

**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 mΩ or less

**Mechanical Requirements**

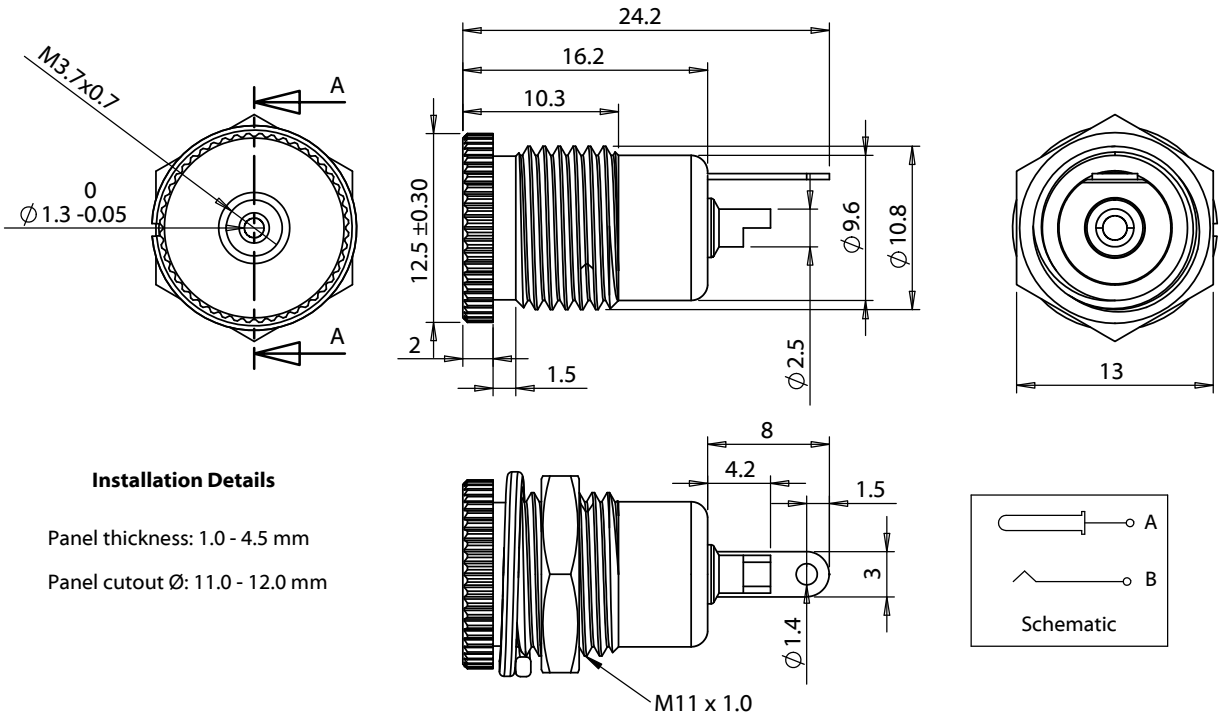
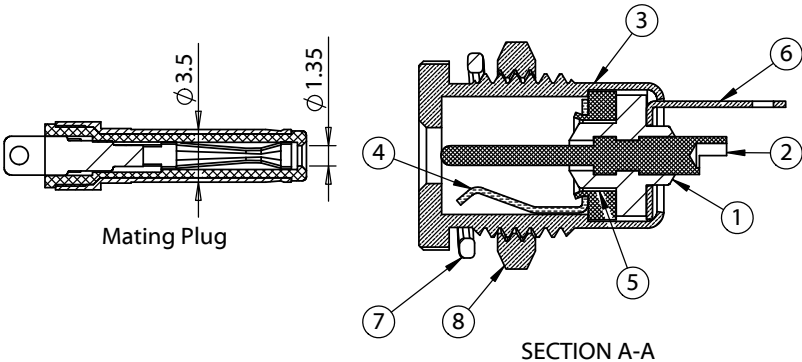
Insertion force: 0.3-3 kgf  
Withdrawal force: 0.2-3 kgf  
Terminal strength: a static load of 150 gf shall be applied to the terminal for 15 seconds in any direction.  
Life cycle: 5000 mating cycles while maintaining less than 100 mΩ contact resistance, 50MΩ insulation resistance minimum, and dielectric strength of 500 Vac for 1 minute withstand voltage.

**Soldering**

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

**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

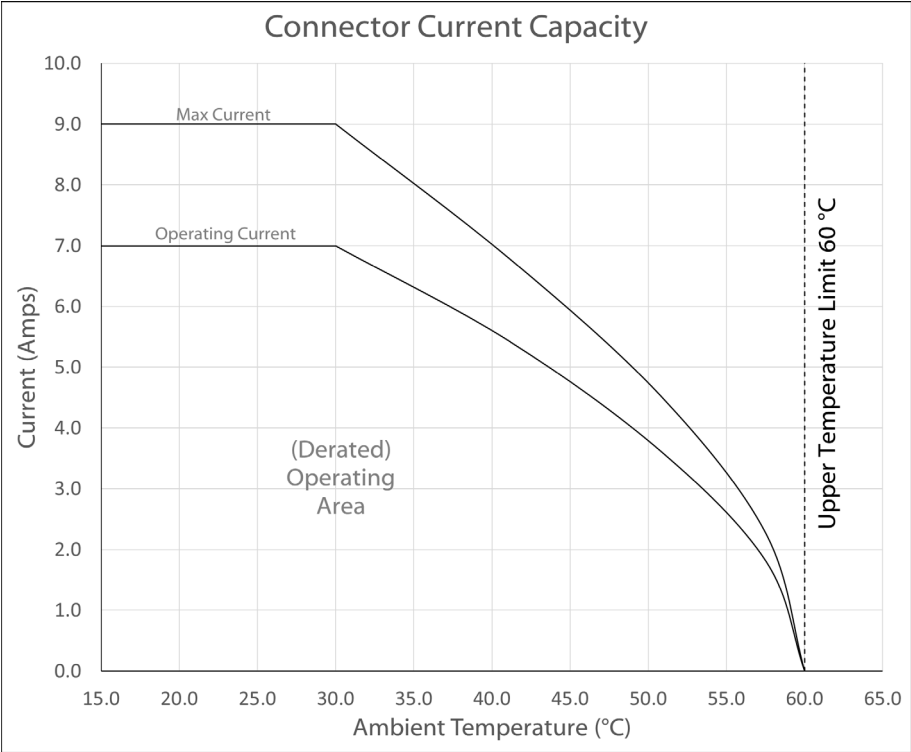


**Installation Details**

Panel thickness: 1.0 - 4.5 mm  
Panel cutout Ø: 11.0 - 12.0 mm

|           |           |                        |                                                                                                  |                                                                                            |                                                                                                 |              |
|-----------|-----------|------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------|
| Revision: | Date:     | Description:           | Prepared:                                                                                        | Notes:                                                                                     | <b>TENSILITY</b><br>tel 1.541.323.3228 800 877.670.7118<br>fax 1.541.323.4202 web tensility.com |              |
| A         | 8/05/2016 | Initial release        | Verified:                                                                                        | RoHS compliant                                                                             |                                                                                                 |              |
| A1        | 1/03/2017 | Updated materials list | Dimensions are in millimeters.<br>Tolerances:<br>X: ± 0.5 mm<br>X.X: ± 0.3 mm<br>X.XX: ± 0.05 mm | Function test: no open, no short circuit, no intermittent                                  | Size:                                                                                           | Part number: |
| A2        | 8/25/2017 | Updated notes          |                                                                                                  | Description:                                                                               | A                                                                                               | 54-00061     |
|           |           |                        |                                                                                                  | Connector, dc jack, 3.5x1.35x24.2 mm, panel mount, threaded, nut and washer, brass, nickel | Scale: 2:1                                                                                      | Sheet 1 of 2 |

**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:                                                                                        | Notes:                                                                                                      | <div>TENSILITY</div> <div>tel 1.541.323.3228 800 877.670.7118</div> <div>fax 1.541.323.4202 web tensility.com</div> <div>Size: Part number:</div> <div>A 54-00061</div> <div>Scale: 2:1</div> <div></div> <div>Sheet 2 of 2</div> |  |  |
| A         | 8/05/2016 | Initial release       | Verified:                                                                                        | RoHS compliant                                                                                              |                                                                                                                                                                                                                                                                                                                        |  |  |
| A1        | 1/03/2017 | Updated material list | Dimensions are in millimeters.<br>Tolerances:<br>X: ± 0.5 mm<br>X.X: ± 0.3 mm<br>X.XX: ± 0.05 mm | Function test: no open, no short circuit, no intermittent                                                   |                                                                                                                                                                                                                                                                                                                        |  |  |
| A2        | 8/25/2017 | Updated notes         |                                                                                                  | Description:<br>Connector, dc jack, 3.5x1.35xL24.2 mm, panel mount, threaded, nut and washer, brass, nickel |                                                                                                                                                                                                                                                                                                                        |  |  |
|           |           |                       |                                                                                                  |                                                                                                             |                                                                                                                                                                                                                                                                                                                        |  |  |
|           |           |                       |                                                                                                  |                                                                                                             |                                                                                                                                                                                                                                                                                                                        |  |  |