

## Solder Cup Cable Connectors

The PowerAmp connector family is a 1- and 2-row high reliability connector solution with a pitch of 5.72 millimeters (0.225"). Available with 5 to 20 contacts and rated up to 23A per contact make it ideal for robust power connections. The connectors can also be customized to address unique design requirements.

- Current rating up to 23A per contact
- High vibration and shock resistant
- Withstands extreme temperatures of -65°C to +125°C
- Accepts wire sizes up to AWG 12 (4 mm<sup>2</sup>)
- UL94V-0 flammability rated insulator
- UL Approved, UL 1977 ECBT2.E466640



### Part Number Builder

iP	Rows	Body Style	Mounting Ears	Size	Termination	Hardware Style
Series	1 2	P Plug R Receptacle	0 Without	05 10 20	PSC Pin: Vertical Solder Cup SSC Socket: Vertical Solder Cup	J Fixed Jacket JTB Turning Jacket QTT-1 Quarter Turn (Turning) QTF-1 Quarter-Turn (Fixed)

### Technical Information

#### Material Specifications

**Insulator Material:**  
Glass-filled PPS (polyphenylene sulfide)

**Insulator Color:** White

**Material (Contacts):** Pins: copper alloy  
Sockets: beryllium copper

**Terminal Material:** Copper alloy

**Plating (Contacts):**  
Minimum 15 µin Au over 30 µin Ni

**Hardware:** Stainless steel

**UL File:** SE466640

#### Electromechanical Performance

**Rated Current:** 23A per contact

**Durability:** ≥ 250 mating cycles

**Test Voltage:** 2,000 V AC for 1 minute

**Insulation Resistance:** 5 GΩ min.

**Contact Resistance:** 1 mΩ max.

**Insertion Force (Max):** 4 oz. (4.45N) per contact

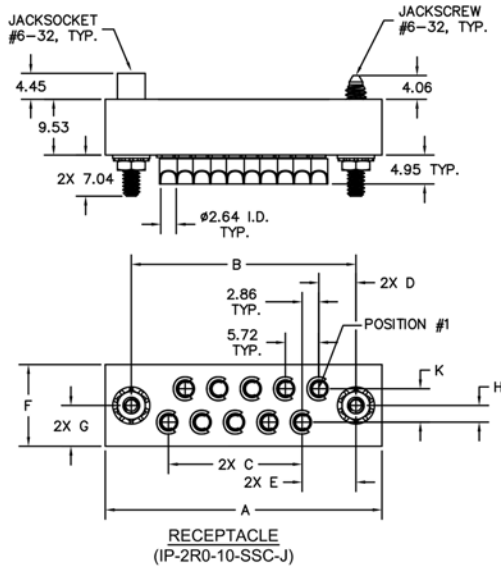
**Withdrawal Force (Min.):**  
0.5 oz. (0.14N) per contact

#### Environmental Specifications

**Operating Temperature:** -65° to +125°C

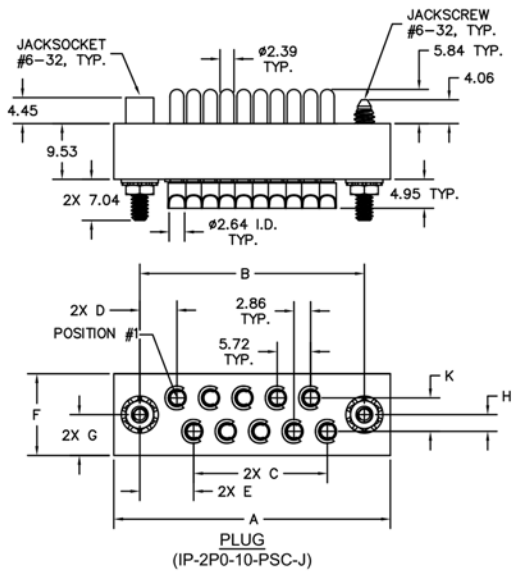
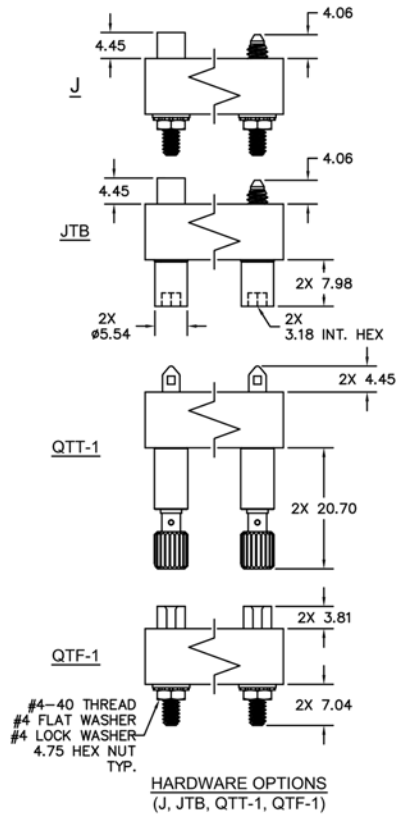
**Vibration:** 10Hz to 2,000Hz, 1.52mm, 147.1m/s<sup>2</sup> (15G), duration 12h

**RoHS:** Compliant



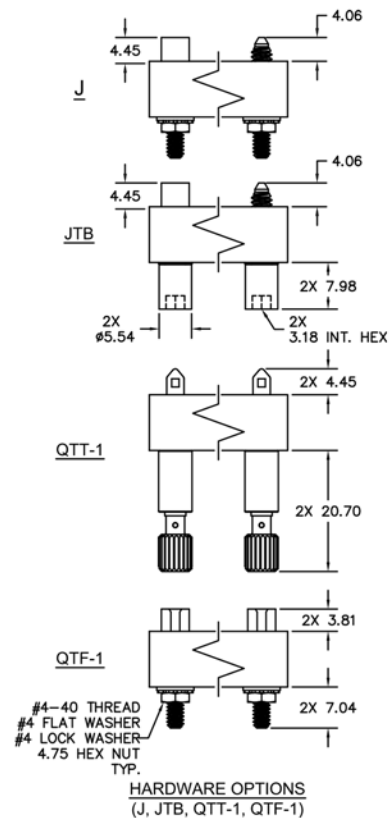
NOTES:  
 SIZE 5 - SINGLE ROW  
 SIZE 10 - 2-ROW STAGGERED GRID  
 SIZE 20 - 2-ROW SQUARE GRID

		DIMENSIONS								
SIZE	A	B	C	D	E	F	G	H	K	
5	44.45	35.56	22.86	6.35	N/A	9.53	4.78	N/A	N/A	
10	47.29	38.40	22.86	6.35	9.22	13.97	6.99	2.86	5.72	
20	73.03	64.14	51.44	6.35	6.35	13.97	6.99	2.86	5.72	



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20	73.03	64.14	51.44	6.35	6.35	13.97	6.99	2.87	5.72	



All dimensions in millimeters.