# **Operating Temperature Range**

-25~105 °C, relative humidity of 85% or less

### Materials

- 1 Insulator: Nylon, black (UL94-V0)
- (2) Sleeve contact: C3604 phosphor bronze, 2 µm nickel plated
- (3) Shell: C2700 brass, 2 µm nickel plated
- (4) Tip contact: C5191 phosphor bronze, 2 µm nickel plated
- (5) Ring contact: C5191 phosphor bronze, 2 µm nickel plated
- (6) Ring contact: C5191 phosphor bronze, 1 µm gold plated

### **Electrical Requirements**

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

## **Mechanical Requirements**

Insertion force: 0.3-4 kgf Withdrawal force: 0.3-4 kgf Life cycle: 5000 mating cycles while maintaining 0.3 kgf min. insertion force, 0.3 kgf min. withdrawal force and less than 60 m $\Omega$  contact resistance.

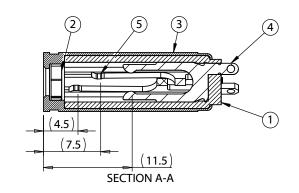
## **Environmental Requirements**

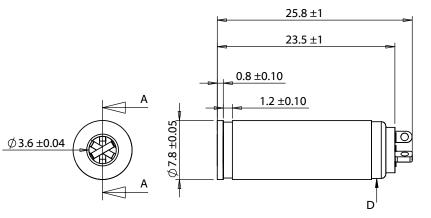
Cold test: -25 ±3 °C for 48 hours without deformation Heat test: 105 °C, relative humidity 70-85% for 96 hours without deformation

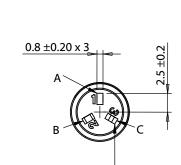
Humidity test: 40 °C, relative humidity 90-100% for 96 hours without deformation

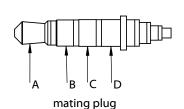
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 m $\Omega$ .

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Revision:	Date:	Description:	Prepared:	Notes:			
Α	5/19/2020	Initial release		RoHS compliant		FNSII ITY	
			Verified:  Dimensions are in millimeters. Tolerances: X: ± 0.3 mm X.X: ± 0.1 mm X.XX: ± 0.05 mm	Function test: no open, no short circuit, no intermittent	tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com		
				Description:	Size: Part number:		
				Connector, 4C audio jack, 3.5x7.8xL25.8 mm, brass, nickel plated, 105 °C, nylon, molding style	Α	50-00949	
					Scale:	2:1 Sheet 1 of 1	

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