Materials

- 1. Insulator, PBT + 15% GF, black
- 2. Pin, C3604 brass, 2 µm nickel plated
- 3. Shell, C3604 brass, 2 µm nickel plated
- 4. Spring contact, C5191 phosphor bronze, 2 μm nickel plated

Electrical requirements

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

Mechanical requirements

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

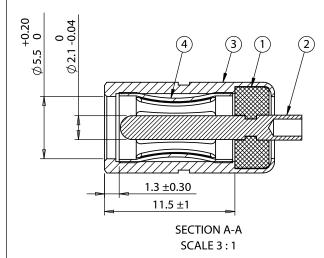
Durability: 5000 mating cycles while maintaining; 0.3 kgf min. insertion force, 0.2 kgf min. withdrawal force and a less than 100 m Ω contact resistance.

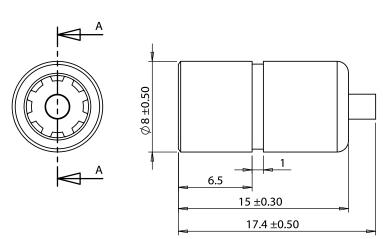
Environmental requirements

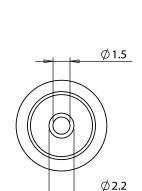
Damp test: 40 °C, $\dot{R}H$ 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 M Ω @ 500 Vdc minimum and a contact resistance of 100 m Ω or less.

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







Revision:	Date:	Description:	Р
А	09/02/2009	Intiial release	<u> </u> -
A1	11/09/2012	Added test data	٧,
A2	10/29/2015	Modifed electrical requirements	[r
A3	04/19/2016	Modified tolerances	֧֓֞֞֞֝֟֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֡֓֓֓֡֓֡֓֡֓֡֓
A4	05/22/2018	Changed material and added test data)

Prepared: JP Digitally signed by JP Date: 2018.05.25 10:13.26-0700				
Verifie	ed:			
AG	Digitally signed by AG Date: 2018.05.25 10:23:26 -07'00'			
Dimensions are in millimeters. Tolerances:				
X:	± 0.5 mm ± 0.3 mm			

Notes:
RoHS compliant

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

Description:

Connector, dc jack, 5.5x2.1xL17.4 mm, molding style

TENSILITY

tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com

size:	Part number:
Α	50-00025

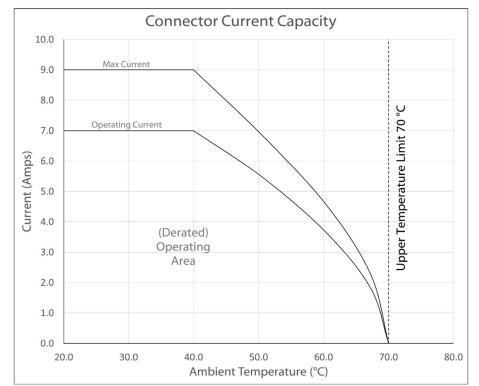
Scale: 4:1 Sheet 1 of 2

3 2

Ratings

Operating Voltage: 48 Vdc Max Current: 7 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	09/02/2009	Intiial release	JP Digitally signed by JP Date: 2018.05.25 10:13:37 -0700°	RoHS compliant		ENS	SIL	ITY		
A1	11/09/2012	Added test data	Verified: AG Digitally signed by AG Date: 2018.05.25 10:23:46 O700'	Function test: no open, no short circuit, no intermittent	te	1.541.323.32	28 800 87	77.670.7118		
A2	10/29/2015	Modifed electrical requirements	Dimensions are in			fax 1.541.323.4202 web tensility.com				
A3	04/19/2016	Modified tolerances	millimeters. Tolerances: X: ± 0.5 mm	Folerances: Connector, dc jack, 5.5x2.1xL17.4 mm, molding		Size:	: Part number: 50-00025			
A4	05/22/2018	Changed material and added test data	X.X: ± 0.3 mm X.XX: ± 0.05 mm	style	Scale:	4:1		Sheet 2 of 2		