Operating temperature range

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

Materials

- 1. Insulator, PBT +15% glass fiber, black
- 2. Pin, C-5191 P-Bronze, 2 µm nickel plated
- 3. Shell, C3604 brass, 2 µm nickel plated

Electrical requirements

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

Rated voltage: 20 Vdc Rated current: 7 A

Mechanical requirements

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

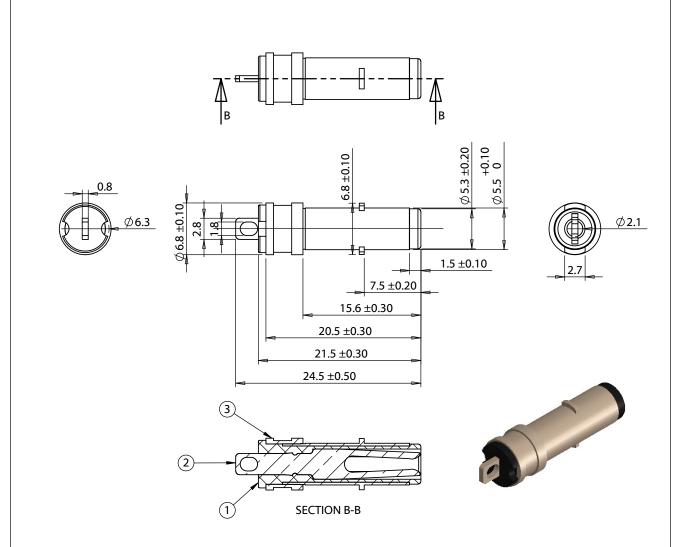
Life cycle: 5000 mating cycles while maintaining; 0.3 kgf min. insertion force, 0.2 kgf min. withdrawal force and a less than $100 \text{ m}\Omega$ contact resistance.

Environmental requirements

Damp test: 40 °C, Relative Humidity 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, Relative Humidity 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 ±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 m Ω .



REVISION A	DATE 10/21/2009	DESCRIPTION Initial release	PREPARED	NOTES RoHS and REACH compliant		TENSILITY			
			VERIFIED DIMENSIONS ARE IN	Function test: no open, no short circuit, no intermittent		20802 Sockeye Place #130 Bend, OR 97701 USA tel 541.323.3228 fax 541.323.4202 800 877.670.7118 www.tensility.com			
			MILLIMETERS TOLERANCES: Up to 1.0: ± 0.1 mm 1.0 to 10.0: ± 0.2 mm Over 10.0: ± 0.3 mm	DESCRIPTION: Connector, dc plug, 5.5x2.1xL24.5 mm, molding style, spring contacts, twist lock	SIZE A SCALE	PART NUMBER 50-00070 E: 5:1 WEIGHT: SHEET 1 OF 1			
		5	4	3	2	1		l [']	1