### Materials

- 1. Spring contact, beryllium copper, 2 µm nickel plated
- 2. Insulator, POM, black
- 3. Center contact, brass, 2 µm nickel plated
- 4. Shell, C3604 brass, 2 μm nickel plated

## **Electrical requirements**

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

Rated voltage: 20 Vdc Rated current: 4 A

# Mechanical requirements

Insertion force: 0.3-2.5 kgf Withdrawal force: 0.3-2.5 kgf

Durability: 5000 mating cycles while maintaining; 0.3 kgf min. insertion force, 0.2 kgf min. withdrawal force and a

than  $100 \text{ m}\Omega$  contact resistance.

## **Environmental requirements**

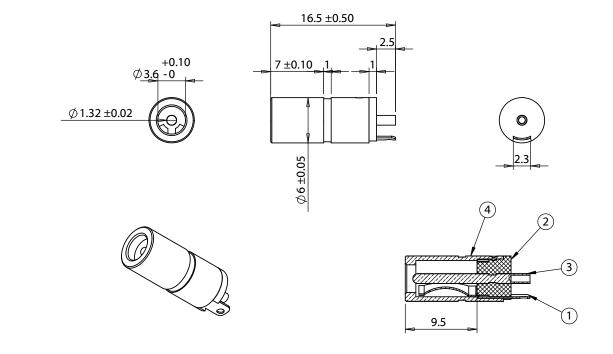
Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 M $\Omega$  @ 500 Vdc minimum and a contact resistance of 100 m $\Omega$  or less.

Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain insulation resistance of 50  $M\Omega$  @ 500 Vdc minimum and a contact resistance of 100  $m\Omega$  or less.

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

## Operating range

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



Revision	Date	Description Initial release	RoHS compliant	TENSILITY					
A1	12/5/2011	updated description to standard	Function test: no open, no short circuit, no INT			20802 Sockeye Place #130 Bend, OR 97701 USA te/ 541.323.3228 fax 541.323.4202			
A2	2/20/2012	updated drawing			800 877.670.7118 www.tensility.com				
А3	11/9/2012 Ad	Added test data	DIMENSIONS ARE IN MILLIMETERS  TOLERANCES:  X: ± 0.5 mm  X.X: ± 0.3 mm  X.XX: ± 0.05 mm	DESCRIPTION: Connector, dc jack, 3.5x1.35xL16.5 mm, molding style	SIZE A	Part number 50-00057			
					SCALI	E: 2:1	WEIGHT:	SHEET 1 OF 1	

3 1