

Operating temperature range

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

Materials

1. Center contact, C5191 phosphor bronze, 2 µm nickel plated
2. Insulator, PBT + 15% glass fiber, black
3. Shell, C3604 brass, 2 µm nickel plated

Electrical requirements

Dielectric strength: 1 min @ 500 Vac
 Insulation resistance: 100 MΩ @ 500 Vdc
 Contact resistance: 30 mΩ or less
 Rated voltage: 20 Vdc
 Rated current: 7 A

Mechanical requirements

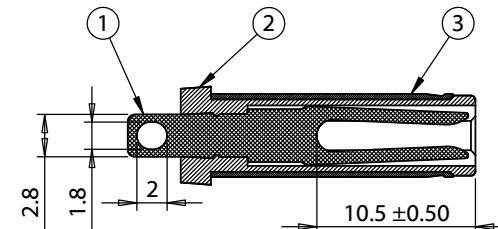
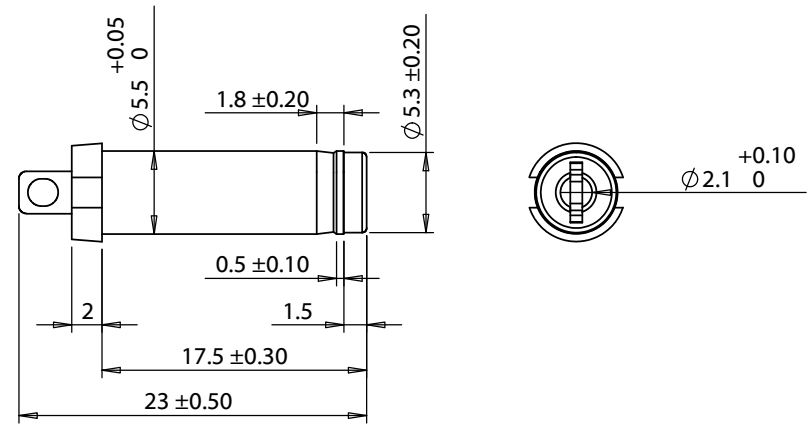
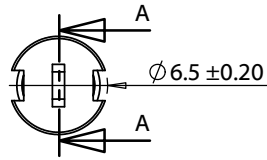
Insertion force: 0.3-3 kgf
 Withdrawal force: 0.3-3 kgf
 Life cycle: 5000 mating cycles while maintaining; 0.3-2 kgf insertion force, 0.2-1.5 kgf withdrawal force and a less than 100 mΩ contact resistance.

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 MΩ @ 500 Vdc minimum and a contact resistance of 100 mΩ 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 MΩ @ 500 Vdc minimum and a contact resistance of 100 mΩ or less.

Salt spray test: 35 °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 2 : 1

REVISION	DATE	DESCRIPTION	PREPARED	NOTES	<h1>TENSILITY</h1> <p>20802 Sockeye Place #130 Bend, OR 97701 USA tel 541.323.3228 fax 541.323.4202 800 877.670.7118 www.tensility.com</p>
A	9/02/2009	Initial release		RoHS and REACH compliant	
A1	11/09/2012	Added test data	VERIFIED	Function test: no open, no short circuit, no intermittent	
A2	12/29/2015	Modified tolerances			
			DIMENSIONS ARE IN 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, 5.5x2.1xL23 mm, molding style, spring contacts
			SIZE	PART NUMBER	
			A	50-00024	
			SCALE: 5:1	WEIGHT:	SHEET 1 OF 1