

## Datasheet for 76650-0220

### General Information

**Part Number:** 76650-0220  
**Manufacturer:** Molex / Waldom  
**Title:** Mini-Fit Sr. Power Connector Kit  
**Description:** Gold Right Angle Header, Plug and Receptacle  
**Product Family:** Mini-Fit Sr.™  
**Certificates:** (Molex Parts within this kit) - EU RoHS Compliant, UL, CSA and TUV  
**Country of Origin:** Kit assembled in U.S.A.

### Specifications

**Design Configuration:** (Wire-to-Wire) and (Wire-to-Board)  
**Pitch:** 10mm (.393")  
**Connector Type:** Plugs and Receptacles  
**Circuit Sizes:** 2, 3 and 4  
**Current Rating:** (23 - 33) Amps - Depending on Wire Gauge  
**Voltage:** 600 Volts  
**Wire size:** 12-10 AWG

### Product Highlights

Need for power connectors above 20 Amps. Lower mating forces with increased reliability. More current packed into fewer lines. The system is UL, CSA and TUV approved. -40 Degrees C to +105 Degrees C. These Gold Plated parts do not need Nyogel coating, as with tin plated parts, to help resist fretting corrosion in applications where vibration is present.

### Features and Benefits

- High current
- Fully polarized, Prevents Mis-Mating
- Positive Locks, Secure Mating, guards against accidental disengagement of housings
- Low engagement force for greater ease in mating
- Includes mandatory Terminal Position Assurance (TPA) clip
- Fully-Isolated Contacts, Withstand Reflow Process
- Four points of electrical contact provide high reliability
- Design Flexibility
- Metal board retention clip

### Applications

- High-end Computers
- Power Supplies, Generators, Battery Chargers
- Factory Automation Machines
- Cellular Base Station
- Air Conditioners
- Telecom Backplane
- Stadium Lighting and Scoreboards
- Medical Equipment
- Power Station
- Deep Well Pumps
- Welders
- Construction Signs
- Other High Amperage Devices
- HVAC

### Bill of Materials for Part No. 76650-0220

**For additional Molex / Waldom Design and Solution Kits please go to [www.molexkits.com](http://www.molexkits.com)**

**Datasheet for 76650-0220**

<b>Molex Part No.</b>	<b>Country of Origin</b>	<b>Description</b>	<b>Quantity in Kit</b>
42815-0012	USA	Female Socket Terminals, 12-10 AWG, Selective Gold	25
42816-0212	USA	10mm (.393") Pitch Mini-Fit Sr.™ Receptacle 2 Circuit	4
42816-0312	USA	10mm (.393") Pitch Mini-Fit Sr.™ Receptacle 3 Circuit	4
42816-0412	USA	10mm (.393") Pitch Mini-Fit Sr.™ Receptacle 4 Circuit	2
42817-0012	USA	Male Pin Terminals, 12-10 AWG, Selective Gold	15
42818-0212	USA	10mm (.393") Pitch Mini-Fit Sr.™ Plug 2 Circuit	2
42818-0312	USA	10mm (.393") Pitch Mini-Fit Sr.™ Plug 3 Circuit	2
42818-0412	USA	10mm (.393") Pitch Mini-Fit Sr.™ Plug 4 Circuit	1
42820-2213	Mexico	10mm (.393") Pitch Mini-Fit Sr.™ Right Angle Gold Header 2 Circuit .062" PCB	2
42820-3213	Mexico	10mm (.393") Pitch Mini-Fit Sr.™ Right Angle Gold Header 3 Circuit .062" PCB	2
42820-4213	Mexico	10mm (.393") Pitch Mini-Fit Sr.™ Right Angle Gold Header 4 Circuit .062" PCB	1

**Recommended Molex Tool(s) for Part No. 76650-0220\***

<b>Molex Part No.</b>	<b>Country of Origin</b>	<b>Description</b>
63811-1600 *	Germany	Hand Crimper
63813-0400 *	USA	Extraction Tool

\*Tool(s) not included in kit. Tool(s) ordered separately.