Tail Length (mm)	Circuits
46817	Right Angle	Yes	2.36, 3.18 or 3.60	3.86 or 4.69	2 or 3
151035		No	2.36	3.86	2 to 6
151053	Vertical	No	2.30	N/A (press-fit tail)	

Power Crimp Receptacles (Series 46818, 151034)

Series No.	Overmolded	Circuits	Wire Gauge (AWG)
46818	Yes	3	6, 8 or 10
151034	No	2, 3, 4, 5, 6	6

High-Power Terminals (Series 46819)

Series No.	Wire Gauge (AWG)	Plating
46819	6, 8, 10	Gold (Au)

Power Harness Terminal Position Assurance (TPA) Clips (Series 151076)

Series No.	Circuits	Note
151076	2, 3, 4, 5, 6	TPA's must be used with housings; they are ordered separately

Power Cable Assemblies (Series 68790, 111119)

Series No.	Overmolded	Circuits	Wire Gauge (AWG)	Single or Double Ended	Cable Length (m)
68790	Yes	2, 3	6	Single, Double	1.20, 1.50, 2.00, 3.00, 15.00
111119	Overmolded Non-overmolded	2, 3, 4, 5, 6	8, 10	Double	1.00

www.molex.com/link/extremeguardian.html