## Materials

1. Spring contact, beryllium copper, 2  $\mu m$  nickel plated

- 2. Insulator, POM, black
- 3. Center contact, brass, 2  $\mu m$  nickel plated
- 4. 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: 4 A

# **Mechanical requirements**

Insertion force: 0.3-2.5 kgf Withdrawal force: 0.3-2.5 kgf Durability: 5000 mating cycles while maintaining; 0.3 kgf min. insertion force, 0.2 kgf min. 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 $\Omega$ .

Description:

Initial release

Updated description

Updated drawing

Added test data

## **Operating range**

Revision:

А

A1

A2

A3

Date:

10/21/2009

12/5/2011

2/20/2012

11/9/2012

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



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