molex®

Exceed high-current and reliability requirements in top-end server and high-power applications with Molex's compact, EXTreme Guardian™ Power Connector System, providing EMI/RFI shielding, overmolding and discrete-wire options for design flexibility

EXTreme Guardian™ header and cable assemblies, previously named EXTreme Power™ Interconnect (EPIC), feature small package sizes with a centerline pitch of 11.00mm. The system supports up to 80.0A per contact, provides good shielding characteristics in EMI-sensitive environments, features hot-plugging capabilities and UL safety features.

Headers are available in 2-circuit, single-flanged and 3-circuit, dual-flanged versions. Cable assemblies are available in 3-circuit, straight, shielded and unshielded versions for high-voltage applications and are UL touch-safe. Additionally, the 2-circuit cabled solutions include a straight, unshielded cable assembly; a right-angled, right-entry and left-entry unshielded version, as well as a left-entry shielded variant for space-saving connections to servers installed in confined spaces.

For additional information visit: www.molex.com/link/extremeguardian.html

EXTreme Guardian™ Power Connector System

46817 PCB Headers, Single and Dual Flange, 2 and 3 Circuits

46818, 170351 Power Crimp Receptacles

46821, 170352 Power Harness TPA Clips

46819 High-Power Terminals

68790 Power Cable Assemblies, Straight, Unshielded, 2 Circuits

68790 Power Cable Assemblies, Right-Angle, Shielded or Unshielded, Left- or Right-Entry, 2 Circuits

111119 Power Cable Assemblies, Straight, Shielded or Unshielded, Low Profile, 3 Circuits

Features and Benefits

EXTreme Guardian Solutions

High-current density per inch	Supports up to 80.0A per blade (185.0A per inch)
Redundant contact design handles up to 600V	Supports AC or DC high-voltage applications with the lowest feasible voltage drop and I2R (irreversible dissipative power) losses
Small centerline spacing of 11.00mm	Reduced PCB footprint compared to legacy power products
Recessed terminals, First-Mate-Last-Break (FMLB)	Allow hot-swapping of power units. Reduce network downtime
Gold or Tin contact plating	Provides flexibility to suit customer applications; Gold plating provides low interface resistance
UL and CSA certification	Meets all accredited agency safety requirement and approvals

PCB Headers

Locating pegs	Enable accurate through-hole positioning of connector on PCB
Through-hole solder retention design	Provides flexible manufacturing options
Insert-molded threaded nut	Provides secure panel attachment

Cable Assemblies

Cable shield gasket	Provides Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) shielding
Standard overmolds and discrete wire capable	Provides strain relief and wire management in rugged environments
Crimp terminal accepts 10, 8, 12/12 or 6 AWG wire	Supports heavier gauge wire with no terminal back-out issues
EMI shielding options (for shielded versions)	Minimizes cross-talk and improves immunity to external noise
Terminal Position Assurance (TPA) option available	Secures cable from accidental cable disconnection
Mounting jackscrews	Improves cable retention after mating to PCB header

molex®

EXTreme Guardian™ Power Connector System

Specifications

Reference Information

Packaging: Tray
UL File No.: E29179
CSA File No.: LR19980 (1779070)
Mates With:
PCB Headers (Series 46817) mate with Cable Assemblies (Series 68790 or 111119)
Use With:
Power Harness Crimp Receptacles (Series 46818, 170351) use High-Power Terminals (Series 46819) and TPA Clips (Series 46821, 170352)
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Compliant: No

Electrical

Voltage (max.): 600V AC/DC
Current (max.): 80.0A
Dielectric Withstanding Voltage:
1,700V 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

EXTreme Guardian™ Power Connector System

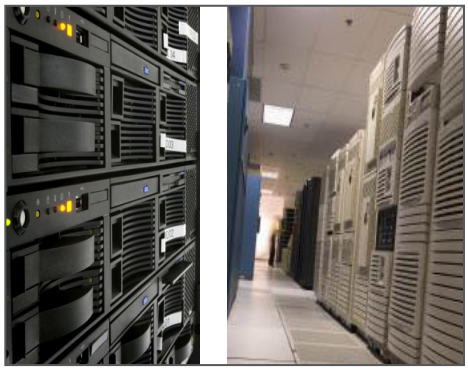
Applications

- Data Communication Equipment
  - High-end servers
- Telecommunication Equipment Manufacturers
  - Cellular base stations
  - Hubs
  - Servers
  - Routers
  - Switches
- Power Supplies
  - UPS (Uninterruptable Power Supply)
- Other Markets
  - Military/Aerospace
  - Solar
  - Medical
  - Electric vehicles
  - Commercial applications that require small form factor interconnects delivering up to 200.0A

Uninterrupted Power Supplies

Medical Equipment

Solar-Powered Cellular Base Station



High-End Servers

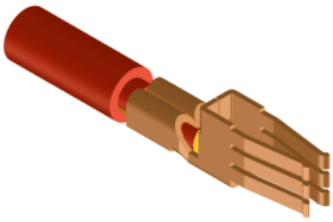
molex®

EXTreme Guardian™ Power Connector System

Product Family

PCB Header, Single-Flange, 2 Circuits
(Series 46817)

PCB Header, Dual-Flange, 3 Circuits
(Series 46817)

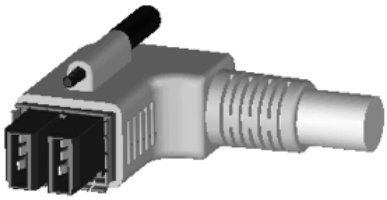


Power Terminal
(Series 46819)

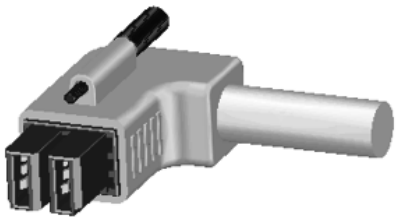
Power Harness TPA Clip
(Series 46821, 170352)
(2 Circuit Clip shown)

Power Harness Crimp Receptacle
2 and 3 Circuits
(Series 170351, 46818)

Power Cable Assembly, Right-Angle,
Unshielded, Right-Entry, 2 Circuits
(Series 68790)



Power Cable Assembly, Right-Angle,
Shielded, Left-Entry, 2 Circuits
(Series 68790)



Power Cable Assembly, Right-Angle,
Unshielded, Left-Entry, 2 Circuits
(Series 68790)

Power Cable Assembly, Straight,
Unshielded, 2 Circuits
(Series 68790)

Power Cable Assembly, Straight,
Shielded, Low-Profile, 3 Circuits
(Series 111119)

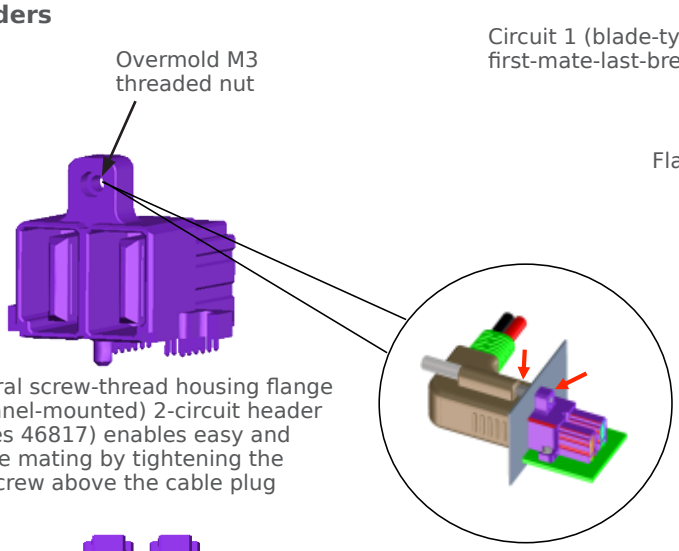
Power Cable Assembly, Straight,
Unshielded, Low Profile, 3 Circuits
(Series 111119)

molex®

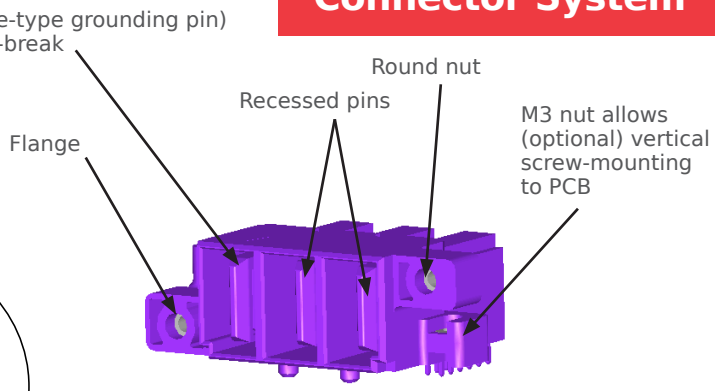
EXTreme Guardian™ Power Connector System

Additional Product Features

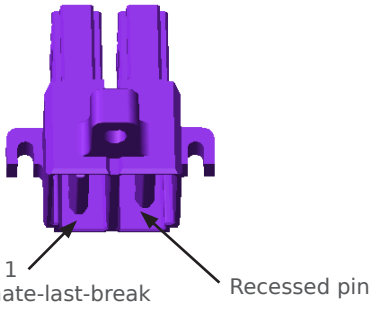
Headers



Integral screw-thread housing flange of (panel-mounted) 2-circuit header (Series 46817) enables easy and secure mating by tightening the jackscrew above the cable plug



The insert-molded, 3-circuit header (Series 46817) with flanged horizontal and (optional) vertical mounting ensures accurate positioning and secured placement of the connector to both tail stock and PCB respectively



Top view of 2-circuit, through-hole, right-angle header (Series 46817) showing position of first-mate-last-break circuit for hot-swapping functions

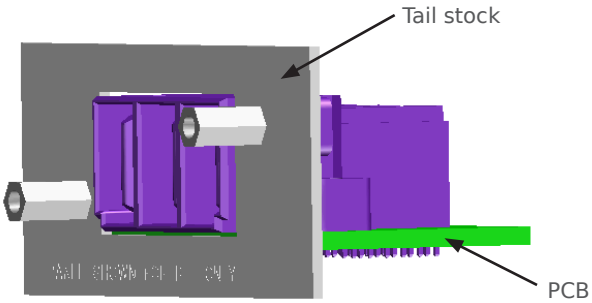
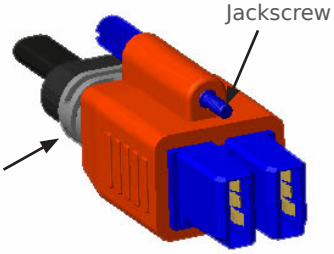
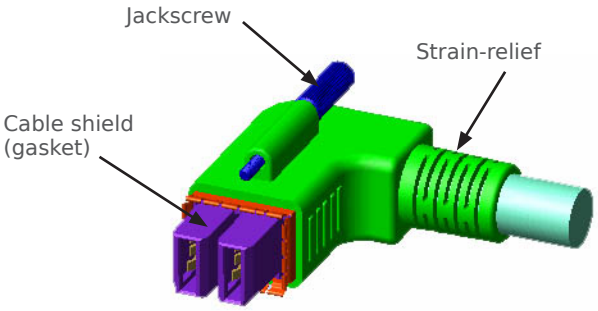


Illustration showing the mounted PCB header assembly complete with tail stock

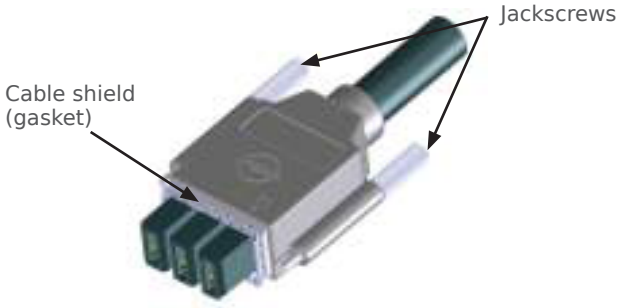
Cable Assemblies



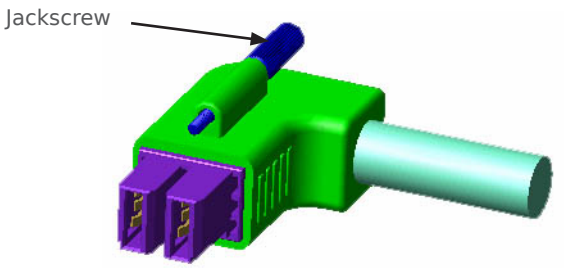
2-circuit, straight, unshielded cable assembly, showing cable overmold with jackscrew feature (Series 68790)



2-circuit, left-entry, right-angle, shielded cable assembly showing cable shield (gasket) and jackscrew feature



3-circuit, straight, dual-ended power cable assembly with reduced cable cross-talk shielding (Series 111119)



2-circuit, left-entry, right-angle, unshielded cable assembly showing jackscrew feature on cable overmold

molex®

EXTreme Guardian™ Power Connector System

Ordering Information

PCB Headers (Series 46817)

Order No.	PCB Thickness (mm)	Tail Length (mm)	Circuits
46817-1000	2.36	3.86	3
46817-1001	3.18 or 3.60	4.69	
46817-1002	2.36	3.86	2
46817-1003	3.18 or 3.60	4.69	

Power Crimp Receptacles (Series 46818, 170351)

Order No.	Circuits	Wire Gauge (AWG)
46818-0001	3	8, 10
46818-0003		6
170351-0002	2	8, 10
170351-0003		6

High-Power Terminals (Series 46819)

Order No.	Wire Gauge (AWG)	Plating
46819-0011	10	Gold (Au)
46819-0012	8	
46819-0013	6	

Power Harness Terminal Position Assurance (TPA) Clips (Series 46821, 170532)

Order No.	Circuits	Note
46821-0001	3	TPA's must be used with housings; they are ordered separately.
170352-0002	2	

Power Cable Assemblies (Series 68790, 111119)

Order No.	Wire Gauge (AWG)	Single or Double Ended	Cable Length (m)
68790-0005	8	Double	2.00
68790-0007	10		1.20
68790-0008			1.50
68790-0009	6	Single	3.00
68790-0010			15.00
111119-1000	8, 10	Double	1.00
111119-2000			

www.molex.com/link/extremeguardian.html

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9