

Operating Temperature Range

-10° to 60° C

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

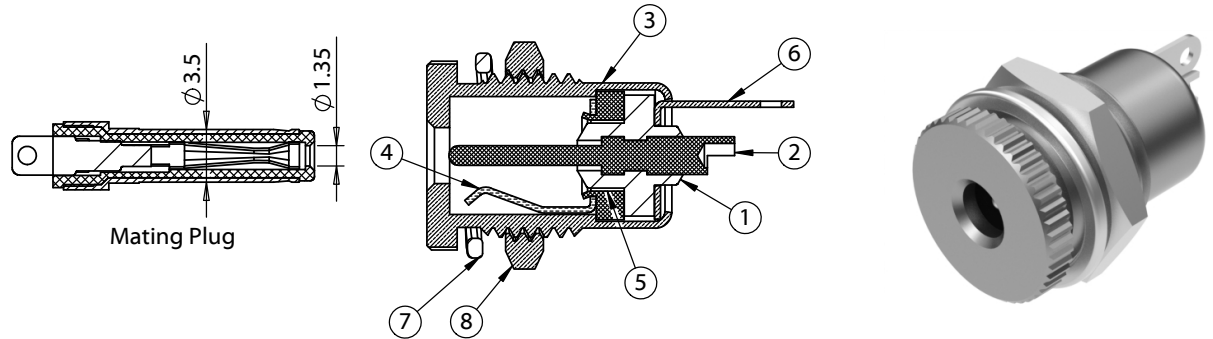
Insertion force: 0.3-3 kgf
 Withdrawal force: 0.2-3 kgf
 Terminal strength: a static load of 150 gf shall be applied to the terminal for 15 seconds in any direction.
 Life cycle: 5000 mating cycles while maintaining less than 100 mΩ contact resistance, 50MΩ insulation resistance minimum, and dielectric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

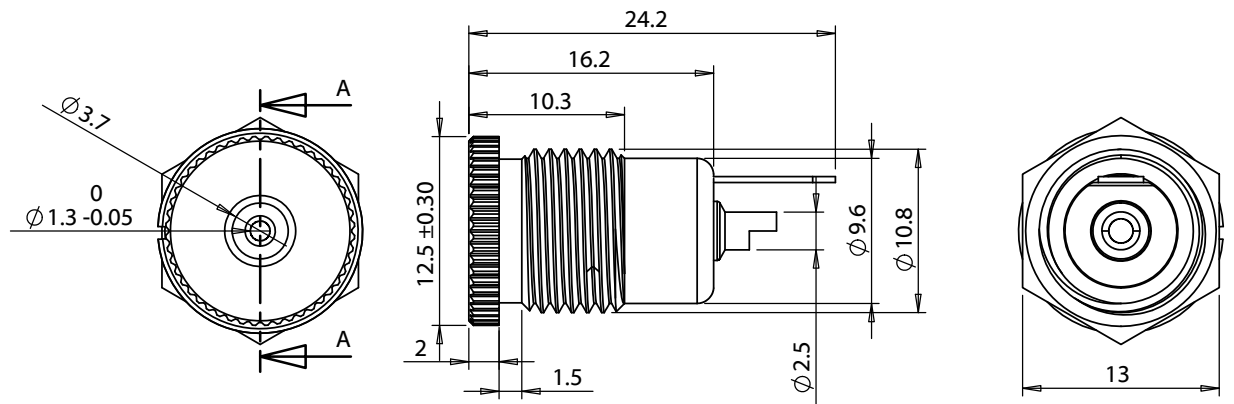
Environmental Requirements

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



Mating Plug

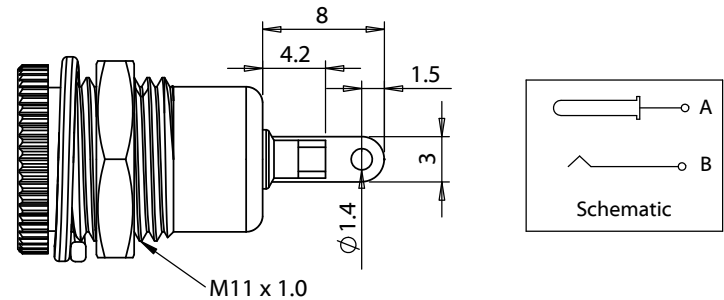
SECTION A-A



Installation Details

Panel thickness: 1.0 - 4.5 mm

Panel cutout Ø: 11.0 - 12.0 mm



Revision:	Date:	Description:
A	8/05/2016	Initial release
A1	1/03/2017	Updated materials list
A2	8/25/2017	Updated notes

Prepared:
Verified:
Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm

Notes: RoHS and REACH compliant
Function test: no open, no short circuit, no intermittent
Description: Connector, dc jack, 3.5x1.35xL24.2 mm, panel mount, threaded, nut and washer, brass, nickel

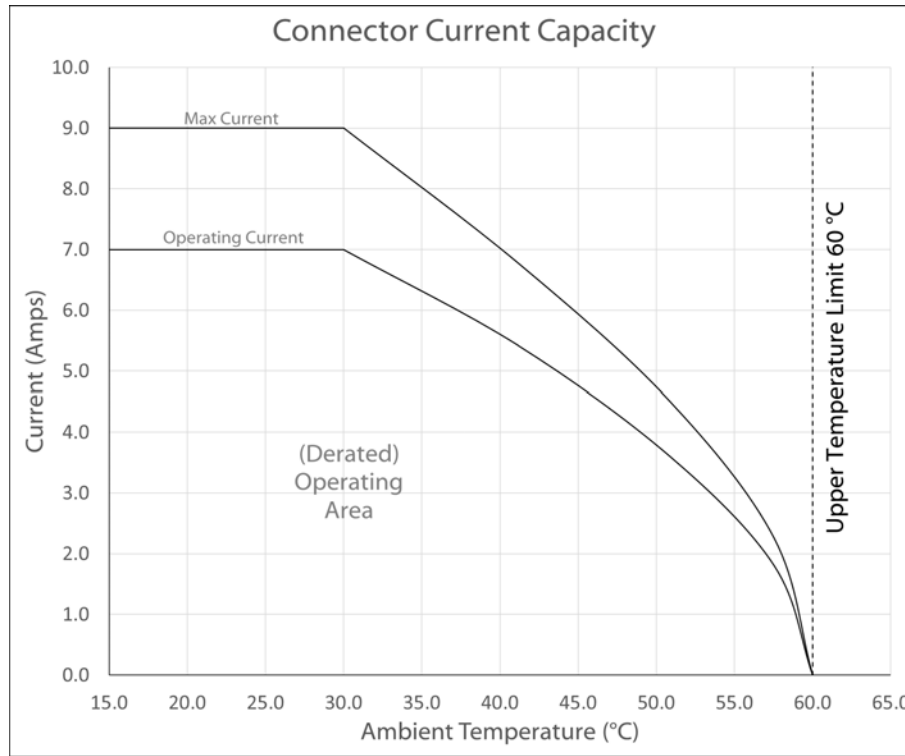
TENSILITY

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 fax 1.541.323.4202 web tensility.com

Size: A	Part number: 54-00061
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.

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