

Materials

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

Electrical requirements

Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 M Ω @ 500 Vdc
Contact resistance: 30 m Ω 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 less than 100 m Ω contact resistance.

Environmental requirements

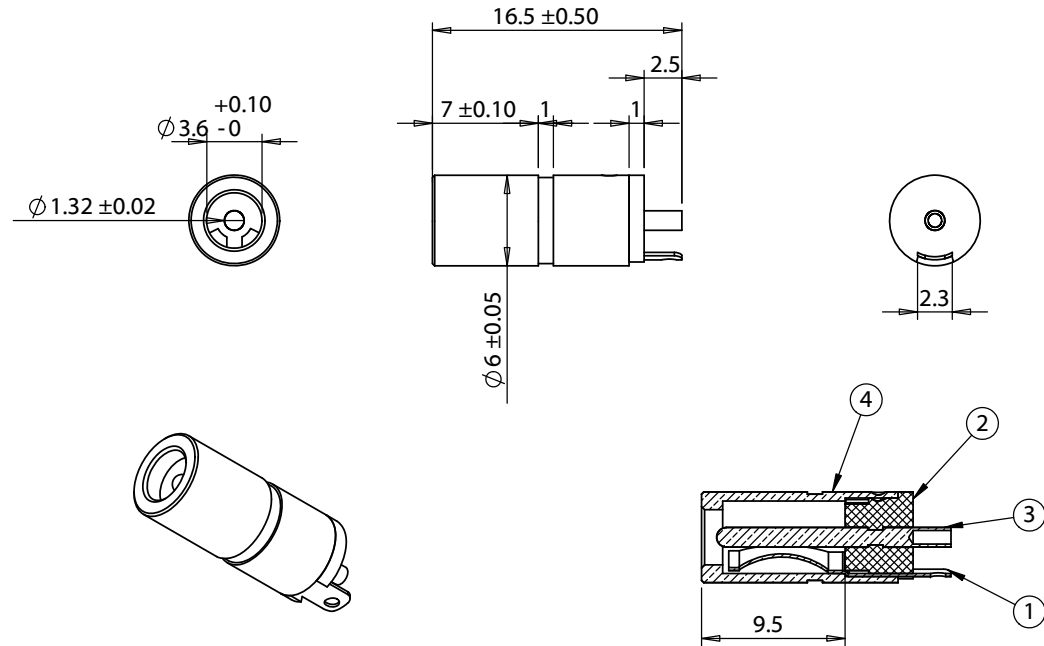
Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 M Ω @ 500 Vdc minimum and a contact resistance of 100 m Ω or less.

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

Operating range

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



Revision	Date	Description	Notes		TENSILITY 20802 Sockeye Place #130 Bend, OR 97701 USA tel 541.323.3228 fax 541.323.4202 800 877.670.7118 www.tensility.com					
A	2/20/2012	Initial release	RoHS compliant Function test: no open, no short circuit, no INT							
A1	12/5/2011	updated description to standard								
A2	2/20/2012	updated drawing								
A3	11/9/2012	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	Part number				
					A	50-00057				
					SCALE: 2:1		WEIGHT:		SHEET 1 OF 1	