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Ratings

Maximum operating voltage: 48 V

Maximum operating current: 6.0 V (not mated under load)

Operating Temperature Range

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

Materials

1)Insulator: Nylon, black black

(2)Center pin: brass, silver plated

(3)Spring contact: brass, silver plated

(4)Terminal: phosphor bronze, silver plated

(5) Terminal: carbon steel, nickel plated

Electrical Requirements

Dielectric strength: 1 min @ 250 Vac

Insulation resistance: 100 MΩ @ 500 Vdc minimum

Contact resistance: 50 mΩ maximum

Mechanical Requirements

Insertion force: 0.4-1.0 kgf

Withdrawal force: 0.3-0.9 kgf

Life cycle: 5000 mating cycles while maintaining contact resistance: 100 mΩ maximum, withstand voltage: 500 Vac, 1 min

Terminal strength: 150 gf applied to the terminal for 15 seconds in any direction while maintaining electrical characteristics and without damage or excessive looseness of terminals

Soldering

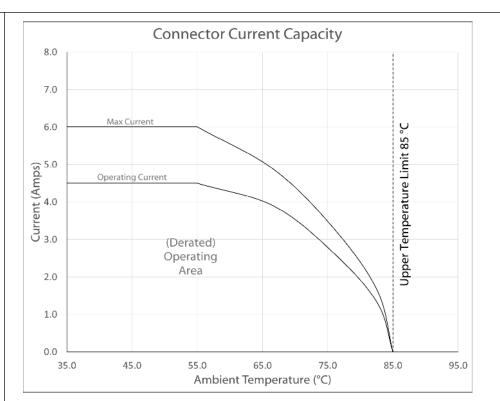
Solderability: 75% minimum coverage when terminals dipped 2mm in 245 \pm 5 °C solder bath for 3 \pm 0.5 seconds

Solder bath durability: no deformation when immersed in 255 \pm 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 \pm 10 °C for 3 ±0.5 seconds

Environmental Requirements Cold test: -25 ±3 °C for 48 hours without deformation Heat test: 85 ± 2 °C, relative humidity 45-85% for 48 hours without deformation

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Humidity test: 40 ± 2 °C, relative humidity 90-95% for 48 hours without deformation



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.

Wave Soldering Temperature Profile 245 °C peak (5 seconds max) Temperature (°C) Pb - Free Flow Profile Solder temperature: 245 °C 120 °C Time: 5 seconds maximum Pre-heat: 100 ~120°C 100 °C Time: 70 seconds maximum Pre-heat Measure point: surface of the solder leads 70 seconds (max) Time (S)

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Revision:	Date:	Description:	Prepared: Digitally signed by AW	Notes: Function test: no open, no short circuit, no					
Α	9/26/2018	Initial release	Date: 2018 09 27		TFNSILITY				
			Verified: JP Digitally signed by JP Date: 2018.09.27 14:16:30-0700	intermittent		tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com			
			Dimensions are in millimeters. Tolerances: < 1.0: ± 0.1 mm	Description: Connector, dc jack 2.35x0.7 mm, PCB mount, 90°, silver plated, thru hole	Size: Part number: A 54-00138				
			1.0 to 10.0: ± 0.2 mm > 10.0: ± 0.3 mm		Scale:	1:1		Sheet 2 of 2	

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