

**Materials**

- ① Insulator: LCP + 30% glass fiber, UL 94 V-0, gray
- ② Pin: brass, nickel plated
- ③ Shell: brass, nickel plated
- ④ Spring contact: phosphor bronze, nickel plated
- ⑤ Switch contact: brass
- ⑥ Shell contact: brass, nickel plated

**Electrical Requirements**

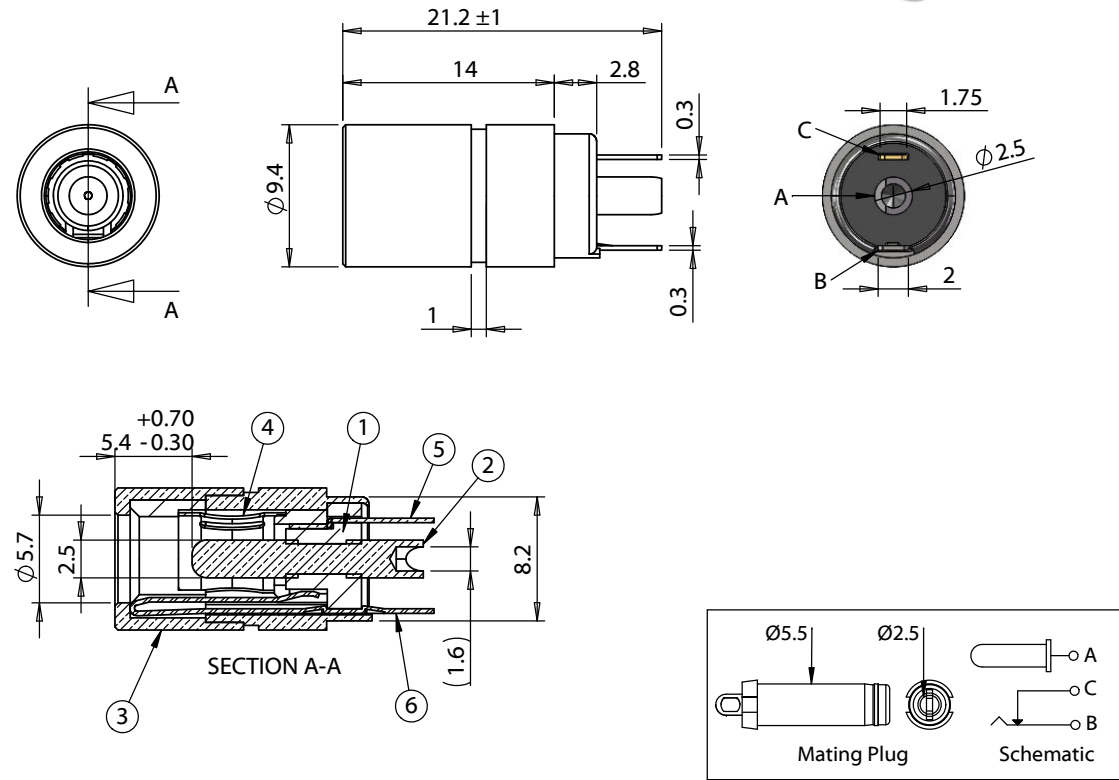
Dielectric strength: 1 min @ 500 Vac  
 Insulation resistance: 100 MΩ @ 500 Vdc  
 Contact resistance: 30 mΩ or less


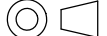
**Mechanical Requirements**

Insertion force: 0.4-4 kgf  
 Withdrawal force: 0.4-4 kgf  
 Life cycle: 5000 mating cycles while maintaining 0.4 kgf min. insertion force, 0.4 kgf min. withdrawal force and less than 100 mΩ contact resistance.

**Environmental Requirements**

Cold test: -25 ±3 °C for 48 hours without deformation  
 Heat test: 70 °C, relative humidity 70-85% for 96 hours without deformation  
 Humidity test: 40 °C, relative humidity 90-100% for 96 hours without deformation



|             |                |                              |  |   |  |   |
|-------------|----------------|------------------------------|--|---|--|---|
| Revision: A | Date: 5/3/2022 | Description: Initial release | Prepared:  | Notes:<br>RoHS compliant<br>Function test: no open, no short circuit, no intermittent |  <p>tel 1.541.323.3228 800 877.670.7118<br/>                 fax 1.541.323.4202 web tensility.com</p> |   |
|             |                |                              | Verified:  |   |  | Description:<br>Connector, dc jack, 5.5x2.1xL22.0 mm, nickel plating, molding style, switch |
|             |                |                              | Dimensions are in millimeters.<br>Tolerances:<br>X: ± 0.3 mm<br>X.X: ± 0.1 mm<br>X.XX: ± 0.05 mm | Scale: 2:1  |   |   |

To see a custom version of this cable assembly, call Tensility at 541-323-3228 or email engineering@tensility.com

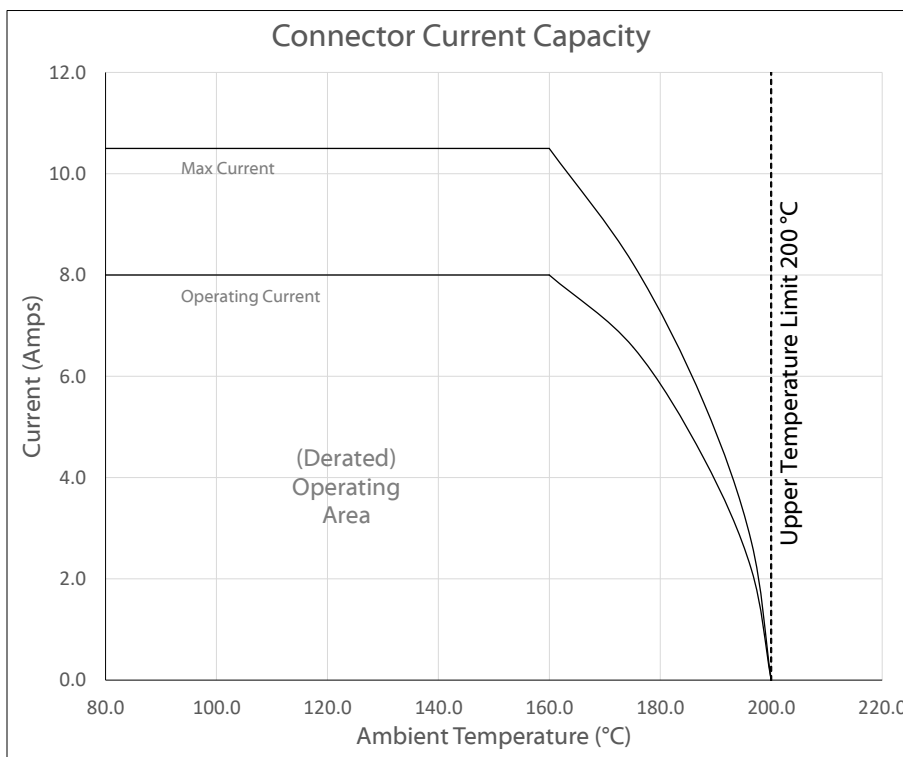
**Ratings**

Voltage: 48 V

Current: 8 A

**Operating Temperature Range**

-50 ~200 °C



Testing based on IEC 60512-5-2. Max current curve generated with isolated test article under controlled environmental conditions based on a 40°C temperature rise difference. Test 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:    |
| A         | 5/3/2022 | Initial release |
|           |          |                 |
|           |          |                 |
|           |          |                 |

|  |   |
|--|---|
| Prepared:  | Notes:  |
|  | RoHS compliant  |
| Verified:  | Function test: no open, no short circuit, no intermittent                                   |
| Dimensions are in millimeters.<br>Tolerances:<br>X: ± 0.3 mm<br>X.X: ± 0.1 mm<br>X.XX: ± 0.05 mm | Description:<br>Connector, dc jack, 5.5x2.1xL22.0 mm, nickel plating, molding style, switch |

**TENSILITY**

tel 1.541.323.3228 800 877.670.7118  
fax 1.541.323.4202 web tensility.com

|            |                          |
|------------|--------------------------|
| Size:<br>A | Part number:<br>50-00999 |
| Scale: 2:1 | Sheet 2 of 2             |