

**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 MΩ @ 500 Vdc

Contact resistance: 30 mΩ 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 mΩ 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 mΩ or less

Insulation resistance: 50 MΩ @ 500 Vdc 1 min

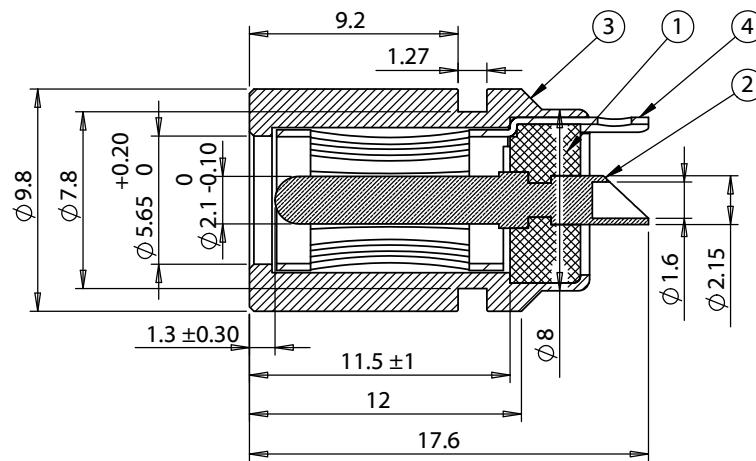
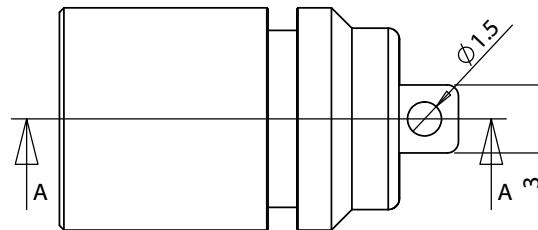
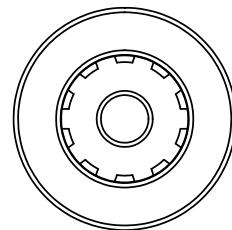
Humidity test: 40 °C, relative humidity 90-100% for 96 hours

Dielectric strength: 1 min @ 500 Vac

Insulation resistance: 50 MΩ @ 500 Vdc 1 min

Contact resistance: 100 mΩ or less

Salt spray test: 35±2 °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 mΩ.



SECTION A-A  
SCALE 3 : 1

Revision:	Date:	Description:	Prepared:	Notes:	TENSILITY
A	3/24/2016	Initial release		RoHS and REACH compliant Function test: no open, no short circuit, no intermittent	tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A1	4/11/2016	Modified specs and shell dimensions	Verified:	Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Connector, dc jack, 5.5x2.1xL17.6 mm, molding style, spring contacts. solder tab
					Size: A Part number: 50-00533
					Scale: 2:1