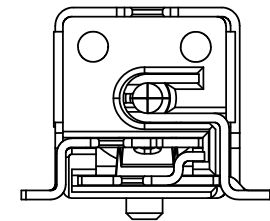
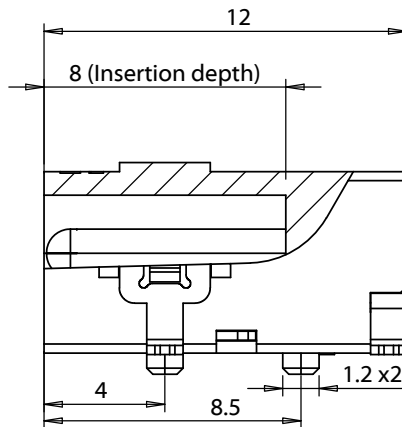
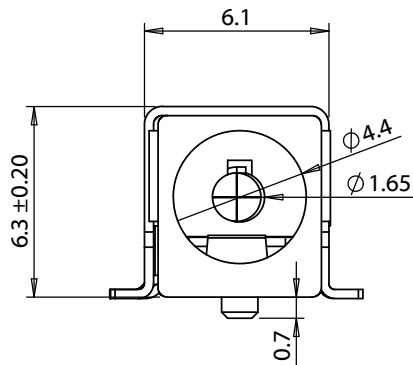
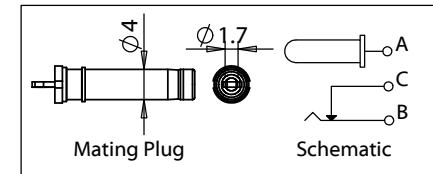
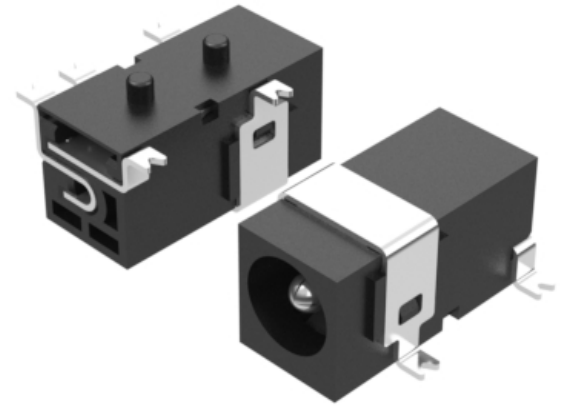
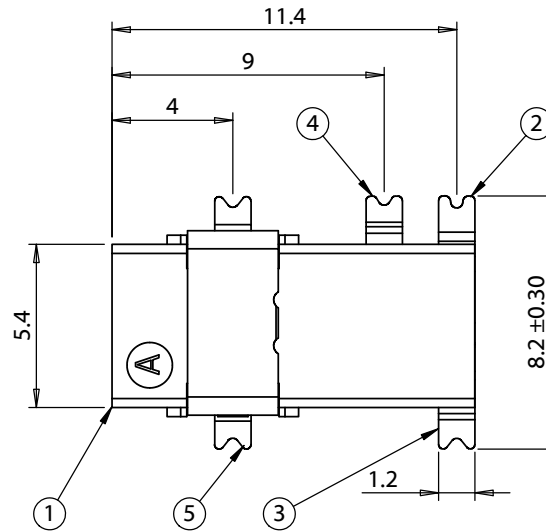


PCB Layout



Revision:	Date:	Description:	Prepared:	Notes:	<h1>TENSILITY</h1> tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A	6/17/2021	Initial release		RoHS compliant	
			Verified:	Function test: no open, no short circuit, no intermittent	Size: Part number: A 54-00289
			Dimensions are in millimeters. Tolerances: X: ± 0.3 mm X.X: ± 0.1 mm X.XX: ± 0.05 mm	Description: Connector, dc jack 4.0x1.7 mm, PCB mount, 90°, silver plated, PA9T, SMT	
					Scale: 4:1

Ratings

Voltage: 48 V
Current: 6.5 A

Operating Temperature Range

-40~105 °C, relative humidity of 85% or less

Materials

- ① Housing: PA9T, black
- ② Pin: C3604 brass, silver plated
- ③ Switch: C3604 brass, silver plated
- ④ Spring contact: C5191 phosphor bronze, silver plated
- ⑤ Retaining strap: C3604 brass, silver plated

Electrical Requirements

Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 MΩ @ 500 Vdc
Contact resistance: 30 mΩ 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 kgf min. insertion force, 0.2 kgf min. withdrawal force and less than 100 mΩ contact resistance.

Soldering

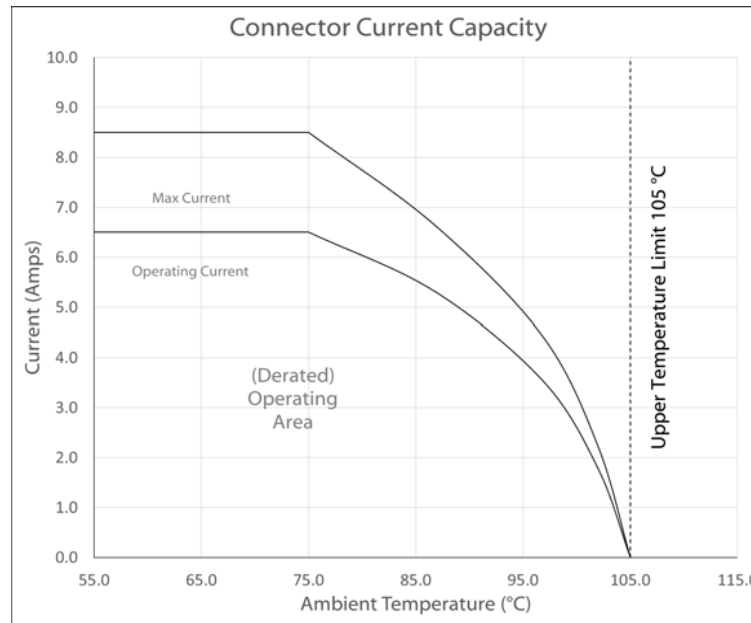
Solderability: 75% minimum coverage when terminals dipped 2mm in 260 ±5 °C solder bath for 3 ±0.5 seconds
Solder bath durability: no deformation when immersed in 260 ±5 °C up to surface of the board 1.6 mm for 5 seconds or less
Solder iron durability: no deformation when exposed to 350 ±10 °C for 3 ±0.5 seconds

Environmental Requirements

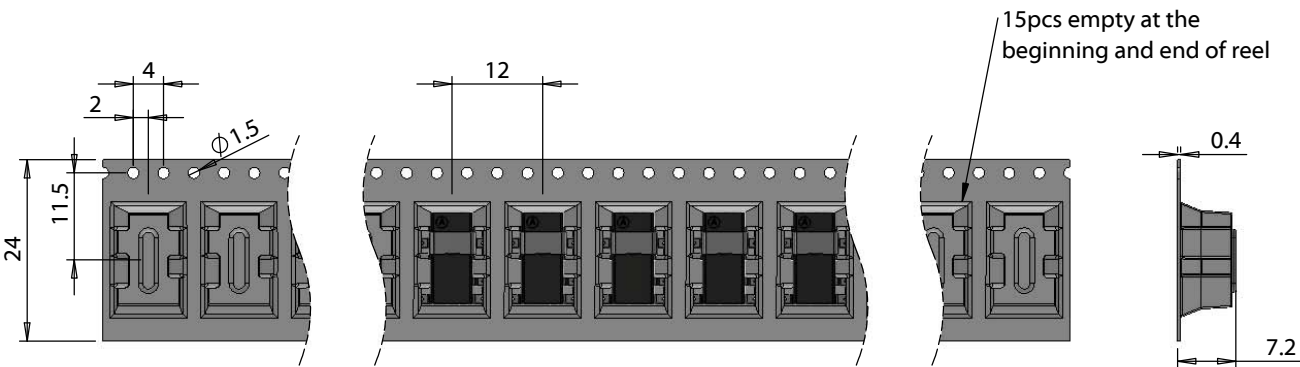
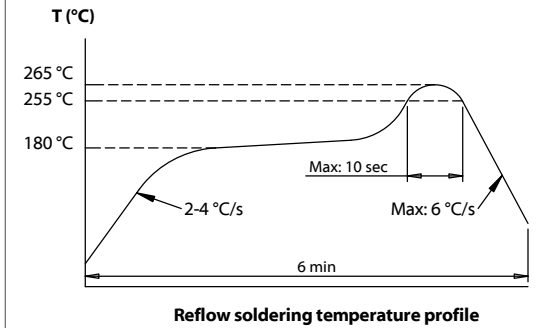
Cold test: -40 ±3 °C for 48 hours without deformation
Heat test: 85 °C, relative humidity 70-85% for 96 hours without deformation
Humidity test: 40 °C, relative humidity 90-95% for 48 hours without deformation
Salt spray test: 35 °C, relative humidity 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 80 mΩ.

Packaging:

800 pieces/ reel
12 reels/ box



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:	<h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com</p>
A	6/17/2021	Initial release		RoHS compliant	
			Verified:	Function test: no open, no short circuit, no intermittent	
				Description: Connector, dc jack 4.0x1.7 mm, PCB mount, 90°, silver plated, PA9T, SMT	
				Size: A Part number: 54-00289	
				Scale: 1:1	Sheet 2 of 2