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
- 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: $50 \text{ m}\Omega$ or less

Mechanical Requirements

Insertion force: 0.3-3 kgf 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.

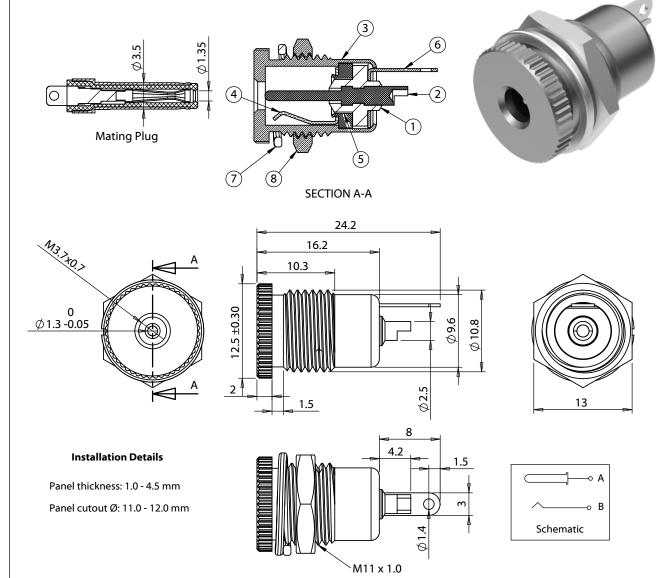
Soldering

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 bath for 5 seconds or less

Solder iron durability: no deformation when exposed to 350 \pm 10 °C for 3 ±0.5 seconds

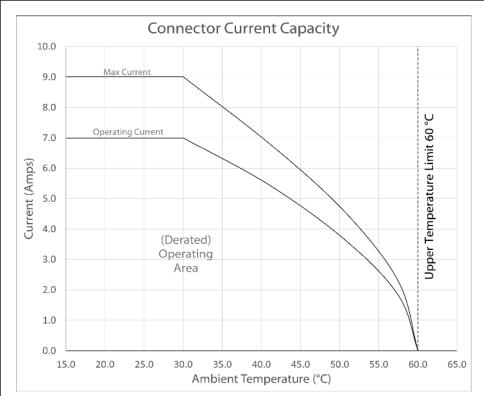
Environmental Requirements Cold test: -25 ±3 °C for 48 hours without deformation Heat test: 70 ±2 °C, for 48 hours without deformation Humidity test: 40 ± 2 °C, relative humidity 90-95% for 48 hours without deformation



Revision:	Date:	Description:	Prepared:	Notes:			
Α	8/05/2016	Initial release	RS Digitally signed by RS Date: 2018.11.01 11:42:58 -07'00'	RoHS compliant		ENSILITY	
A1	1/03/2017	Updated materials list	Verified: PS Digitally signed by PS Date: 2018.11.05 13:14:22 -08'00'	Function test: no open, no short circuit, no intermittent		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. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description:	Size: Part number:		
				Connector, dc jack, 3.5x1.35xL24.2 mm, panel mount, threaded, nut and washer, brass, nickel	Α	54-00061	
					Scale:	: 2:1 Sheet 1 of 2	

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Ratings Maximum Operating Voltage: 48 Vdc Maximum Operating Current: 7.0 A



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: Digitally signed by RS	Notes:			
Α	8/05/2016	Initial release	RS Date: 2018.11.01	RoHS compliant	ΙΤ	FNSII ITY	
A1	1/03/2017	Updated material list	Verified: PS Digitally signed by PS Date: 2018.11.05 13:21:40 -08'00'	Function test: no open, no short circuit, no intermittent		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. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description:	Size:	Part number: 54-00061	
				Connector, dc jack, 3.5x1.35xL24.2 mm, panel mount, threaded, nut and washer, brass, nickel	Α		
					Scale:	2:1 Sheet 2 of 2	

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