Ratings

Operating temperature range: -10° to 60° C Flammability: UL 94 V-0

Materials

1. Insulator: PBT, black

- 2. Pin: copper alloy, nickel plated 3. Shell: brass, nickel plated
- 4. Spring contact: stainless steel, nickel plated
- 5. Spring contact collar: copper alloy, nickel plated
- 6. Solder tab: brass, nickel plated
- 7. Washer p/n 56-00001: cold rolled steel, nickel plated
- 8. Nut p/n 56-00000: brass, nickel plated

Electrical Requirements

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 MΩ @ 500 Vdc Contact resistance: 50 m Ω or less

Mechanical Requirements

Insertion force: 0.3-3 kaf Withdrawal force: 0.2-3 kgf Terminal strength: a static load of 150 gf shall be applied to the terminal for 15 seconds in any direction.

Life cycle: 5000 mating cycles while maintaining less than 100 m Ω contact resistance, $50M\Omega$ insulation resistance minimum, and dielectric strength of 500 Vac for 1 minute withstand voltage.

Solderina

- Solderability: 75% minimum coverage when terminals dipped 2mm in 245 \pm 5 °C solder bath for 3 \pm 0.5 seconds
- Solder bath durability: no deformation when immersed in 255 ±5 °C bath for 5 seconds or less
- Solder iron durability: no deformation when exposed to 350 ±10 °C for 3 ±0.5 seconds

Description:

Initial release

Updated notes

Updated materials list

Date:

8/05/2016

1/04/2017

8/25/2017

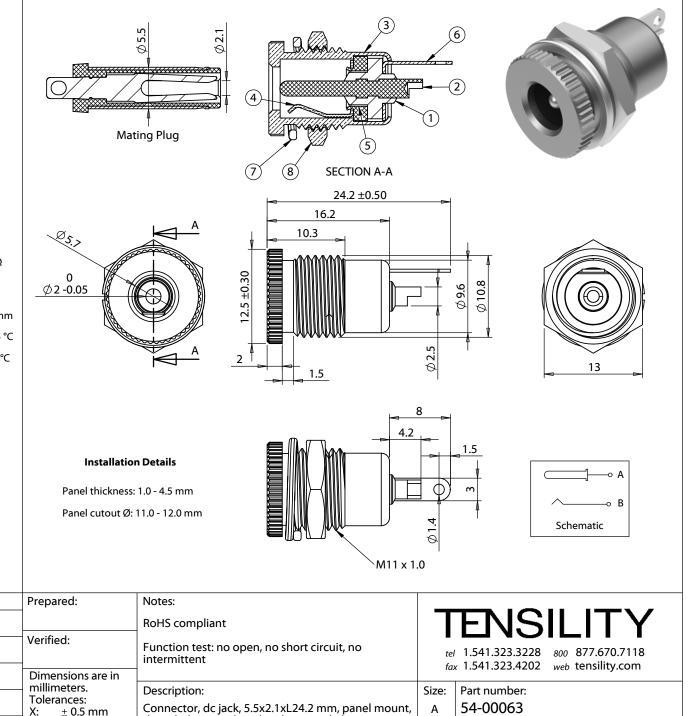
Revision:

А

A1

A2

Environmental Requirements Cold test: -25 ±3 °C for 48 hours without deformation Heat test: 70 ±2 °C, for 48 hours without deformation Humidity test: 40 ±2 °C, relative humidity 90-95% for 48 hours without deformation



5

3

X.X: ± 0.3 mm

X.XX: ± 0.05 mm

threaded, nut and washer, brass, nickel

2

Sheet 1 of 2

Scale: 2:1

Ratings Maximum Operating Voltage: 48 Vdc Maximum Operating Current: 6.5 A **Connector Current Capacity** 10.0 9.0 Max Current 8.0 Upper Temperature Limit 60 °C 7.0 Operating Current Current (Amps) 6.0 5.0 4.0 (Derated) Operating 3.0 Area 2.0 1.0 0.0

15.0

20.0

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 othercircuitry. Operating current curve (derated by 20% of maximum values) accounts for external factors, and manufacturing variation.

40.0

Ambient Temperature (°C)

45.0

50.0

55.0

60.0

65.0

35.0

30.0

25.0

Revision:	Date:	Description:	Prepared:	Notes:						
А	8/05/2016	Initial release		RoHS compliant		TENSILITY				
A1	1/04/2017	Updated materials list	Verified:	Function test: no open, no short circuit, no intermittent Description: Connector, dc jack, 5.5x2.1xL24.2 mm, panel mount, threaded, nut and washer, brass, nickel		tel 1.541.323.3228 800 877.670.7118				
A2	8/25/2017	Updated notes	Dimensions are in			fax 1.541.323.4202 web tensility.com				
			millimeters.			Size:	Part nu	number:		
			Tolerances: X: ± 0.5 mm			A	54-00	00063		
			X.X: ± 0.3 mm X.XX: ± 0.05 mm			Scale	2:1	$\bigcirc \bigcirc$	Sheet 2 of 2	
5 4			4	3	2			1		