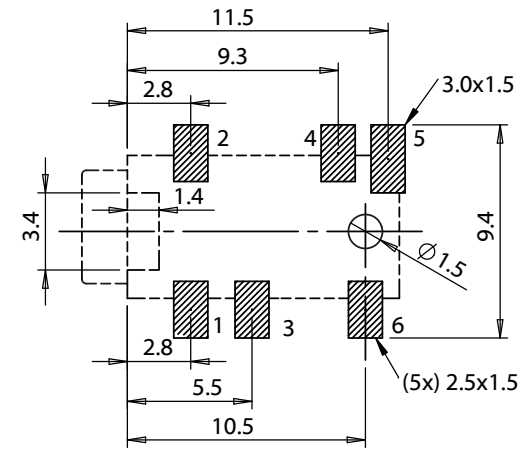
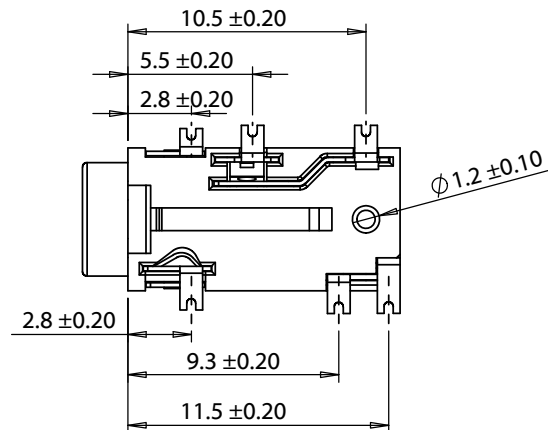
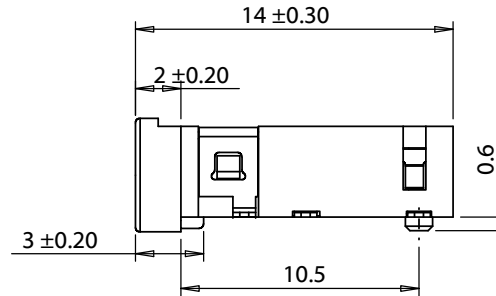
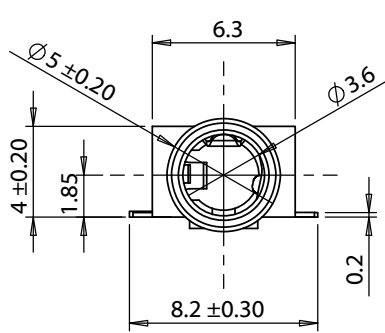
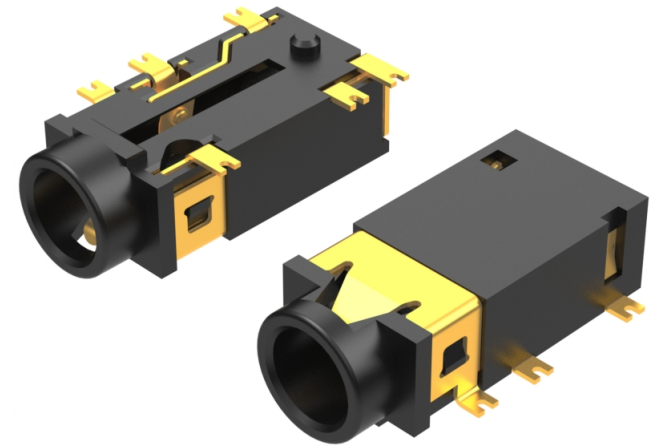


Unplugged Schematic

Plugged Schematic



P.C.B Layout

Revision:	Date:	Description:	Prepared:	Notes:	<b>TENSILITY</b>
A	3/11/2020	Initial release	Verified:	RoHS compliant	
			Dimensions are in millimeters. Tolerances: X: $\pm 0.5$ mm X.X: $\pm 0.2$ mm X.XX: $\pm 0.2$ mm	Function test: no open, no short circuit, no intermittent	tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
				Description: Connector, 4C audio jack, 3.5xL14 mm, SMT mount, gold plated	Size: A Part number: 54-00179
					Scale: 3:1  Sheet 1 of 2

**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, gold plating
- ② #2 contact: phosphor bronze, gold plating
- ③ #3 contact: phosphor bronze, gold plating
- ④ #4 contact: phosphor bronze, gold plating
- ⑤ #5 contact: phosphor bronze, gold plating
- ⑥ #6 contact: phosphor bronze, gold 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**

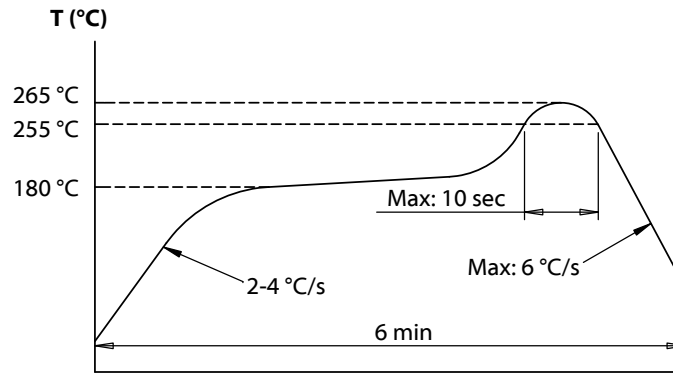
Solderability: 90% minimum coverage when terminals dipped 2mm in 260 ±5 °C solder bath for 3 ±0.5 seconds  
Solder bath durability: no deformation when immersed in 255 ±5 °C up to surface of the board 1.6 mm for 5 seconds or less  
Solder iron durability: no deformation when exposed to 350 ±10 °C for 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

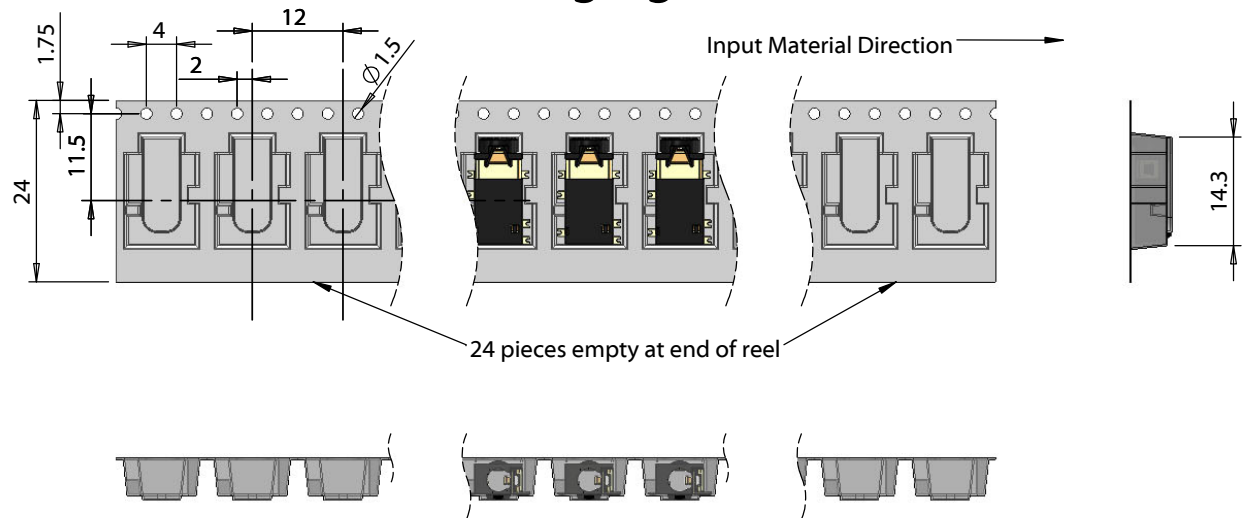
**Packaging Information**

1000 connectors/reel  
12 reels/box



**Reflow soldering temperature profile**

**Packaging Detail**



Revision:	Date:	Description:	Prepared:	Notes: RoHS compliant	<b>TENSILITY</b> tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A	3/11/2020	Initial release	Verified:		
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.2 mm	Description:	Size: Part number:
				Connector, 4C audio jack, 3.5xL14 mm, SMT mount, gold plated	A 54-00179
				Scale: 1:1	Sheet 2 of 2