Materials

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

Electrical requirements

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 MΩ @ 500 Vdc Contact resistance: 30 m Ω or less

Mechanical requirements

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

Environmental requirements

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

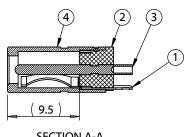
Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 M Ω @ 500 Vdc minimum and a contact resistance of 100 m Ω or less.

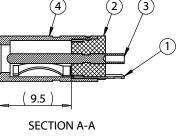
Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain insulation resistance of 50 $M\Omega$ @ 500 Vdc minimum and a contact resistance of 100 $m\Omega$ or less.

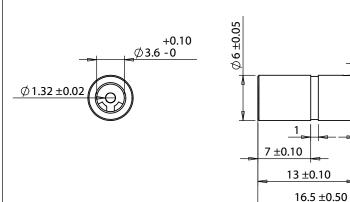
Salt spray test: 35 °C, RH 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 m Ω .

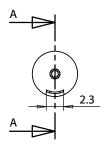
Operating range

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









2.5

Revision:	Date:	Description:	Pi
Α	10/21/2009	Intitial release	
A1	12/05/2011	Updated description	\[\v\
A2	02/20/2012	Updated drawing	D
А3	11/09/2012	Added test data	T
A4	01/23/2018	Changed insulator material	X

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Prepared:					
Verified:					
Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: + 0.05 mm					

Notes: **RoHS** compliant

Function test: no open, no short circuit, no intermittent

Description:

Connector, dc jack, 3.5x1.35xL16.5 mm, molding style

tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com

Sheet 1 of 2

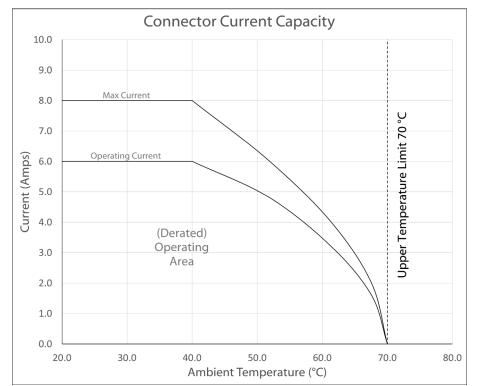
Size:	Size: Part number:					
Α	50-00057					
Scale:	2:1	01				

3 2

Ratings

Maximum Operating Voltage: 48 Vdc Maximum Operating Current: 6.0 A

Operating Temperature Range -25° to 70°C, 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	10/21/2009	Intitial release		RoHS compliant		ENSILITY
A1	12/05/2011	Updated description	Verified:	Function test: no open, no short circuit, no intermittent	tel 1.541.323.3228 800 877.670.7118	
A2	02/20/2012	Updated drawing	Dimensions are in			x 1.541.323.4202 web tensility.com
А3	11/09/2012	Added test data	millimeters. Tolerances: X: ± 0.3 mm	Description: Connector, dc jack, 3.5x1.35xL16.5 mm, molding	Size:	Part number: 50-00057
A4	01/23/2018	Changed insulator material	X.X: ± 0.1 mm X.XX: ± 0.05 mm	style	Scale:	2:1 Sheet 2 of 2

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