# Ratings

Voltage: 20 Vdc Current: 8 A

### **Operating Temperature Range**

-25 to 70°C, relative humidity of 85% or less

#### Materials

- (1) Insulator: Nylon, black
- (2) Pin: C3604 brass, 1 µm nickel plated
- (3) Shell: C3604 brass, 1 µm nickel plated
- (4) Spring contact: C5191 phosphor bronze, 1 μm nickel plated

# **Electrical Requirements**

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 M $\Omega$  @ 500 Vdc Contact resistance: 30 m $\Omega$  or less

## **Mechanical Requirements**

Insertion force: 0.3-3 kgf Withdrawal force: 0.3-3 kgf

Life cycle: 5000 mating cycles while maintaining 0.3 kgf min. insertion force, 0.2 kgf min. withdrawal force and less than  $100 \text{ m}\Omega$  contact resistance.

## **Environmental Requirements**

Cold test: -25 ±3 °C for 48 hours without deformation Heat test: 70 °C, relative humidity 70-85% for 96 hours without deformation

Contact resistance:  $100 \text{ m}\Omega$  or less

Insulation resistance: 50 MΩ @ 500 Vdc 1 min

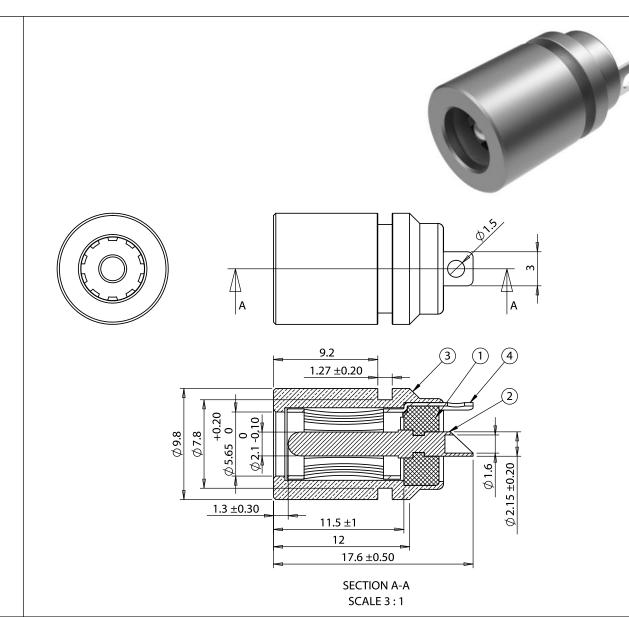
Humidity test: 40 °C, relative humidity 90-100% for 96 hours

Dielectric strength: 1 min @ 500 Vac

Insulation resistance: 50 M $\Omega$  @ 500 Vdc 1 min

Contact resistance: 100  $m\Omega$  or less

Salt spray test:  $35\pm2$  °C, relative humidity 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 m $\Omega$ .



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Revision: Date: Description: Prepared: Notes: Digitally signed by GL Date: 2017.01.12 08:52:57 -08'00' GL Α 3/24/2016 Initial release **RoHS** compliant Verified: Modified specs and shell Function test: no open, no short circuit, no Α1 4/11/2016 Digitally signed by DN Date: 2017.01.12 09:45:0 -08'00' tel 1.541.323.3228 800 877.670.7118 DN dimensions intermittent fax 1.541.323.4202 web tensility.com A2 1/11/2017 Modified tolerances Dimensions are in millimeters. Part number: Description: Size: **Tolerances:** Connector, dc jack, 5.5x2.1xL17.6 mm, molding 50-00533 ± 0.5 mm style, spring contacts, solder tab X.X:  $\pm$  0.3 mm Scale: 2:1 Sheet 1 of 1 X.XX: ± 0.05 mm

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