

Materials

1. Insulator, nylon, black
2. Front terminal, brass, gold plating
3. Spring plate, phosphor bronze, gold plating
4. Spring plate, copper beryllium, gold plating

Electrical

Dielectric strength: 1 min @ 250 Vac
 Insulation resistance: 100 M Ω @ 500 Vdc
 Contact resistance: 70 m Ω or less
 Rated voltage: 30 Vdc
 Rated current: 0.3 A

Mechanical

Insertion force: 1.0-2.0 kgf
 Withdrawal force: 0.8-1.4 kgf
 Durability: 5000 mating cycles at 15 to 18 cycles per minute without loading; less than 100 m Ω contact resistance; minimum 50 M Ω insulation resistance
 Terminal strength: 0.3 kgf for 15 seconds in any direction without damage or looseness

Soldering

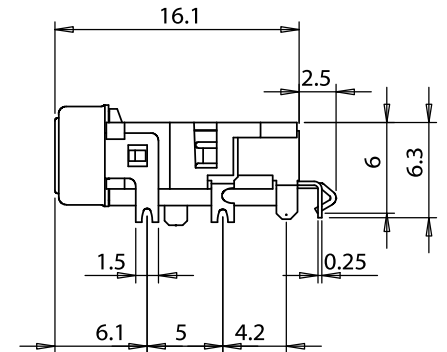
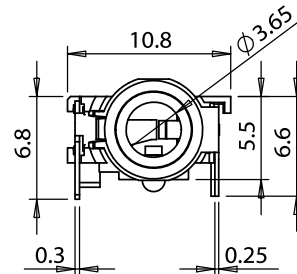
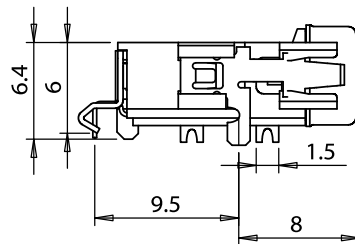
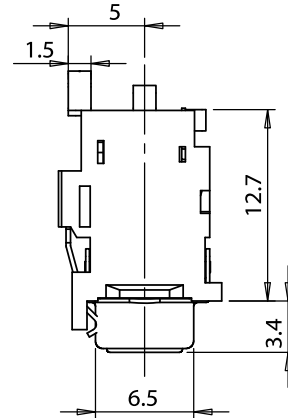
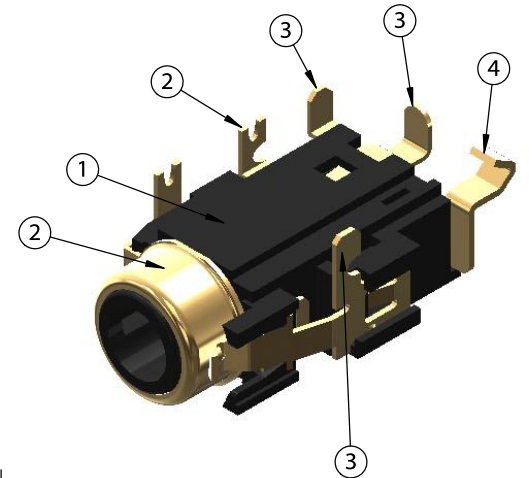
Solderability: 75% minimum when terminals dipped 2 mm in 245 \pm 5 $^{\circ}$ C solder bath for 3 \pm 0.5 seconds
 Solder bath durability: no deformation when immersed in 255 \pm 5 $^{\circ}$ C up to surface of the board 1.6 mm for 5 seconds or less
 Solder iron durability: no deformation when exposed to 350 \pm 10 $^{\circ}$ C for 3 \pm 0.5 seconds

Environmental

Cold test: -25 \pm 3 $^{\circ}$ C for 48 hours without deformation
 Heat test: 70 \pm 2 $^{\circ}$ C for 48 hours without deformation
 Humidity test: 40 \pm 2 $^{\circ}$ C and humidity between 90 and 98 % for 48 hours without deformation

Operating range

-10 ~ 60 $^{\circ}$ C



REVISION	DATE	DESCRIPTION
A	2/11/15	Initial release
A1	11/5/2015	added wiring schematic, updated description
A2	7/12/2016	corrected PCB Layout
A3	4/25/2017	Modified PCB dimensioning

PREPARED:
 Digitally signed by GL
 Date: 2017.04.25 10:30:21 -0700

VERIFIED:
 Digitally signed by PS
 Date: 2017.04.25 12:16:45 -0700

DIMENSIONS ARE IN MILLIMETERS

TOLERANCES:
 X: \pm 0.5 mm
 X.X: \pm 0.3 mm
 X.XX: \pm 0.05 mm

NOTES
 RoHS compliant

Function test: no open, no reversed polarity, no short circuit, no INT

Drawing in third angle projected

DESCRIPTION:
 Connector, 6C audio jack, 3.5xL18.6 mm, PCB mount, 90 $^{\circ}$, AU plated

TENSILITY

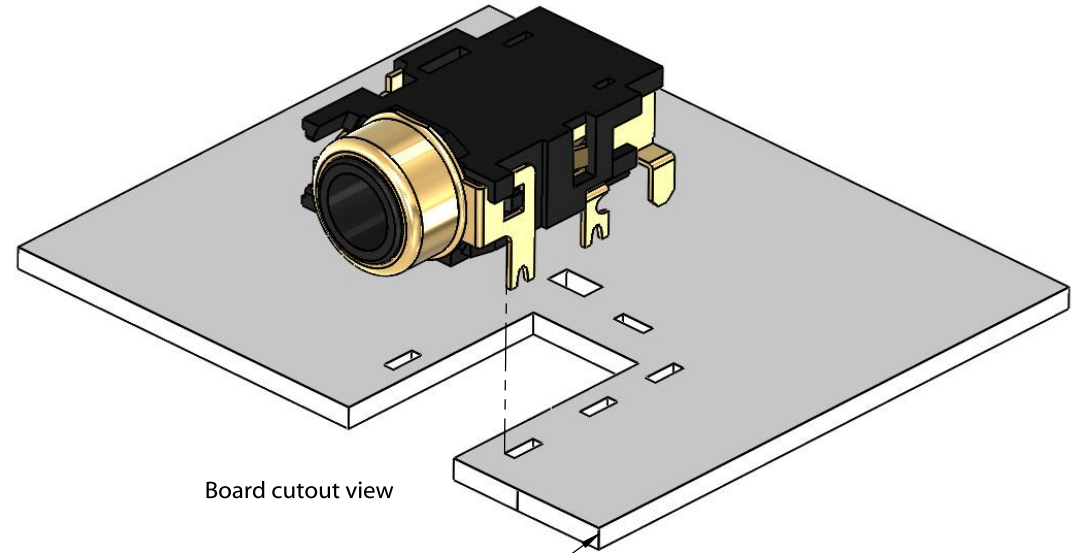
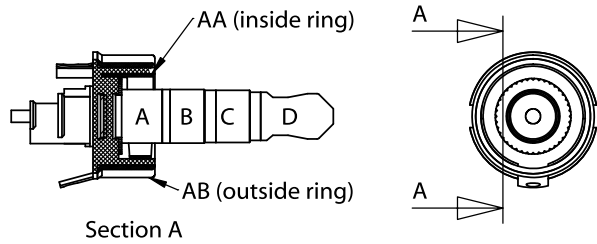
20802 Sockeye Place #130
 Bend, OR 97701 USA
 tel 541.323.3228 fax 541.323.4202
 800 877.670.7118 www.tensility.com

SIZE	PART NUMBER
A	54-00032

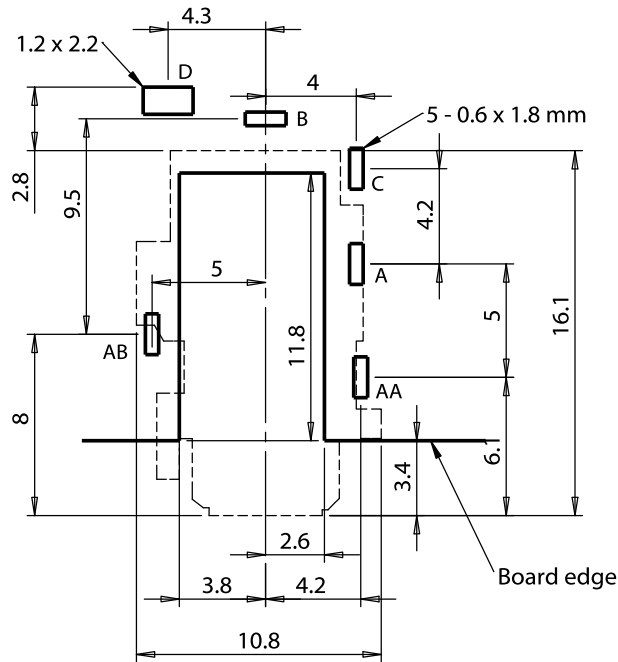
SCALE: 1:1

SHEET 1 OF 2

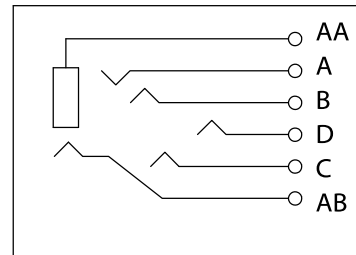
Mating connector: 50-00009



Recommended board thickness: 1.1-1.6 mm



PCB Layout



Schematic

Revision:	Date:	Description:	Prepared:	Notes:	<h1>TENSILITY</h1> tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A	2/11/2015	Initial release	GL <small>Digitally signed by GL Date: 2017.04.25 12:16:32 +0700</small>	RoHS compliant	
A1	11/5/2015	added wiring schematic, updated description	Verified: PS <small>Digitally signed by PS Date: 2017.04.25 12:16:32 +0700</small>	Function test: no open, no short circuit, no intermittent	Size: Part number: A 54-00032
A2	7/12/2016	Corrected PCB Layout	Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Connector, 3.5xL21.3 mm, 6C audio plug with double metal rings, brass gold plated	Scale: 3:1
A3	4/25/2017	Modified PCB dimensioning			Scale: