

Materials

- ① Insulator: LCP + 30% glass fiber, UL 94 V-0, gray
- ② Pin: brass, nickel plated
- ③ Shell: brass, nickel plated
- ④ Spring contact: phosphor bronze, nickel plated
- ⑤ Switch contact: brass
- ⑥ Shell contact: brass, nickel plated

Electrical Requirements

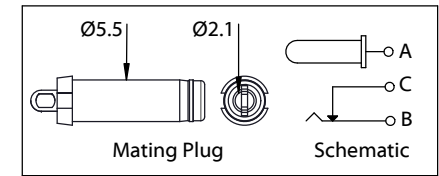
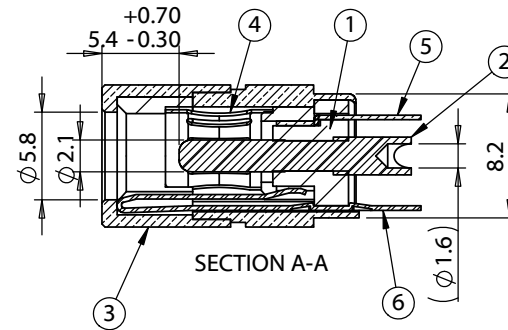
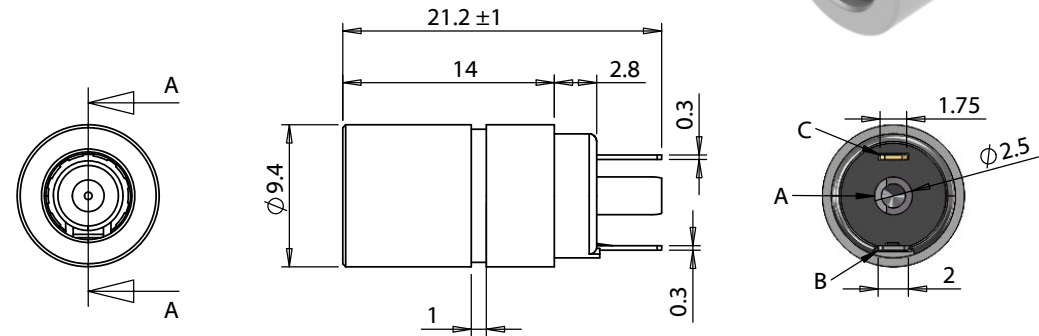
Dielectric strength: 1 min @ 500 Vac
 Insulation resistance: 100 MΩ @ 500 Vdc
 Contact resistance: 30 mΩ or less

Mechanical Requirements

Insertion force: 0.4-4 kgf
 Withdrawal force: 0.4-4 kgf
 Life cycle: 5000 mating cycles while maintaining 0.4 kgf min. insertion force, 0.4 kgf min. withdrawal force and less than 100 mΩ contact resistance.

Environmental Requirements

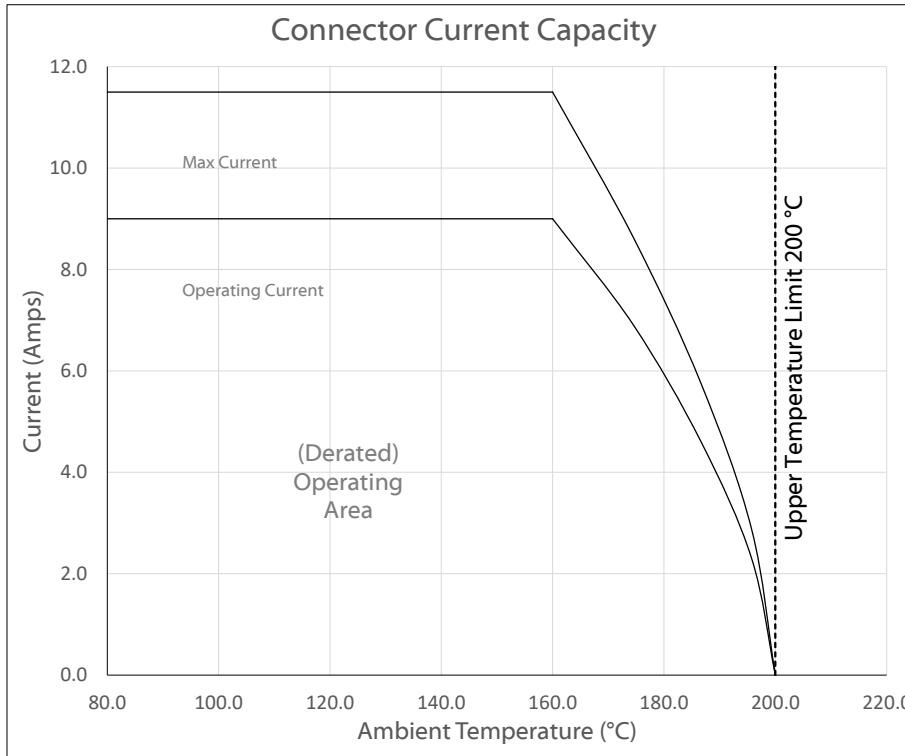
Cold test: -25 ±3 °C for 48 hours without deformation
 Heat test: 70 °C, relative humidity 70-85% for 96 hours without deformation
 Humidity test: 40 °C, relative humidity 90-100% for 96 hours without deformation



Revision:	Date:	Description:	Prepared:	Notes:	<h1>TENSILITY</h1> tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A	5/27/2022	Initial release	Verified:		
			Dimensions are in millimeters. Tolerances: X: ± 0.3 mm X.X: ± 0.1 mm X.XX: ± 0.05 mm	Description:	Size: Part number:
				Connector, dc jack, 5.5x2.1xL22.0 mm, nickel plating, molding style, switch	A 50-01002
				Scale: 2:1	Sheet 1 of 2

Ratings
 Voltage: 48 V
 Current: 9.0 A

Operating Temperature Range
 -50 ~200 °C



Testing based on IEC 60512-5-2. Max current curve generated with isolated test article under controlled environmental conditions, based on a 40° C temperature rise. Test does not take into account external factors such as housings, mating cables, or other circuitry. Operating current curve (derated by 20% of maximum values) accounts for external factors, and manufacturing variation.

Revision:	Date:	Description:	Prepared:	Notes:	TENSILITY tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A	5/27/2022	Initial release	Verified:	RoHS compliant Function test: no open, no short circuit, no intermittent	
			Dimensions are in millimeters. Tolerances: X: ± 0.3 mm X.X: ± 0.1 mm X.XX: ± 0.05 mm	Description:	Size: Part number:
				Connector, dc jack, 5.5x2.1xL22.0 mm, nickel plating, molding style, switch	A 50-01002
				Scale: 2:1	Sheet 2 of 2

5

4

3

2

1