

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

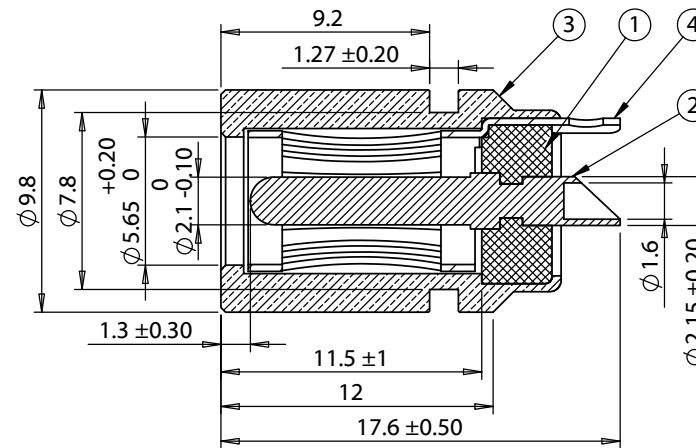
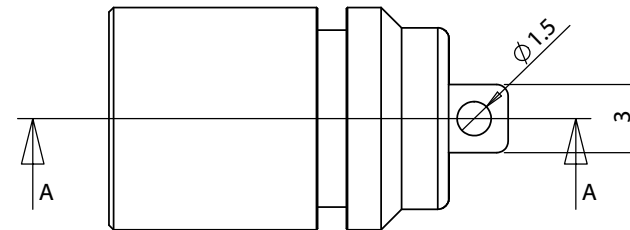
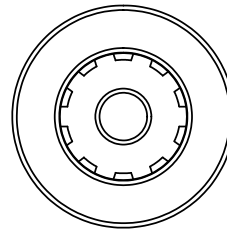
Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 MΩ @ 500 Vdc
Contact resistance: 30 mΩ or less

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 tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A	3/24/2016	Initial release	GL <small>Digitally signed by GL Date: 2017.01.12 08:52:57 -08'00'</small>	RoHS and REACH compliant	
A1	4/11/2016	Modified specs and shell dimensions	Verified: DN <small>Digitally signed by DN Date: 2017.01.12 09:45:03 -08'00'</small>	Function test: no open, no short circuit, no intermittent	Size: Part number: A 50-00533
A2	1/11/2017	Modified tolerances	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	Scale: 2:1 Sheet 1 of 1