Materials

- 1. Insulator, ABS, black
- 2. Pin, C3604 brass, 2 µm nickel plated
- 3. Shell, C3604 brass, 2 µm nickel plated
- 4. Spring contact, C5191 phosphor bronze, 2 μm 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: 36 Vdc Rated current: 7 A

Mechanical requirements

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

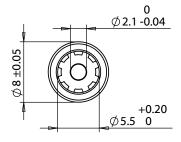
Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain insulation resistance of 50 M Ω @ 500 Vdc minimum and a contact resistance of 100 m Ω or less.

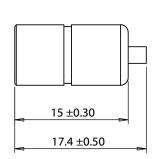
Salt spray test: 35 °C, RH 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 m Ω .

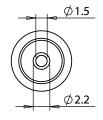
Operating range

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

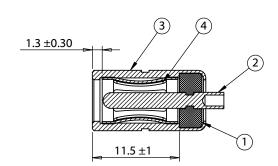
5











Revision:	Date:	Description:	Prepared:	Notes:		
Α	9/2/2009	Initial release		RoHS and REACH compliant		ENSILITY
A1	11/9/2012	Added test data	Verified:	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	
A2	10/29/2015	Modified electrical requirements	Dimensions are in			
A3	4/19/2016	Modified tolerances	millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Connector, dc jack, 5.5x2.1xL17.4 mm, molding style	Size: Part number: A 50-00025	
					Scale:	: 4:1 Sheet 1 of 1

3