

### Materials

1. Shell, C3604 brass, 2  $\mu$ m nickel plated
2. Insulator, PBT + 15% glass fiber, black
3. Terminal, phosphor bronze, 1  $\mu$ m gold plated
4. Plastic tube insulator, POM, white

### Electrical requirements

Dielectric strength: 1 min @ 500 Vac  
Insulation resistance: 100 M $\Omega$  @ 500 Vdc  
Contact resistance: 50 m $\Omega$  or less

### Mechanical requirements

Insertion force: 0.3-2 kgf  
Withdrawal force: 0.3-2 kgf  
Durability: 5000 mating cycles while maintaining; 0.1 kgf min. insertion force, 0.1 kgf min. withdrawal force and a less than 60 m $\Omega$  contact resistance.

### Environmental requirements

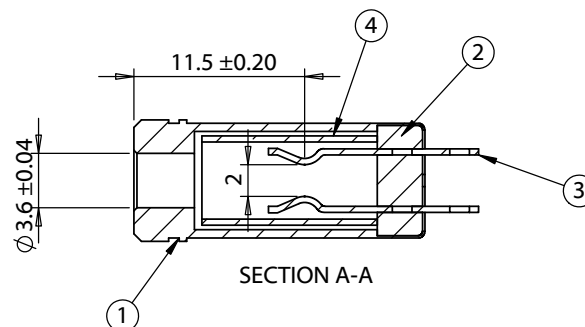
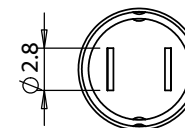
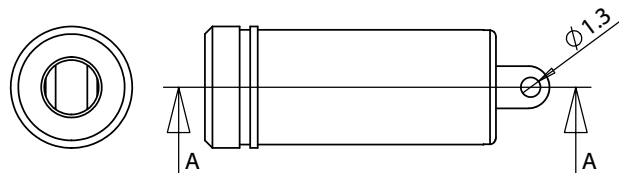
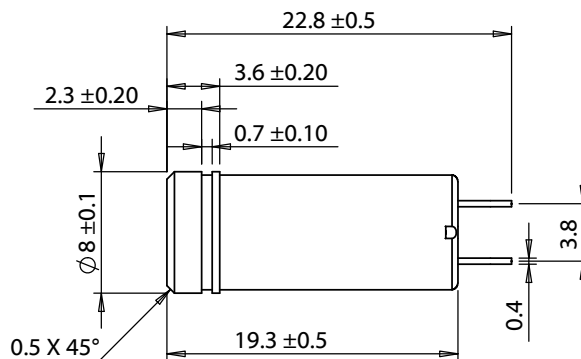
Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 M $\Omega$  @ 500 Vdc minimum.

Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain contact resistance of 100 m $\Omega$  or less.

Salt spray test: 35  $\pm$  2 °C, RH 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 100 m $\Omega$ .

### Operating range

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



REVISION	DATE	DESCRIPTION	PREPARED:	NOTES	<div>TENSILITY</div> <div>20802 Sockeye Place #130 Bend, OR 97701 USA tel 541.323.3228 fax 541.323.4202 800 877.670.7118 www.tensility.com</div>		
A	1/23/2015	Initial release	VERIFIED:	Function test: no open, no reversed polarity, no short circuit, no INT			
			DIMENSIONS ARE IN MILLIMETERS	Functionally equivalent components may be used			
			TOLERANCES: X: $\pm$ 0.5 mm X.X: $\pm$ 0.3 mm X.XX: $\pm$ 0.05 mm	Drawing in third angle projected			
				DESCRIPTION: Connector, mono jack, 3.5x8.0xL22.8 mm, brass, nickel plated, molding style	SIZE A	PART NUMBER 50-00480	
					SCALE: 1:1		SHEET 1 OF 1