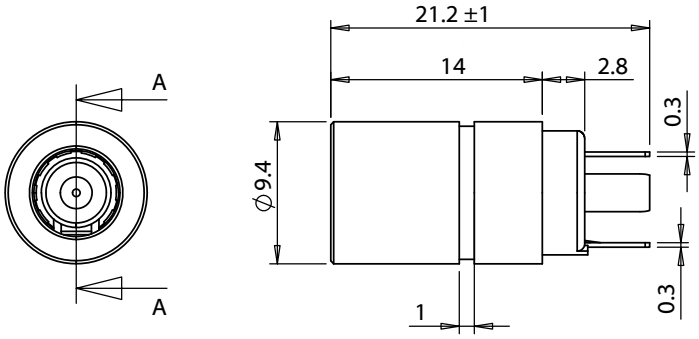
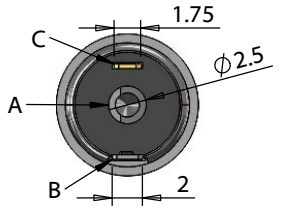
Materials
① Insulator: LCP + 30% glass fiber, UL 94 V-0, gray
② Pin: brass, nickel plated
③ Shell: brass, nickel plated
④ Spring contact: phosphor bronze, nickel plated
⑤ Switch contact: brass
⑥ Shell contact: brass, nickel plated

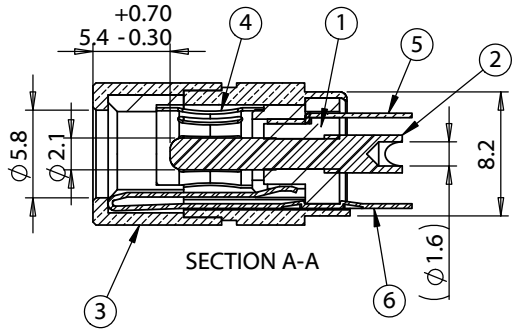
Electrical Requirements
Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 MΩ @ 500 Vdc
Contact resistance: 30 mΩ or less

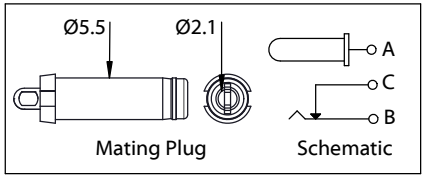
Mechanical Requirements
Insertion force: 0.4-4 kgf
Withdrawal force: 0.4-4 kgf
Life cycle: 5000 mating cycles while maintaining 0.4 kgf min. insertion force, 0.4 kgf min. withdrawal force and less than 100 mΩ contact resistance.

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:	Date:	Description:
A	5/27/2022	Initial release

Prepared: JD
Digitally signed by JD
Date: 2022.07.28 10:25:40 -07'00'

Verified: MP
Digitally signed by MP
Date: 2022.07.28 10:32:02 -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

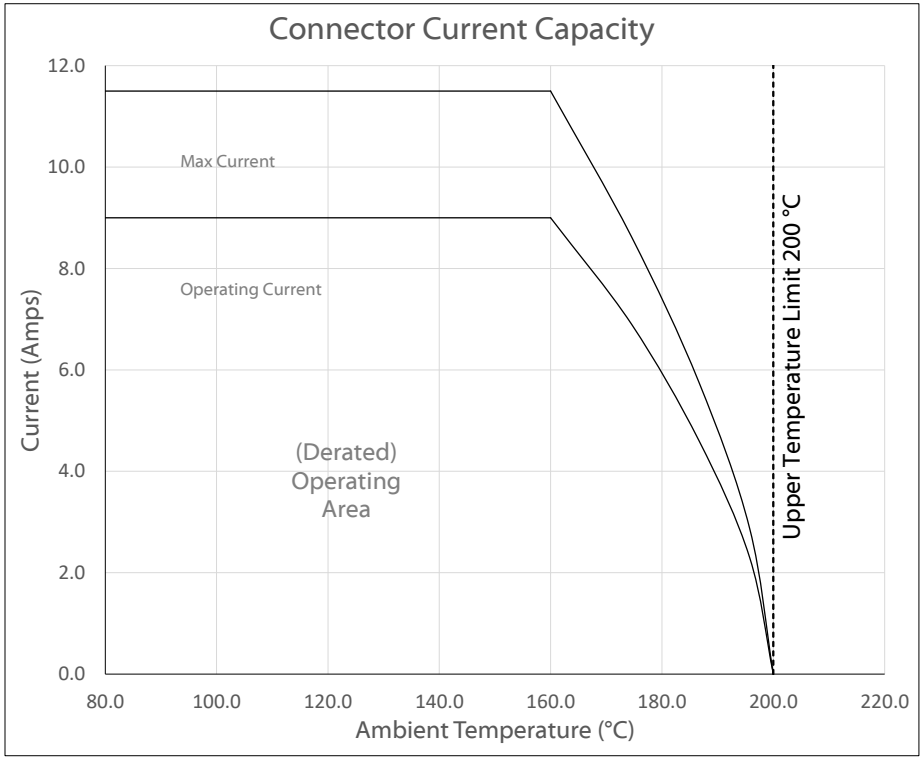
TENSILITY
tel 1.541.323.3228 800 877.670.7118
fax 1.541.323.4202 web tensility.com

Size: A
Part number: 50-01002
Scale: 2:1
Sheet 1 of 2

5 4 3 2 1

Ratings
Voltage: 48 V
Current: 9.0 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. 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	5/27/2022	Initial release

Prepared:
JD
Digitally signed by JD
Date: 2022.07.28 10:25:48 -07'00'

Verified:
MP
Digitally signed by MP
Date: 2022.07.28 10:32:50 -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: 50-01002
Scale: 2:1
Sheet 2 of 2

5 4 3 2 1