

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

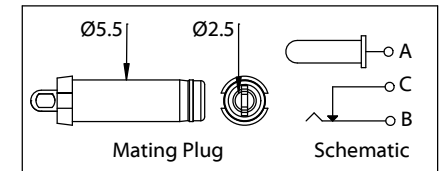
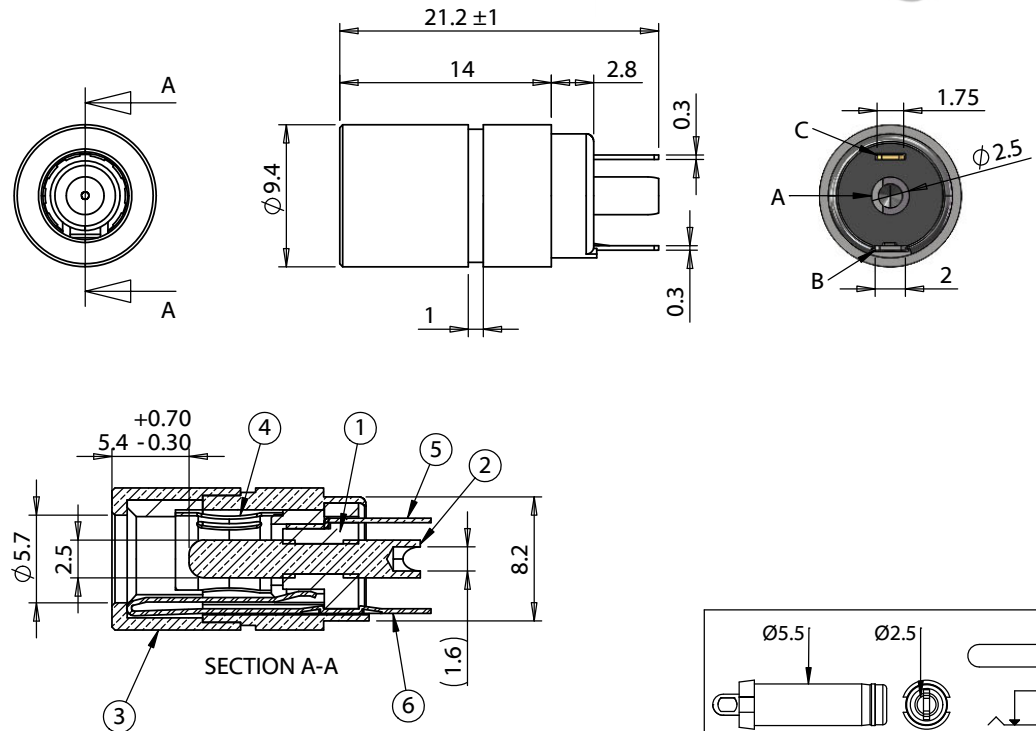
Dielectric strength: 1 min @ 500 Vac
 Insulation resistance: 100 MΩ @ 500 Vdc
 Contact resistance: 30 mΩ or less

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



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|-----------|----------|-----------------|
| Revision: | Date: | Description: |
| A | 5/3/2022 | Initial release |
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| | | |

Prepared: **JD**
Digitally signed by JD
 Date: 2022.05.25
 10:22:50 -07'00'

Verified: **AG**
Digitally signed by AG
 Date: 2022.05.27
 15:34:04 -07'00'

Dimensions are in millimeters.
 Tolerances:
 X: ± 0.3 mm
 X.X: ± 0.1 mm
 X.XX: ± 0.05 mm

Notes:
 RoHS compliant
 Function test: no open, no short circuit, no intermittent

Description:
 Connector, dc jack, 5.5x2.1xL22.0 mm, nickel plating, molding style, switch

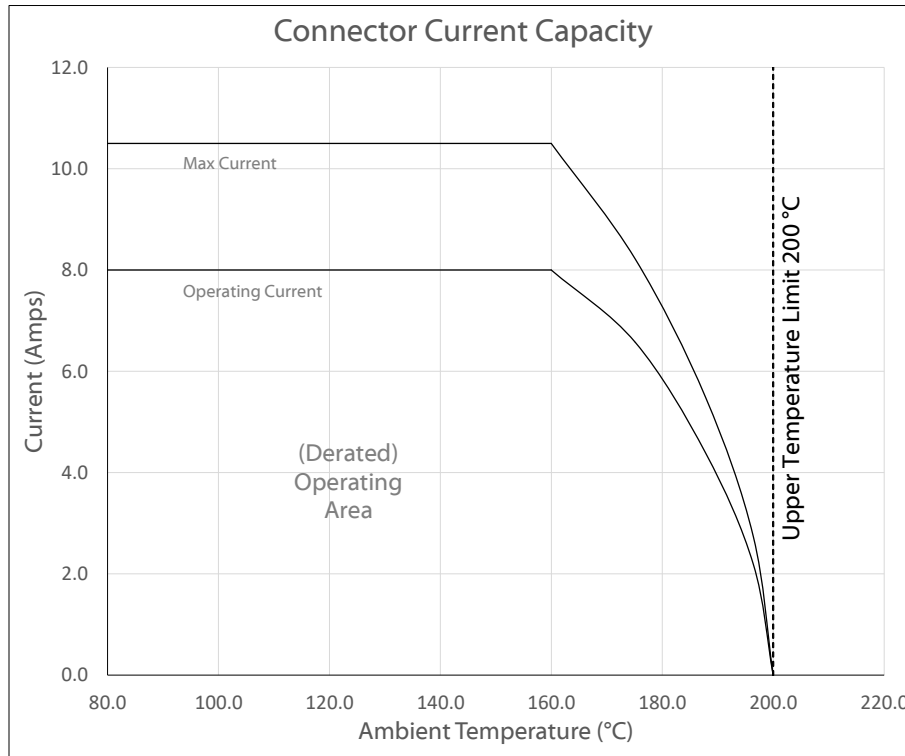
TENSILITY

tel 1.541.323.3228 800 877.670.7118
 fax 1.541.323.4202 web tensility.com



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

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.

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|-----------|--------------|-----------------|--|---|--|-------|--------------|---|----------|
| Revision: | Date: | Description: | Prepared: | Notes: | <h1>TENSILITY</h1> <p>tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com</p> | | | | |
| A | 5/3/2022 | Initial release | JD <small>Digitally signed by JD Date: 2022.05.25 10:23:04 -07'00'</small> | RoHS compliant | | | | | |
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| | | | | | Sheet 2 of 2 | | | | |

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