

# EXTreme Guardian Plug-Side Overmolded Cable Assemblies >

EXTreme Guardian plug-side overmolded cable assemblies, available in multiple circuit sizes and lengths, meet ever-expanding power requirements for a range of networking and datacom equipment while providing rugged strain relief at the connector and cable interface.



*EXTreme Guardian Plug-Side Overmolded Cable Assemblies*

## FEATURES AND ADVANTAGES

### Dependable strain relief

Decreases mechanical stress on wires and terminals

### 2- and 3-circuit options

Accommodate a broad range of design configurations

### Polarized mating geometry and locking tang-on terminals

Help ensure secure retention and can help prevent accidental mis-mating

### Available in multiple lengths

Optimizes design flexibility

### Capable of carrying 55.0 to 60.0A of current

Supports numerous power applications; fully uninterruptible with Molex EXTreme Guardian system product range



## MARKETS AND APPLICATIONS

### Automotive

Electric vehicles

### Aerospace and Defense

UPS (uninterruptible power supply)

### Data Communication

High-end servers

### Solar

### Medical

### Telecommunication

Cellular base station

Routers

Hubs

Switches

Servers



*Automotive*



*Aerospace and Defense*



*Telecommunication*

*Note: Application recommendations are based on the connector specifications.*

# EXTreme Guardian Plug-Side Overmolded Cable Assemblies >

## SPECIFICATIONS

### TWO-CIRCUIT GUARDIAN CABLE ASSEMBLY

#### Reference Information

Packaging:  
See packaging drawing  
Termination method: Soldering  
Designed In: Millimeters  
RoHS: Yes  
Glow Wire Compliant: No

#### Electrical

Voltage (max.): 600V  
Current (max.): 60.0A  
Dielectric Withstanding Voltage:  
2200V AC/1 minute between adjacent circuits

#### Physical

Housing: LCP  
Contact: Copper alloy  
Plating:  
Contact Area—Gold Lengths: 500mm, 1.00M, 2.00M

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\*The specification given is based on the connector used.

## ORDERING INFORMATION

Series	Component	UL	Wire Gauge	Circuits	Length
<a href="#">218055</a>	EXTreme Guardian Plug-Side Overmolded Cable Assemblies	10669	6 AWG	2 and 3	500.00mm 1.00M 2.00M

[www.molex.com/link/extremeguardian.html](http://www.molex.com/link/extremeguardian.html)

# Off-the-Shelf (OTS) EXTreme Guardian Overmolded Cable Assemblies >

Off-the-Shelf (OTS) EXTreme Guardian Overmolded Assemblies with locking screw are available in 2- and 3-circuit sizes



## FEATURES AND ADVANTAGES

### Capable of carrying 50.0 to 60.0A of current

Is an excellent option for many power applications



### Locking tang-on terminals

Help secure terminals in housings



*Off-the-Shelf (OTS) EXTreme Guardian Overmolded Assemblies*

### Connector-locking screw

Helps ensure secure retention when receptacle and header or receptacle and plug are mated; can help prevent accidental mis-mating



*Off-the-Shelf (OTS) EXTreme Guardian Overmolded Assemblies*



### Polarized mating geometry

Helps prevent accidental mis-mating

## MARKETS AND APPLICATIONS

### Aerospace and Defense Power Supplies

Uninterruptable power supplies (UPSs)

### Data Communication Equipment

High-end servers

### Electric vehicles

### Medical

### Solar

### Telecommunication Equipment Manufacturers

Cellular base stations

Hubs

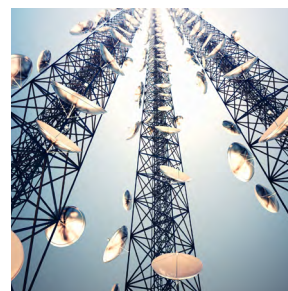
Servers

Routers

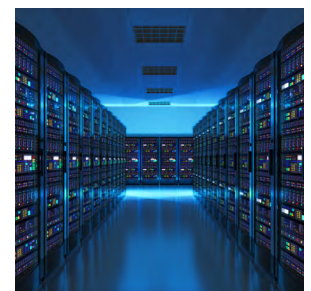
Switches



*Uninterruptible Power Supply (UPS)*



*Cellular Towers*



*Servers*

# Off-the-Shelf (OTS) EXTreme Guardian Overmolded Cable Assemblies >

## SPECIFICATIONS

### Two-pin Guardian

#### Reference Information

Packaging: See packaging drawing  
Terminal Used: 468190013  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: No  
Glow Wire Compliant: No

#### Electrical

Voltage (max.): 600V  
Current (max.): 60.0A  
Contact Resistance: 106 milliohms  
Dielectric Withstanding Voltage: 1000V DC/0.01s  
Insulation Resistance (min.): 10 Megohms

#### Physical

Housing: PBT  
Contact: Copper alloy  
Plating, Contact Area—Gold  
Solder Tail Area—Tin  
Underplating—Nickel  
Operating Temperature: -40 to +105°C

### Three-pin Guardian

#### Reference Information

Packaging: See packaging drawing  
Terminal Used: 468190013  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: No  
Glow Wire Compliant: No

#### Electrical

Voltage (max.): 600V  
Current (max.): 50.0A  
Contact Resistance: 106 milliohms  
Dielectric Withstanding Voltage: 1000V DC/0.01S  
Insulation Resistance: 10 Megohms

#### Physical

Housing: PBT  
Contact: Copper alloy  
Plating, Contact Area—Gold  
Solder Tail Area—Tin  
Underplating—Nickel  
Operating Temperature: -40 to +105°C

#### Mechanical

Durability (min.): 25 Cycles

## ORDERING INFORMATION

Part No.	Description	Length (m)	Number of Circuits
<a href="#">2167592025</a>	EXTreme Guardian Overmolded Cable Assemblies	2.0	2
<a href="#">2167592026</a>		4.0	2
<a href="#">2167592027</a>		6.0	2
<a href="#">2167592035</a>		2.0	3
<a href="#">2167592036</a>		4.0	3
<a href="#">2167592037</a>		6.0	3

[www.molex.com/link/overmolded.html](http://www.molex.com/link/overmolded.html)

# Off-the-Shelf (OTS) Mega-Fit Overmolded Cable Assemblies



Molex delivers off-the-shelf and customized Mega-Fit Overmolded Cable Assemblies in multiple circuit sizes and lengths, combining rugged signal connection with a user-friendly interface

## Features and Advantages

### Custom assemblies for production also available

Meet design needs after prototyping is complete. Molex's extensive design and manufacturing expertise can meet the unique challenges of the most demanding applications

### User-friendly overmolded interface and strain relief

Provides a ruggedized general market connector that is safe and convenient for consumer use. Reduces mechanical stress on wires and terminals.

### Positive latching on housings

Ensures secure retention. Delivers an audible click to provide feedback that connector is fully mated



### Mega-Fit Cable Assembly capable of carrying a maximum 23.0A of current

High-current terminals deliver more power per linear and square millimeter than most mid-range power products

### Fully polarized housings

Prevent accidental mis-mating



### Fully isolated terminals

Protected against damage during handling and mating

## Applications

### Consumer

- Office equipment
- Fan tray assemblies
- Gaming and vending
- Washers and dryers
- Heaters and air conditioners

### Networking

- Hubs and servers
- Power supplies and distributions

### Data/Computing

- Personal computers
- Workstations
- Servers

### Industrial

- Machinery and heavy equipment
- Lighting and automation

### Commercial Vehicle

- Unsealed electronic control modules
- Power converters



Office Equipment



Vending Machines



Industrial Automation

Mega-Fit 4-Circuit Connector

# Off-the-Shelf (OTS) Mega-Fit Overmolded Cable Assemblies



## Specifications - Mega-Fit Overmolded Cable Assemblies

### **ELECTRICAL**

Voltage (max.): 600V  
Current (max.): 23.0A  
Contact Resistance (max. change): 6 milliohms  
Current Interrupt Rating: 48V AC/DC, 23.0A max. up to 30 mate and unmate cycles

### **MECHANICAL**

Contact Retention to Housing: 30N  
Mating Force (max.): 5.6N per circuit (Gold)  
Unmating Force (max.): 5.6N per circuit (Gold)  
Durability (max.): 200 mating cycles (Gold)  
Wire Pull-Out Force (min.): 12 AWG/4.0mm<sup>2</sup>: 220N

### **PHYSICAL**

Header: UL 94V-0, Glow Wire and Low Halogen  
Contact: High-Conductivity Copper  
Plating: Contact Area: Gold  
Underplating: Nickel  
Operating Temperature: -40 to +120°C

## Ordering Information

Part No.	Description	Length (m)	Number of Circuits
<a href="#">245136</a>	Mega-Fit Overmolded Cable Assembly	0.5	2, 4, 6, 8 and 10
		1	
		2	

Custom Product	Description
<a href="#">Contact Molex</a>	Customized Mega-Fit Overmolded Cable Assembly

[www.molex.com/link/overmolded.html](http://www.molex.com/link/overmolded.html)

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# Off-the-Shelf (OTS) Micro-Fit Overmolded Cable Assemblies



Off-the-Shelf (OTS) Micro-Fit Double-Ended, Overmolded Assemblies with strain relief are available in multiple circuit sizes and cable lengths for a rugged signal connection



Micro-Fit Overmolded Cable Assembly  
(10-Circuit Version Shown)

## Features and Advantages

### Both custom and off-the-shelf assemblies available

Provides quick availability for development and production programs and customized versions for final designs

### Overmolded strain relief

Reduces mechanical stress on wires and terminals

### Positive latching

Helps ensure secure retention when receptacle and header or receptacle and plug are mated. Prevents accidental unmating

### Capable of carrying 5.0A of current

Ideal for many signal and power applications

### Locking tang on terminals

Helps secure terminals in housings

### Polarized mating geometry

Helps prevent accidental mis-mating

## Applications

### Consumer

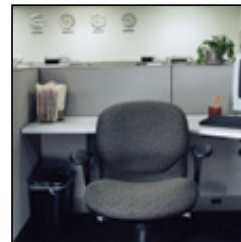
- Office equipment
- Fan tray assemblies
- Gaming and vending

### Data/Computing

- Personal computers
- Computers, work stations and servers



Vending Machines



Work Stations



Office Equipment



Micro-Fit 4-, 6- and 10-Circuit  
Overmolded Cable Assemblies  
(2- and 8-Circuit versions also available)

# Off-the-Shelf (OTS) Micro-Fit Overmolded Cable Assemblies



## Specifications

### Electrical

Voltage (max.): 300V AC/DC  
Current (max.): 5.6A  
Dielectric Withstanding Voltage: 1000V AC  
Insulation Resistance (min.): 10 Megohms

### Mechanical

Insertion Force to PCB (max.): 14.7N  
Retention Force (min.): 24.5N  
Mating Force (max. per circuit): 8.0N  
Unmating Force (min. per circuit): 3.7N  
Wire Pullout Force (min.): 57.8N  
Durability (min.): 30 cycles

### Physical

Flammability: UL 94V-0  
Housing: Nylon, Black  
Terminal: Phosphor Bronze  
Plating: Tin  
Wire/Cable: UL2464, Black, 80°C, xC\*20AWG, 300V  
Overmolding resin: PVC, Black  
Operating Temperature: -20 to +80°C

## Ordering Information

Part No.	Description	Length (m)	Number of Circuits
<a href="#">214770</a>	OTS Overmolded Cable Assemblies	0.5, 1.0, 2.0, 3.0, 5.0	2 to 6
<a href="#">245132</a>			2 to 10

Custom Product	Description
<a href="#">Contact Molex</a>	Customized Micro-Fit* Overmolded Cable Assembly

[www.molex.com/link/overmolded.html](http://www.molex.com/link/overmolded.html)

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# Off-the-Shelf (OTS) Mini-Fit Overmolded Cable Assemblies >



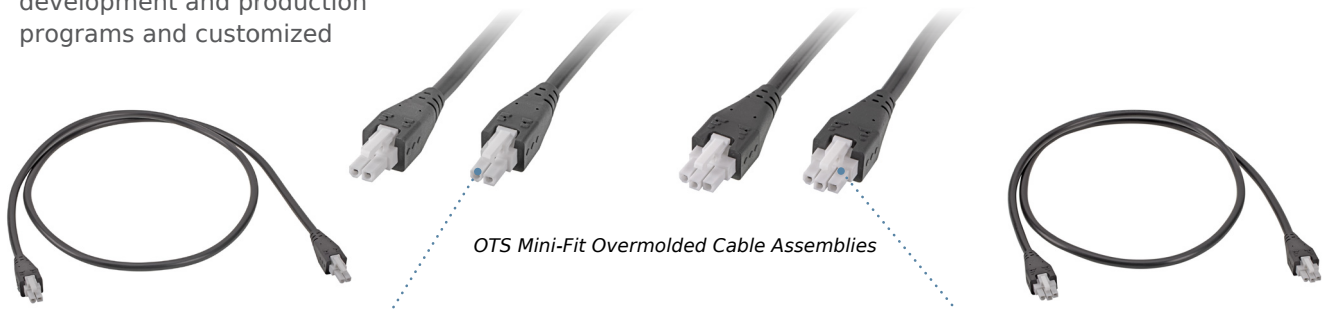
OTS Mini-Fit Overmolded Cable Assemblies

The Mini-Fit Overmolded Cable Assemblies deliver up to 6.0A, provide terminal position assurance options and offer off-the-shelf and customized versions with various circuit sizes and lengths

## FEATURES AND ADVANTAGES

### Both custom and off-the-shelf assemblies available

Provides quick availability for development and production programs and customized



OTS Mini-Fit Overmolded Cable Assemblies

### Overmolded strain relief

Reduces mechanical stress on wires and terminals

### Positive locking housings

Help ensure connectors are fully mated with easy-to-operate thumb latch. Helps to prevent accidental unmating

### Polarized mating geometry

Helps ensure header and receptacle cannot be mated

## APPLICATIONS

### Automotive

Harness manufacturers  
Inside devices  
Non-sealed applications

### Commercial Vehicle

Electronic control modules

### Consumer

Gaming equipment  
Gaming machines  
Vending machines

### Data/Computing

Copiers  
Printers

### Home Appliance

White goods

### Industrial

Industrial equipment  
Power suppliers

### Industrial Automation

Automation equipment  
Food and beverage dispensers

### Medical

Medical devices  
X-rays

### Telecommunications/Networking

Backplanes  
Fan-tray assemblies  
Rack-mount servers  
Routers  
Servers  
Switches



Office Equipment



Industrial Automation



Vending Machines

# Off-the-Shelf (OTS) Mini-Fit Overmolded Cable Assemblies >

## SPECIFICATIONS

### REFERENCE INFORMATION

Packaging: Reel, Bag or Tray  
UL File No.: E29179  
CSA File No.: LR19980  
Mates with: Other Mini-Fit and Mini-Fit Plus Housings  
Use With: Mini-Fit and Mini-Fit Plus Terminals  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: Yes, some series  
Glow Wire Capable: No

### ELECTRICAL

Voltage (max.): 600V AC/DC  
Current (max.): 6.0A Max.  
Contact Resistance (max.): 10 milliohm  
Dielectric Withstanding Voltage: 2200V AC  
Insulation Resistance (min.): 1000 Megohms

### MECHANICAL

Contact Insertion Force (max.): 15N  
Contact Retention to Housing (min.): 30N  
Mating Force (max.): 14.7N  
Unmating Force (max.): 0.5N  
Durability (min.): 30 Cycles

### PHYSICAL

Flammability: UL 94V-0 (for the housing)  
Housing: Nylon  
Plating:  
Contact Area – Tin (Sn)  
Tail Area – Tin (Sn)  
Operating Temperature: -10 to 80°C

[www.molex.com/link/otscableassemblies.html](http://www.molex.com/link/otscableassemblies.html)