# Ratings

Voltage: 24 Vdc Current: 8 A

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

### Materials

- 1. Insulator: PBT +15% GF, black
- 2. Center pin: C2680 brass, 2 µm nickel plated
- 3. Shell: C3604 brass, 2 µm nickel plated
- 4. Nut: C3604 brass, 2 µm nickel plated

### **Electrical Requirements**

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 MΩ @ 500 Vdc Contact resistance:  $30 \text{ m}\Omega$  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 kgf
insertion force, 0.2-1.5 kgf withdrawal force and less than

100 mΩ contact resistance.

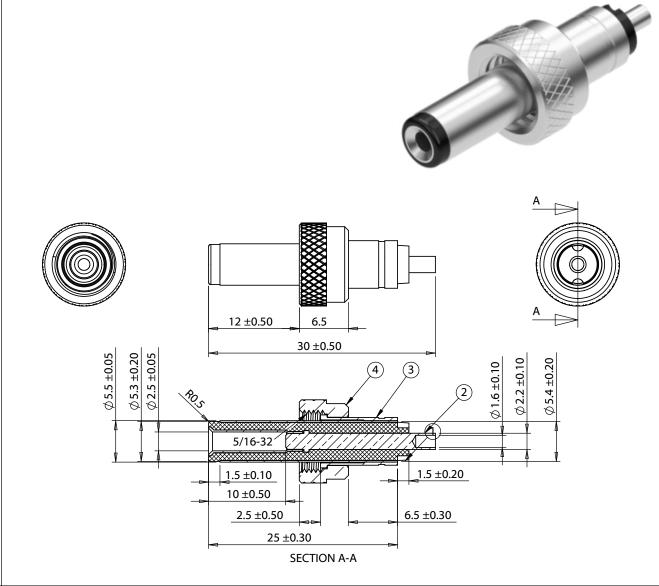
## **Environmental Requirements**

Heat test: 70 °C, relative humidity 70-85% for 96 hours without deformation while maintaining contact resitance after test 100 mohms or less, and insulation resistance 50 Mohms/500 Vdc minimum

Humidity test: 40 °C, relative humidity 90-100% for 96 hours without deformation while maintaining dielectric strength 500 Vac/1 minute, insulation resistance 50 Mohms/500 Vdc minimum, and contact resistance 100 mohms or less 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 $\Omega$ .

5



Revision:	Date:	Description:	Prepared:	Notes:				\	
Α	8/16/2010	Initial release		RoHS and REACH compliant		Fľ	NSIL	ITY	
A1	8/30/2016	Changed insulator material	Verified:	Function test: no open, no short circuit, no intermittent	tel 1.541.323.3228 800 877.670.7118				
A2	11/20/2017	Updated specifications	Dimensions are in			fax 1.541.323.4202 web tensility.com			
			millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description:	Size: Part number:				
				Connector, dc plug, 5.5x2.5xBL12xL30 locking style, brass nickel plated, threaded nut 5/16-32	Α	50-00104			
					Scale:	2:1		Sheet 1 of 1	

3