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Ratings

Maximum operating voltage: 48 V

Maximum operating current: 8 A (not mated under load)

Operating Temperature Range

-40 ~ 130 °C, relative humidity of 85% or less

Materials

1)Insulator: LCP, black UL 94 V-0

2)Spring contact: C5191 phosphor bronze, silver plated

(3) Switch contact: C3604 brass, silver plated

(4)Pin: zinc alloy, nickel plated

(5)Shell: SPCC, nickel plated

(6)Front plate: SUS301

Electrical Requirements

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 MΩ @ 250 Vdc

Contact resistance: 30 mΩ or less

Mechanical Requirements

Insertion force: 0.5-3 kgf Withdrawal force: 0.5-3 kgf

Life cycle: 5000 mating cycles while maintaining 30% initial values. withdrawal force and less than 100 m Ω contact resistance.

Soldering

Solderability: 90% 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 265 $\pm 5\,^{\circ}\text{C}$ up to surface of the board 1.6 mm for 10 seconds or less

Solder iron durability: no deformation when exposed to 350 $\pm 10\,^{\circ}\text{C}$ for 5 ± 0.5 seconds

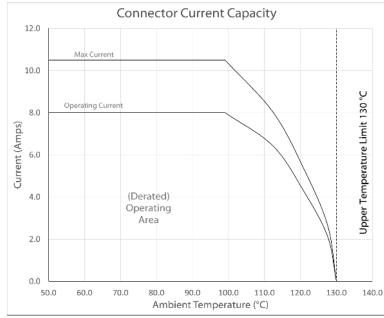
Environmental Requirements

Cold test: -40 ± 2 °C for 48 hours without deformation Heat test: 85 °C for 48 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 m Ω .

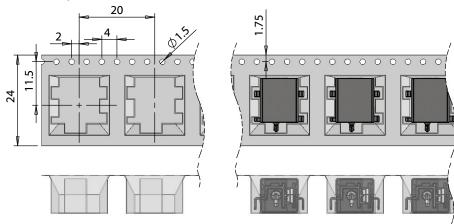
Packaging

300 pieces/ reel 12 reels/ box



Reflow soldering temperature profile

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.



20pcs empty at the beginning and end of the reel

Revision:	Date:	Description:	Prepared:	Notes:		
Α	10/1/2020	Initial release	Digitally signed by AW Date: 2020.10.13 13:22:23 -07'00'	RoHS compliant		FNSII ITY
			AG Digitally signed by AG Date: 2020.10.13 15:31:28-0700'	Function test: no open, no short circuit, no intermittent	te	el 1.541.323.3228 800 877.670.7118 ax 1.541.323.4202 web tensility.com
				Description:	Size:	Part number:
				Connector, dc jack 5.5x2.1 mm, PCB mount, 180°, silver plated, LCP, board cut thru hole		54-00253
						: 1:1 Sheet 2 of 2

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