

**Materials**

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

**Electrical requirements**

Dielectric strength: 1 min @ 500 Vac  
 Insulation resistance: 100 M $\Omega$  @ 500 Vdc  
 Contact resistance: 30 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  
 Durability: 5000 mating cycles while maintaining; 0.3-2 kgf insertion force, 0.2-1.5 kgf withdrawal force and a less than 100 m $\Omega$  contact resistance.

**Environmental requirements**

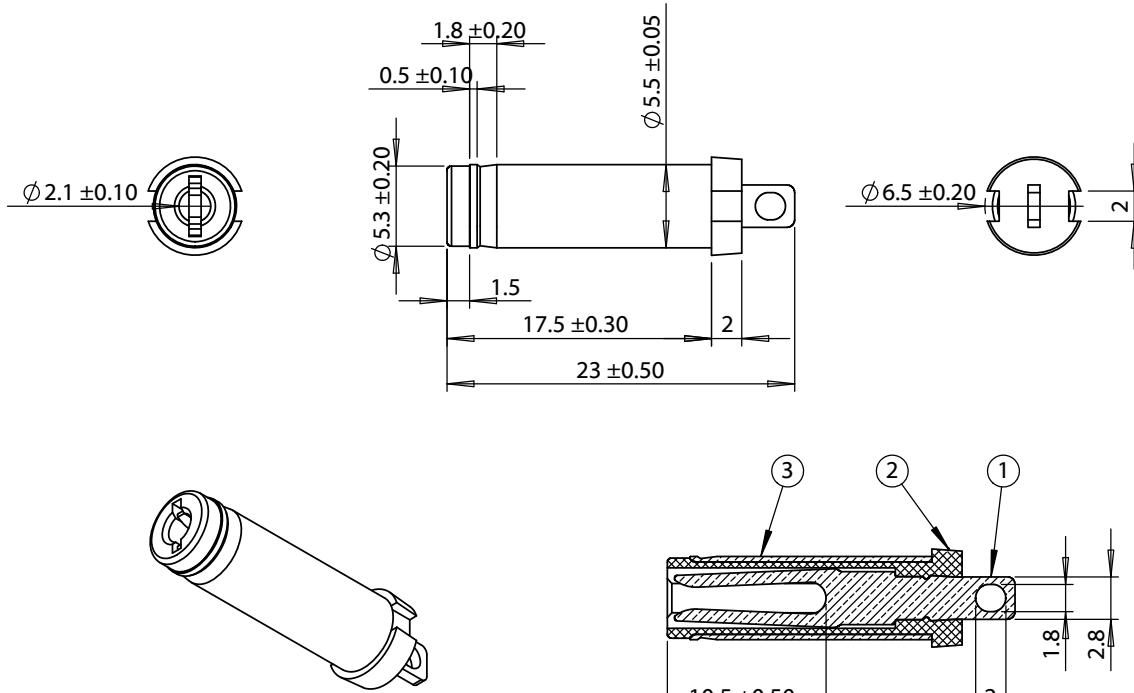
Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 M $\Omega$  @ 500 Vdc minimum and a contact resistance of 100 m $\Omega$  or less.

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

**Operating range**

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



Revision	Date	Description	Notes		TENSILITY	
A	9/2/2009	Initial release	RoHS compliant Function test: no open, no short circuit, no INT		20802 Sockeye Place #130 Bend, OR 97701 USA tel 541.323.3228 fax 541.323.4202 800 877.670.7118 <a href="http://www.tensility.com">www.tensility.com</a>	
A1	11/9/2012	Added test data				
			DIMENSIONS ARE IN MILLIMETERS TOLERANCES: X: ± 0.5 mm XX: ± 0.3 mm XXX: ± 0.05 mm	DESCRIPTION: Connector, dc plug, 5.5x2.1xL23 mm, molding style, spring contacts	SIZE A	Part number <b>50-00024</b>
					SCALE: 2:1	WEIGHT: <span style="border: 1px solid black; padding: 2px 10px;"></span>
						SHEET 1 OF 1