## Materials

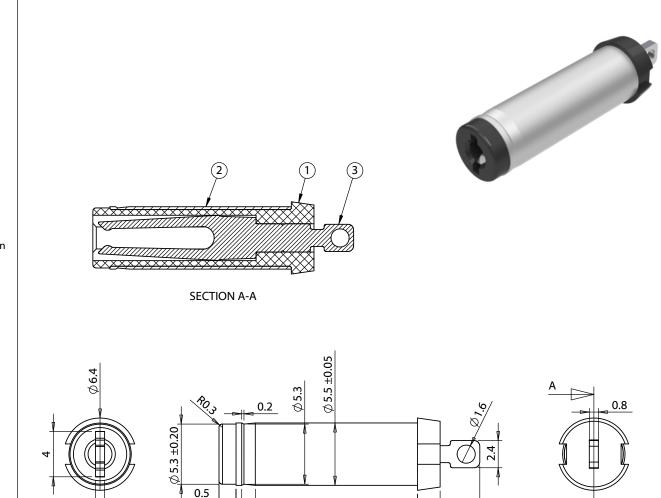
- 1. Insulator: Nylon PA46, black
- 2. Shell: C3604 brass, nickel plated 3. Terminal: C5191 phosphor bronze, nickel plated
- Electrical Requirements

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 MΩ @ 500 Vdc Contact resistance: 30 m $\Omega$  or less

## Mechanical Requirements

Insertion force: 0.3-3 kgf Withdrawal force: 0.3-3 kgf Life cycle: 5000 mating cycles while maintaining 0.3-2.0 kgf min. insertion force, 0.2-1.5 kgf min. withdrawal force and less than 100 m $\Omega$  contact resistance.

- Environmental Requirements Heat test: 70 °C, relative humidity 70-85% for 96 hours while Heat test: 70 °C, relative humidity 70-85% for 96 hours while maintaining contact resistance: 100 m $\Omega$  maximum, insulation resistance: 50 M $\Omega$  @ 500 Vdc without looseness or deformation Humidity test: 40 °C, relative humidity 90-100% for 96 hours while maintaining dielectric strength: 1 min @ 500 Vac, insulation resistance: 100 M $\Omega$  @ 500 Vdc, contact resistance: 100 m $\Omega$ maximum
- 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 $\Omega$ .



1.7 ±0.20

16 ±0.20

23 ±0.50

2

Revision:	Date:	Description:	Prepared:	Notes:					
А	09/28/2016	Initial release	AW Digitally signed by AW Date: 2020.01.09 16:01:04 - 08'00'	RoHS compliant	TENSILITY   tel 1.541.323.3228   fax 1.541.323.4202   web tensility.com				
A1	01/18/2019	Updated temperature rise data	Verified: LA Digitally signed by LA Date: 2020.01.27 Of Bits 0.0800' Dimensions are in	Function test: no open, no short circuit, no intermittent					
			Millimeters. Tolerances: X: ± 0.3 mm X.X: ± 0.1 mm X.XX: ± 0.05 mm	Description: Connector, dc plug, 5.5x2.1x23 spring contacts, nickel plated, 1	ription: nector, dc plug, 5.5x2.1x23 mm, molding style, ng contacts, nickel plated, 105° C		Size: Part number: A 50-00540 Scale: 3:1 () Sheet 1 of 2		
		5	4	3	2				1

1.5 ±0.10

0.85

