Ø 1.3

2.3

Materials

- 1. Shell, C3604 brass, 2 µm nickel plated
- 2. Spring contact, BeCu, 2 µm nickel plated
- 3. Pin, C3604 brass, 2 µm nickel plated
- 4. Insulator, PBT + 15% GF, black

Electrical requirements

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 M Ω @ 500 Vdc Contact resistance: $30 \text{ m}\Omega$ or less

Mechanical requirements

Insertion force: 0.3-2.5 kgf Withdrawal force: 0.3-2.5 kgf

Durability: 5000 mating cycles while maintaining; min 0.3 kgf insertion force, min 0.2 kgf withdrawal force and less than 100 m Ω contact resistance.

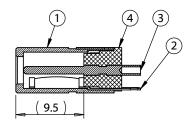
Environmental requirements

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 Ω @ 500 Vdc minimum and a contact resistance of 100 m Ω or less.

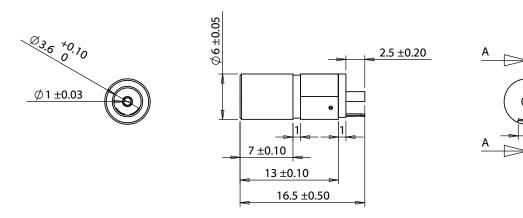
Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain insulation resistance of 50 $M\Omega$ @ 500 Vdc minimum and a contact resistance of 100 $m\Omega$ or less.

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 Ω .

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SECTION A-A



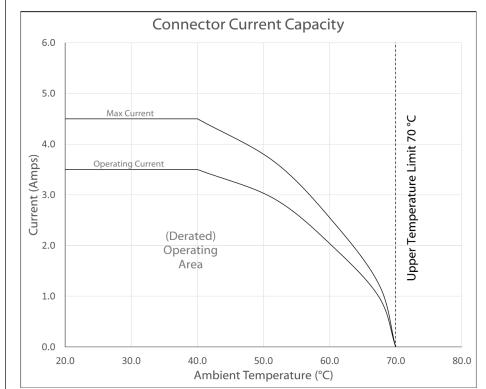
Revision:	Date:	Description:	Prepared:	Notes:					
Α	10/19/2009	Initial release		RoHS compliant		L	NSIL	JTY.	
A1	12/08/2011	Updated measurements	Verified: Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Function test: no open, no short circuit, no	1	tel 1.541.323.3228 800 877.670.7118			
A2	03/14/2013	Updated spec format		intermittent		fax 1.541.323.4202 web tensility.com			
А3	01/23/2018	Changed insulator material		Description: Connector, dc jack, 3.5x1.1xL16.5 mm, molding style	Size:	Size: Part number: A 50-00045			
					Scale	2:1		Sheet 1 of 2	

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Ratings

Maximum Operating Voltage: 48 Vdc Maximum Operating Current: 3.5 A

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



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, mating cables, or other circuitry. Operating current curve (derated by 20% of maximum values) accounts for external factors, and manufacturing variation.

Revision:	Date:	Description:	Prepared:	Notes:					
Α	10/19/2009	Initial release		RoHS compliant		ENSILITY			
A1	12/08/2011	Updated measurements	Verified:	Function test: no open, no short circuit, no intermittent	tel 1.541.323.3228 800 877.670.7118				
A2	03/14/2013	Updated spec format	Dimensions are in			fax 1.541.323.4202 web tensility.com			
А3	01/23/2018	Changed insulator material	millimeters. Tolerances: X: ± 0.3 mm	Description: Connector, dc jack, 3.5x1.1xL16.5 mm, molding style	Size:	Size: Part number:			
			X.X: ± 0.1 mm X.XX: ± 0.05 mm		Scale:	2:1 Sheet 2 of 2			

5 3 2