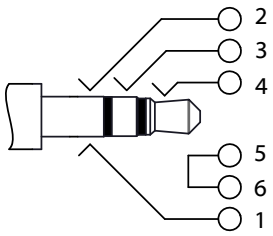
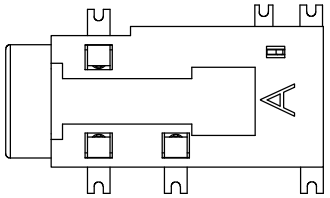


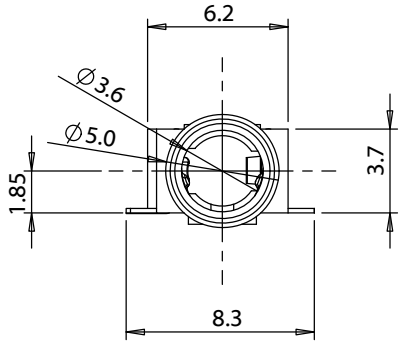
Unplugged Schematic

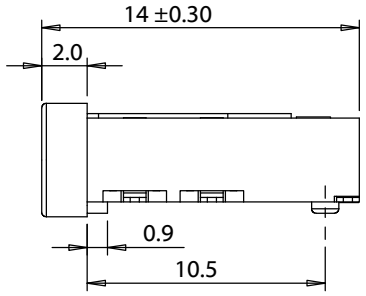


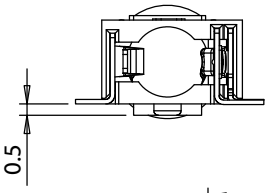
Plugged Schematic

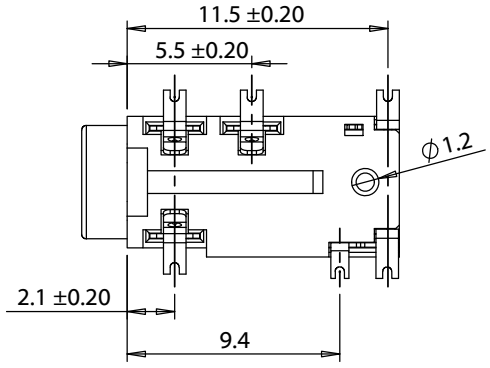


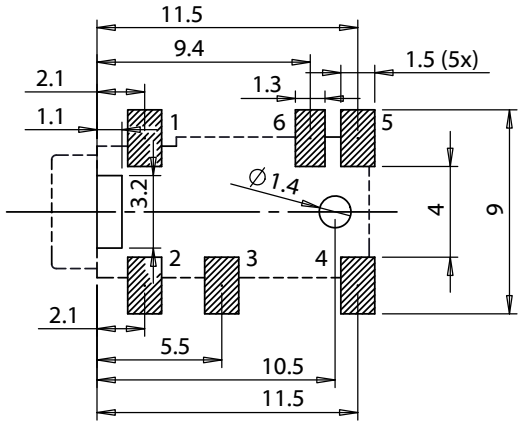












P.C.B Layout

Revision:	Date:	Description:
A	3/11/2020	Initial release

Prepared:
AG
Digitally signed by AG
Date: 2020.04.08 11:48:34 -07'00'

Verified:
AW
Digitally signed by AW
Date: 2020.04.08 12:15:46 -07'00'

Dimensions are in millimeters.
Tolerances:
X: ± 0.5 mm
X.X: ± 0.2 mm
X.XX: ± 0.2 mm

Notes:

RoHS compliant

Function test: no open, no short circuit, no intermittent

Description:

Connector, 3C audio jack, 3.5xL14 mm, SMT mount, silver plated

TENSILITY
tel 1.541.323.3228 *800* 877.670.7118
fax 1.541.323.4202 *web* tensility.com

Size: A

Part number: 54-00178

Scale: 3:1

Sheet 1 of 2

5 4 3 2 1

Ratings
Voltage: 48 V
Current: 0.5 A

Operating Temperature Range
-40 ~ 105°C, relative humidity of 85% or less

Materials
① #1 contact: phosphor bronze, silver plating
② #2 contact: phosphor bronze, silver plating
③ #3 contact: phosphor bronze, silver plating
④ #4 contact: phosphor bronze, silver plating
⑤ #5 contact: phosphor bronze, silver plating
⑥ #6 contact: phosphor bronze, silver plating
⑦ Housing: PA9T, black , UL 94 V-0

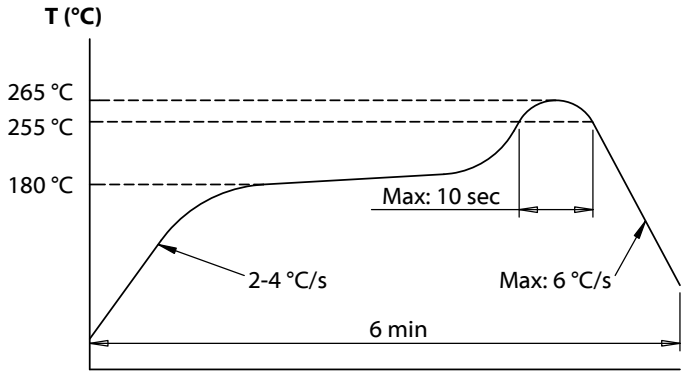
Electrical Requirements
Dielectric strength: 1 min @ 500 Vac
Insulation resistance: 100 MΩ @ 250 Vdc
Contact resistance: 30 mΩ or less at 1 KHz

Mechanical Requirements
Insertion force: 0.3-2 kgf
Withdrawal force: 0.3-2 kgf
Life cycle: 5000 mating cycles while maintaining 0.3 kgf min. insertion force, 0.2 kgf min. withdrawal force and less than 100 mΩ contact resistance
Terminal strength: 500 gf applied in one direction to the tip of the terminal for 1 second without mechanical or electrical damage

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 ±5 °C up to surface of the board 1.6 mm for 5 seconds or less
Solder iron durability: no deformation when exposed to 350 ±10 °C for 5 seconds or less

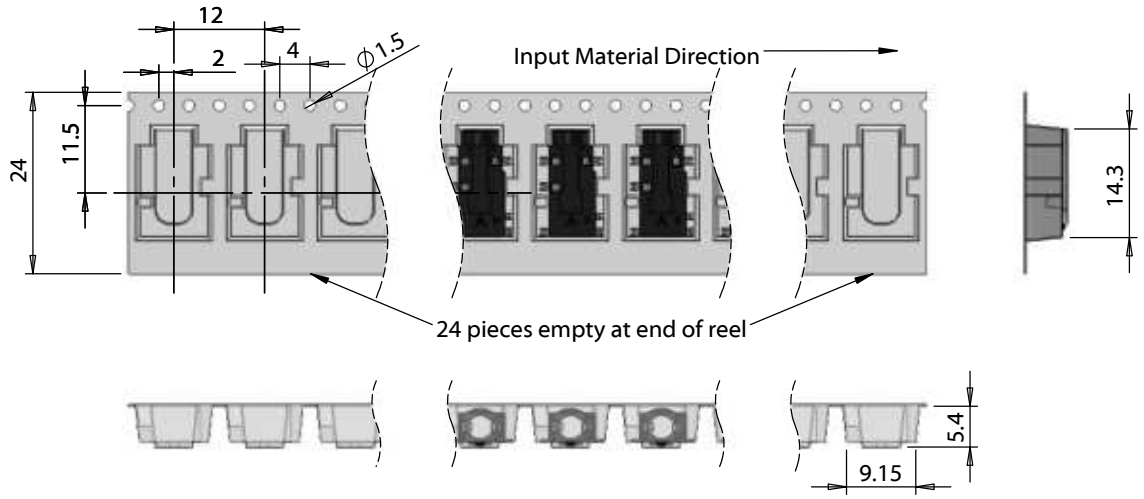
Environmental Requirements
Cold test: -40 ±2 °C for 48 hours without deformation
Heat test: 70 °C, relative humidity 70-85% for 96 hours without deformation
Humidity test: 40 ±2 °C, relative humidity 90-100% for 96 hours without deformation
Salt spray test: 35 ±2 °C, 5% NaCl mist for 24 hrs. Wash parts after test. No remarkable corrosion shall be present

Packaging Information
1000 connectors/reel
12 reels/box



Reflow soldering temperature profile

Packaging Detail



Revision:	Date:	Description:
A	3/11/2020	Initial release

Prepared: AG Digitally signed by AG Date: 2020.04.08 11:48:50 -07'00'

Verified: AW Digitally signed by AW Date: 2020.04.08 12:15:56 -07'00'

Dimensions are in millimeters.
Tolerances:
X: ± 0.5 mm
X.X: ± 0.3 mm
X.XX: ± 0.2 mm

Notes:

RoHS compliant

Function test: no open, no short circuit, no intermittent

Description:

Connector, 3C audio jack, 3.5xL14 mm, SMT mount, silver plated

TENSILITY
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Size: A

Part number: 54-00178

Scale: 1:1

5 4 3 2 1