Materials

1. Brass, nickel plating, 1µm minimum 2. Nylon PA46, UL 94 V-0, black

Electrical requirements

Dielectric strength: 1 min @ 500 Vac Insulation resistance: 100 MΩ @ 500 Vdc Contact resistance: 50 m Ω or less

Mechanical requirements

Insertion force: 0.4 ~ 4 kgf Withdrawl force: 0.4 ~ 4 kgf Durability: 5000 mating cycles while maintaining insertion force of 0.3 ~ 4 kg; withdrawl force of 0.3 ~ 4 kgf; contact resistance of $60m\Omega$ or less.

Environmental tests

Damp test: 40 °C, RH 90-100% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain dielectric strength of 500 Vac for 1 min, insulation resistance of 50 MΩ @ 500 Vdc minimum.

Dry test: 70 °C, RH 70-85% for 96 hrs. Cool to ambient and recover for 2 hours. Maintain contact resistance of 100 $m\Omega$ or less with no looseness or deformation.

Salt spray test: 35 ±2 °C, RH 90-95%, 5% NaCl mist for 24 hrs. Wash parts after test. Maintain mechanical requirements and a contact resistance of less than 100 m Ω .

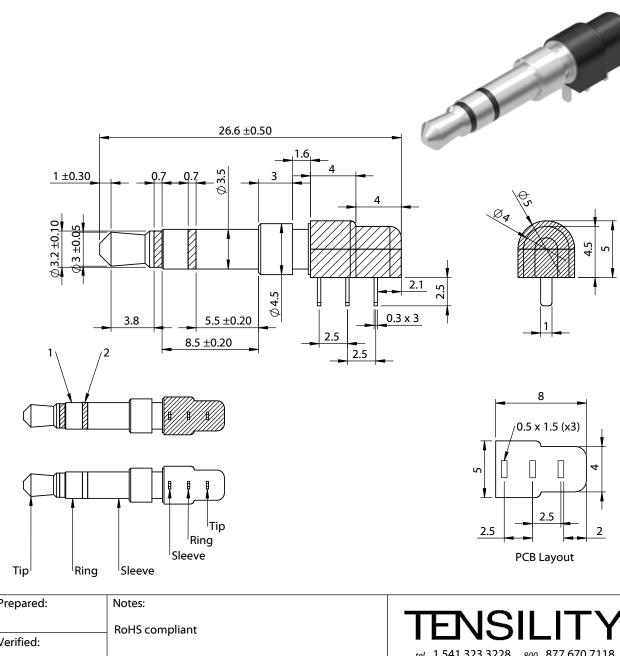
Soldering

Solderability: 90% minimum coverage when terminals dipped 2mm in 260 ± 5 °C solder bath for 3 ± 0.5 seconds

- Solder bath durability: no deformation when immersed in 255 \pm 5 °C up to surface of the board for 5 seconds or less
- Solder iron durability: no deformation when exposed to 350 ±10 °C for 5 seconds or less

Operating range

-25 to 70 °C, relative humidity of 85% or less



| Revision: | Date: | Description: | Prepared: | red: Notes: | | | | | |
|-----------|------------|---|-------------------------------------|--|---|--------|-------|---------------------|--------------|
| A | 7/9/2015 | Initial release | | RoHS compliant | | | E | NSIL | ITY |
| A1 | 10/27/2015 | Added PCB dimensioning and wiring information | Verified: | _ | tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com | | | | |
| | | | Dimensions are in — millimeters. | Description: | | | | | |
| | | | Tolerances: | | | Size: | | | |
| | | | X: ± 0.3 mm | Connector, audio plug, 3C, 3.5xL26.6 mm, thru hole 90°, nickel plated | A | 54-00 | 00036 | | |
| | | X.X: ± 0.1 mm X.XX: ± 0.05 mm | X.X: ± 0.1 mm X.XX: ± 0.05 mm | | | Scale: | 2:1 | $\bigcirc \bigcirc$ | Sheet 1 of 1 |
| | | 5 | 4 | 3 | 2 | | I | | 1 |

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