# MOLEX Mini-Fit Sr.™ Power Connectors, Silver-plated



Silver-plated connectors support up to 50.0A current with superb electrical reliability and significant costsavings 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



### **Applications:**

- Industrial:
   Copiers, Printers, Power supplies
- Consumer: Washers, Dryers
- Automotive:
   Two-wheelers,
   Commercial vehicles
- Data/Networking/Telecom: Servers, Power supplies
- Medical: X-ray



Two-wheelers



Commercial Vehicles



Copiers



Consumer Appliances

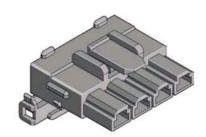


Vending Machines

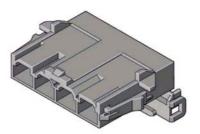
## **MOLEX Mini-Fit Sr.™ Power Connectors, Silver-plated**



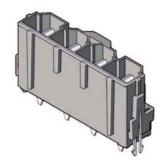
## **Mating Configuration**



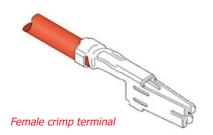
Single-row wire-to-wire receptacle with positive lock and TPA retainer

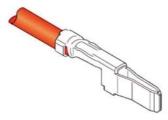


Panel-mounted single-row plug



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





Male crimp terminal

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

## **Specifications**

#### **Electrical**

Voltage (max.): 600V AC /DC 50.0A per contact Current (max.): 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.): 2.0ka 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°C to +105°C

## **TPA Retainer – Application Guide**

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

