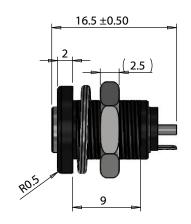
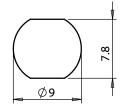
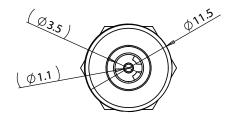
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	COMPONENT NOTES
1	50-00674	Connector, dc jack, 3.5x1.1xL16.5 mm, brass nickel plated, molding style, 105 °C	1	UL 94 V-0
2	24-00354	Overmold, panel mount 3.5 mm dc jack, nylon	1	black, UL 94 V-0
3	56-00021	Hardware, washer, lock, 12x9x1.1 mm, SPCC, nickel plated	1	
4	56-00020	Hardware, nut, hex, 11.0x2.5 mm, M9x1.0, brass, nickel plated	1	

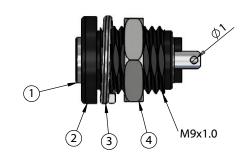


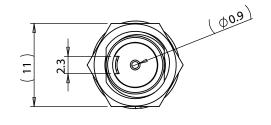
# **Installation Details**

Panel thickness: 1.0 - 4.0 Recommended panel cutout:









Revision:	Date:	Description:	Prepared:	Notes:					
Α	9/25/2020	Initial release		RoHS compliant		FNSII ITY			
			Verified:	Function test: no open, no short circuit, no intermittent		tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com			
			Dimensions are in millimeters.	Description		,			
			Tolerances:	blerances:  ± 0.3 mm X: ± 0.3 mm threaded, nut and washer, 105 °C	Size:   Part number:   A   54-00264				
			X.X: ± 0.3 mm X.XX: ± 0.1 mm		Scale:	2:1 Sheet 1 of 2			

5 4 3 2

## Ratings

Voltage: 48 V Current: 6.0 A

# **Operating Temperature Range**

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

### Materials

- 1. Insulator: Nylon UL94 V-0, black
- 2. Center pin: C3604 brass, 2 µm nickel plated
- 3. Shell: C3604 brass, 2 µm nickel plated
- 4. Spring contact: Beryllium copper, 2 µm nickel plated

# **Electrical Requirements**

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 MΩ @ 500 Vdc Contact resistance:  $30 \text{ m}\Omega$  or less

Mechanical Requirements Insertion force: 0.3-2.5 kgf Withdrawal force: 0.3-2.5 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.

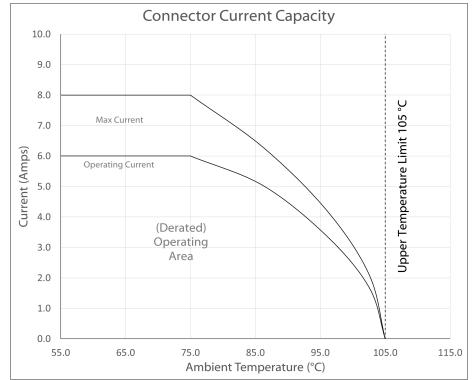
# **Environmental Requirements**

Heat test: 70 °C, relative humidity 70-85% for 96 hours while maintaining contact resistance:  $100 \text{ m}\Omega$  or less, insulation resistance: 50 MΩ @ 500 Vdc, and without looseness or deformation

Humidity test: 40 °C, relative humidity 90-100% for 96 hours while maintaining dielectric strength: 1 min @ 500 Vac, insulation resistance:  $50 \text{ M}\Omega$  @ 500 Vdc, and contact resistance: 100 mΩ or less

Salt spray test: 35±2 °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 $\Omega$ .

5



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:					
Α	9/25/2020	Initial release		RoHS compliant	TENSILITY				
			Verified:	Function test: no open, no short circuit, no intermittent  Description: Connector, dc jack, 3.5x1.1x16.5 mm, panel mount,		tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com			
			-			Part number:			
			_			А 54-00264			
				threaded, nut and washer, 105 °C	Scale:	: 2:1 Sheet 2 of 2			

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