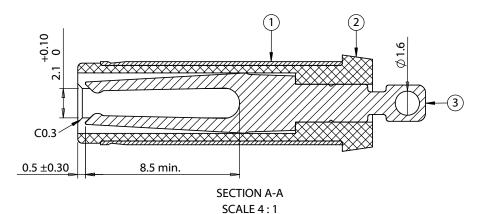
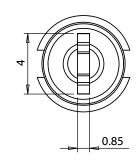
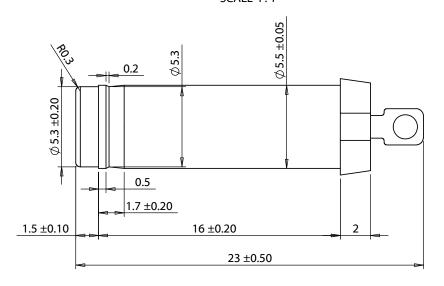
ITEM NO.	DESCRIPTION	MATERIAL	QTY.
1	Shell	C3604 brass, nickel plated	1
2	Insulator	Nylon PA46, black	1
3	Spring Contact	C5191 Phosphor bronze, nickel plated	1

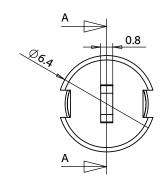




Ratings Operating Voltage: 48 Vdc Max Current: 9.5 A

Operating Temperature Range -25° to 105° C, relative humidity of 85% or less





Revision:	Date:	Description:	Prepared:	Notes:						
A	9/28/2016	Initial release	Verified:  Dimensions are in	RoHS and REACH compliant  Function test: no open, no short circuit, no intermittent		TENSILITY  tel 1.541.323.3228 800 877.670.7118 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: Connector, dc plug, 5.5x2.1x23 spring contacts, nickel plated, 1	mm, molding style, 05° C	Size: A Scale:	50-00	number: 00540 Sheet 1 of 2		
	•	5	4	3	2	•			1	

## **Electrical Requirements**

Operating Voltage: 48 Vdc

Max Current: 9.5 A

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 M $\Omega$  @ 500 Vdc

Contact resistance: 30 m $\Omega$  or less

## **Mechanical Requirements**

Insertion force: 0.3-3 kgf Withdrawal force: 0.3-3 kgf

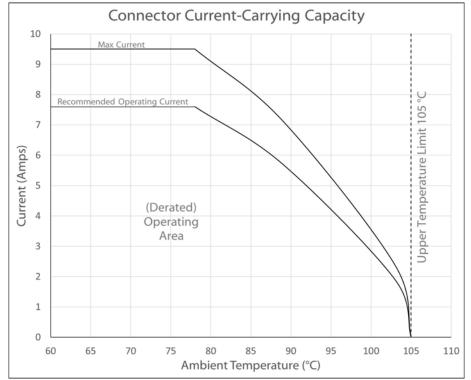
Life cycle: 5000 mating cycles while maintaining 0.3-2 kgf min. insertion force, 0.2-1.5 kgf min. withdrawal force and less than  $100 \text{ m}\Omega$  contact resistance.

**Environmental Requirements** 

Operating Temperature Range: -25° to 105° C, relative humidity of 85% or less

Heat test: 70 °C, relative humidity 70-85% for 96 hours without deformation while maintaining less than 100 m $\Omega$  contact resistance and a minimum of 50 M $\Omega$  insulation resistance at 500 Vdc.

Humidity test: 40 °C, relative humidity 90-100% for 96 hours without deformation while maintaining dielectric strength at 500 Vac for one minute, minimum insulation resistance of 50 M $\Omega$  at 500 Vdc, and a maximum contact resistance of 100 m $\Omega$ . 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 $\Omega$ .



Testing based on IEC 60512-5-2. Max current curve generated with isolated test article under controlled environmental conditions, and does not take into account external factors such as housings or circuitry. Recommended operating current curve accounts for external factors, manufacturing variation, and error in temperature measurements.

Revision:	Date:	Description:	Prepared:	Notes:					
Α	2/16/2017	Initial release		RoHS and REACH compliant		$\vdash$	NSII .	ITY	
			Verified:	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			
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Connector, dc plug, 5.5x2.1x23 mm, molding style, spring contacts, nickel plated, 105° C	Size: Part number: A 50-00540				
					Scale:	1:1		Sheet 2 of 2	

4 3 2