

# Mini-Fit Sr.™

Power Connectors, Silver-plated



Silver-plated connectors support up to 50.0A current with superb electrical reliability and significant cost-savings over a vast range of industrial, consumer, power supply, medical and commercial vehicle applications

## Features and Benefits

Silver-plated contacts	Offers significant cost-savings over gold-plated systems; avoids the need to manually lubricate Tin-plated versions to mitigate fretting corrosion
High amperage interconnect solution (50.0A)	Supports high-power server, telecommunication and industrial equipment requirements
Polarized housing	Prevents connector mis-mating
Dual-beam (female) terminal design	Gives four points of contact and ensures superb contact reliability
Terminal Position Assurance (TPA) retainer required on housings	Prevents terminal back-out



Silver-plated Mini-Fit Sr. Connector Solutions

## Applications

### Industrial

- Copiers
- Printers
- Power supplies

### Data/Networking/

- ### Telecom
- Servers
  - Power supplies

### Consumer

- Washers
- Dryers

### Medical

- X-ray

### Automotive

- Two-wheelers
- Commercial vehicles



Two-wheelers



Commercial Vehicles



Copiers



Consumer Appliances



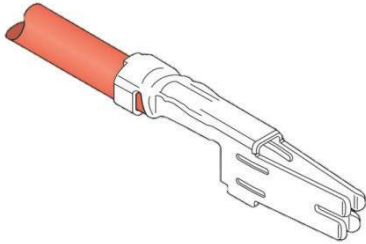
Vending Machines

# Mini-Fit Sr.™

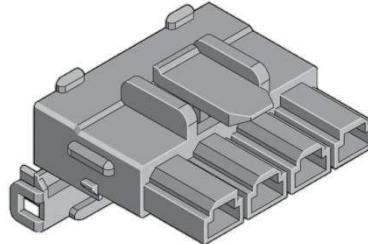
Power Connectors, Silver-plated



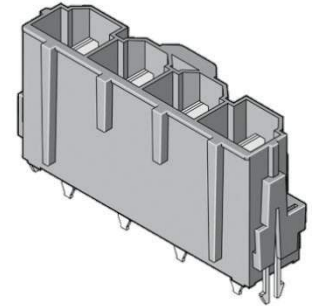
## Mating Configuration



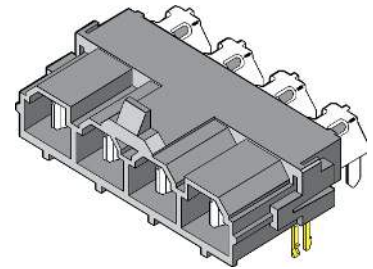
Female crimp terminal



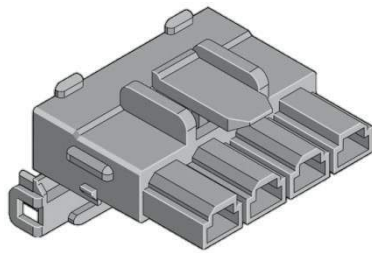
Single-row wire-to-wire receptacle with positive lock and TPA retainer



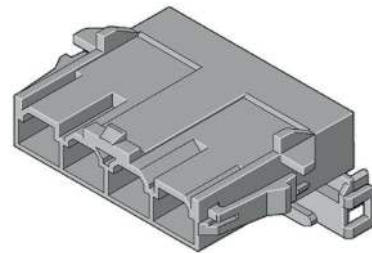
Vertical, through-hole, single-row PCB header with forklocks



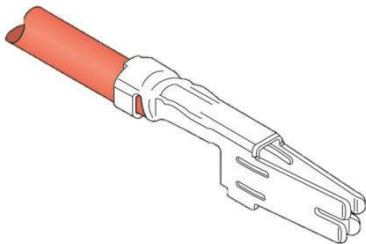
Right angle, through-hole, single-row PCB header with forklocks



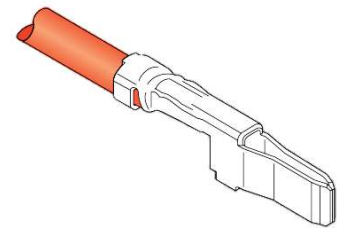
Single-row wire-to-wire receptacle with positive lock and TPA retainer



Panel-mounted single-row plug



Female crimp terminal



Male crimp terminal

## Specifications

### Reference Information

Packaging: Housing (Bulk);  
 Terminals (Reels);  
 Headers (Tray or Tube)  
 UL File No.: E29179  
 CSA File No.: LR19980-555  
 TUV File No.: R 9751144, R 9950481  
 RoHS: Yes  
 Halogen Free: No  
 Glow Wire Compliant: No  
 Terminals: Silver (Ag)-plated

### Electrical

Voltage (max.): 600V AC /DC  
 Current (max.): 50.0A per contact  
 Contact Resistance (max.): 1.0 milliohm  
 Insulation Resistance (min.): 1000 megohm

### Mechanical

Contact Insertion Force: 0.25kg (min.) and 3kg (max.)  
 Contact Retention to Housing (min.): 10.0 kg  
 Insertion Force to PCB (max.): 2.0kg  
 Mating Force (max.): 3.0kg  
 Unmating Force (max.): 3.0kg  
 Durability (min.): 30 cycles

### Physical

Housing: Black  
 Contact: Copper Alloy  
 Plating:  
 Contact Area — Silver (Ag)  
 Solder Tail Area — Tin (Sn)  
 Underplating — Nickel (Ni)  
 PCB Thickness: 0.062, 0.093, 0.125, 0.25mm  
 Operating Temperature: -40 to +105 °C

## Ordering Information

Series No.	Connector	Circuits	Use With
<a href="#">42815</a>	Female Terminal, Silver-plated	N.A.	8; 10 to 12; 14 to 16 AWG wire sizes
<a href="#">42817</a>	Male Terminal, Silver-plated	N.A.	
<a href="#">42819</a>	Vertical Header, Single-row	2 to 6	Accommodates 1.57, 2.36, 3.18, and 6.35mm-thick PCBs
<a href="#">42820</a>	Right Angle Header, Single-row		

### Remarks:

- a) Dual-row (Series 43915) Vertical header and reflow-capable Single-row Vertical and Right Angle variants are available in selected circuit sizes. Please contact our sales person for enquires on these.  
 b) Molex also supplies Gold (Au)-plated terminal version connectors if required. Please contact our sales person for enquires on these.

## TPA Retainer – Application Guide

- Detach TPA retainer from the housing as shown in the reverse (or underside) view of the crimp receptacle
- Insert the appropriate terminal into the housing (female terminal used in illustration)
- Snap the TPA retainer onto the receptacle housing to secure the assembly as shown below

