

Revision:	Date:	Description:	Prepared:	Notes:	TENSILITY
A	5/7/2020	Initial release		RoHS compliant 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
			Verified:		
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.2 mm	Description: Connector, 4C audio jack, 3.5xL14 mm, thru hole, silver plated	Size: A Part number: 54-00174
					Scale: 3:1

**Ratings**

Voltage: 48 V  
Current: 0.5 A

**Operating Temperature Range**

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

**Materials**

- (1) #1 contact: bronze, silver plating
- (2) #2 contact: bronze, silver plating
- (3) #3 contact: brass, silver plating
- (4) #4 contact: bronze, silver plating
- (5) Housing: PA9T, black, UL 94 V-0
- (6) Tape: polyimide/silicone adhesive

**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**

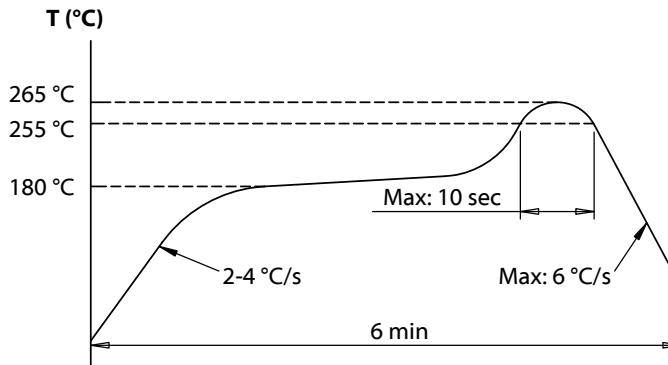
Solderability: 90% minimum coverage when terminals dipped 2mm  
in 260 ±5 °C solder bath for 3 ±0.5 seconds  
Solder bath durability: no deformation when immersed in 255 ±5 °C  
up to surface of the board 1.6 mm for 5 seconds or less  
Solder iron durability: no deformation when exposed to 350 ±10 °C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

**Environmental Requirements**

Cold test: -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  
Salt spray test: 35 ±2 °C, 5% NaCl mist for 24 hrs. Wash parts after  
test. No remarkable corrosion shall be present

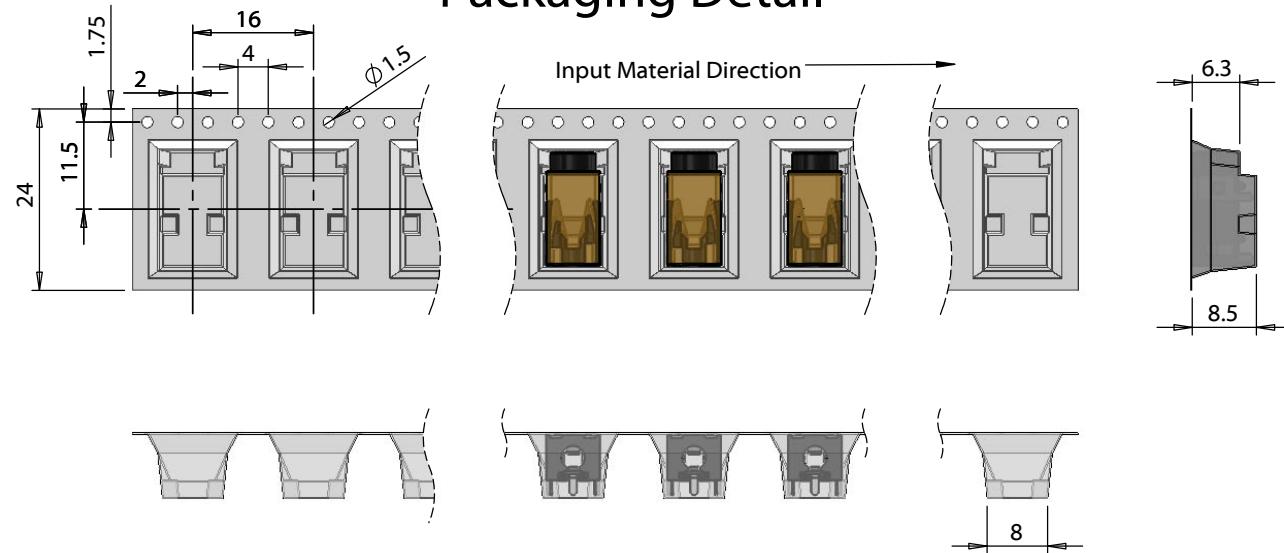
**Packaging**

500 pieces/ reel  
12 reels/ box



Reflow soldering temperature profile

## Packaging Detail



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**TENSILITY**

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Size: A Part number:  
54-00174

Scale: 1:1 Sheet 2 of 2