

Materials

- 1. Insulator, POM, yellow
- 2. Insulator, PBT, black
- 3. Center contact, C5191 phosphor bronze, 2 μm nickel plated
- 4. 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: 4 A

Mechanical requirements

Insertion force: 0.5-2 kgf
 Withdrawal force: 0.3-1.5 kgf
 Durability: 5000 mating cycles while maintaining; 0.4-2 kgf insertion force, 0.2-1.5 kgf withdrawal force and a less than 100 mΩ contact resistance.

Environmental requirements

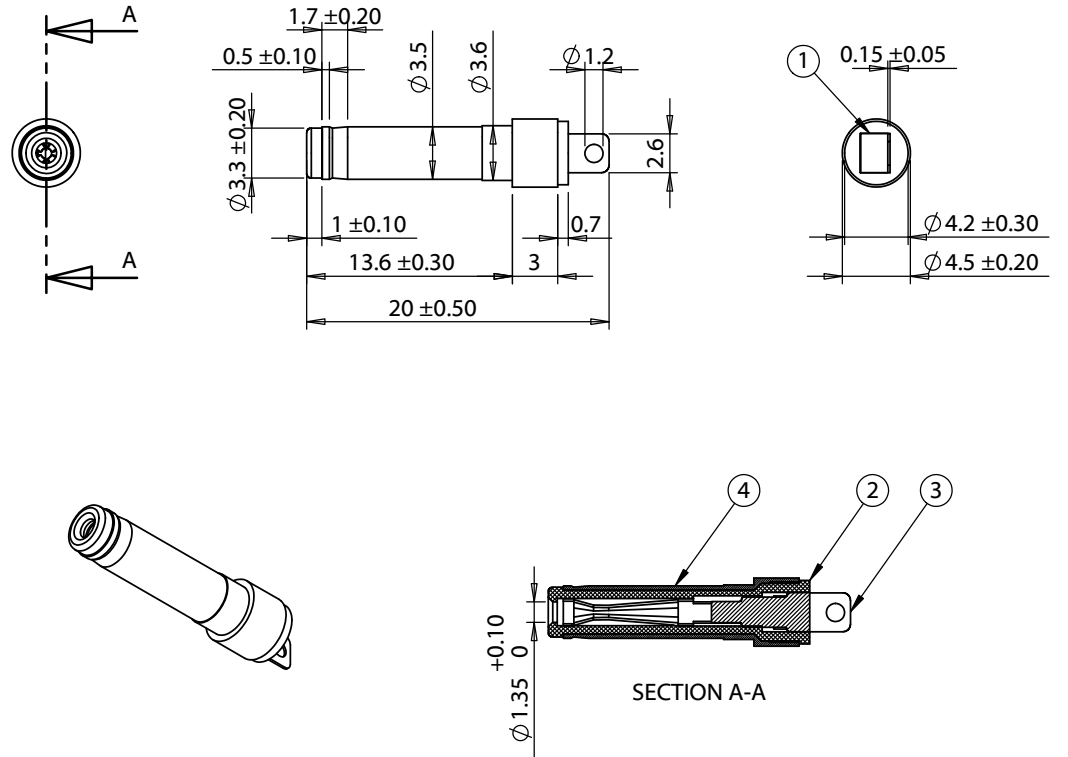
Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 MΩ @ 500 Vdc minimum and a contact resistance of 100 mΩ or less.

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

Operating range

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



Revision:	Date:	Description:
A	10/21/2009	Initial release
A1	11/9/2012	Added test data

Prepared:
Verified:
Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm

Notes: RoHS and REACH compliant
Function test: no open, no short circuit, no intermittent
Description: Connector, dc plug, 3.5x1.35xL20mm, molding style, spring contacts

TENSILITY

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Size: A	Part number: 50-00056
Scale: 2:1	
	Sheet 1 of 1