



# PUIaudio



Data Sheet

AI-1027-TWT-3V-R

## Features:

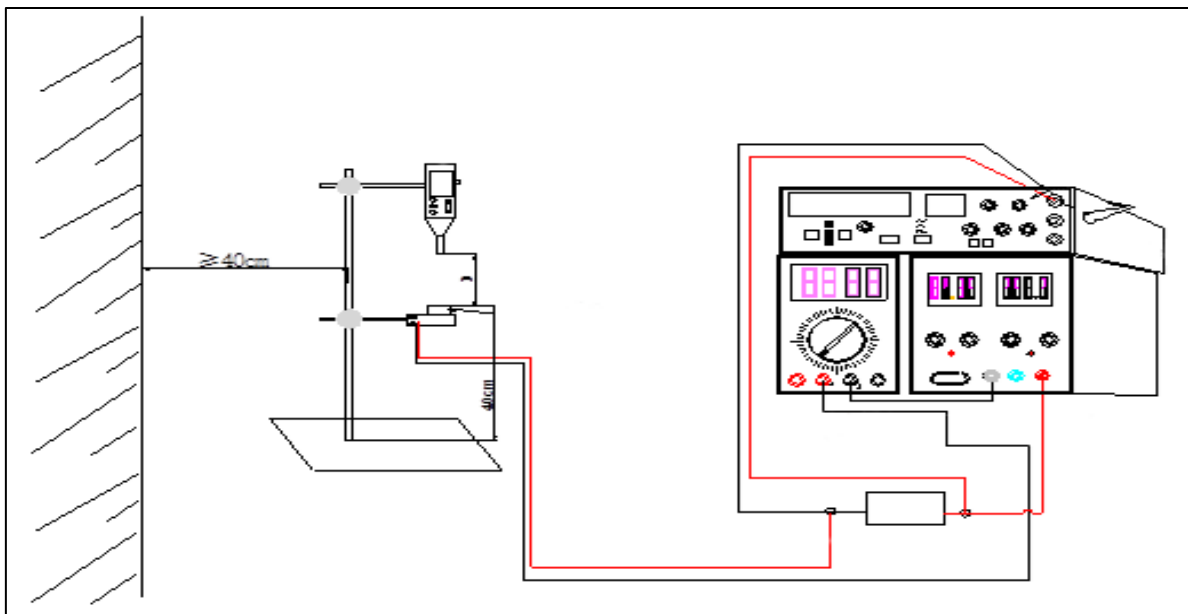
- Top-firing, thru-hole magnetic indicator
- 3 V<sub>DC</sub>, 2700 Hz resonant frequency
- Wave solder and Wash allowed

## Specifications

Parameters	Values	Units
Rated Voltage	3	V <sub>DC</sub>
Operating Voltage Range	2 ~ 5	V <sub>DC</sub>
Current Draw at Rated Voltage	30	mA
Minimum SPL @ 10cm	80	dBA
Resonant Frequency	2,700 ± 300	Hz
Tone or Pulse Rate	Continuous	-
Housing Material	PBT	-
Terminal Material	SN Plated Red Copper	-
Weight	1.0	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	-
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-30 ~ +70	°C

## Measurement Method (Temperature: 25±3°C; Relative Humidity: 60% ~ 70%)

Standard test fixture (Voltage: 3 V<sub>DC</sub>; Resonant Frequency: 2,700Hz)

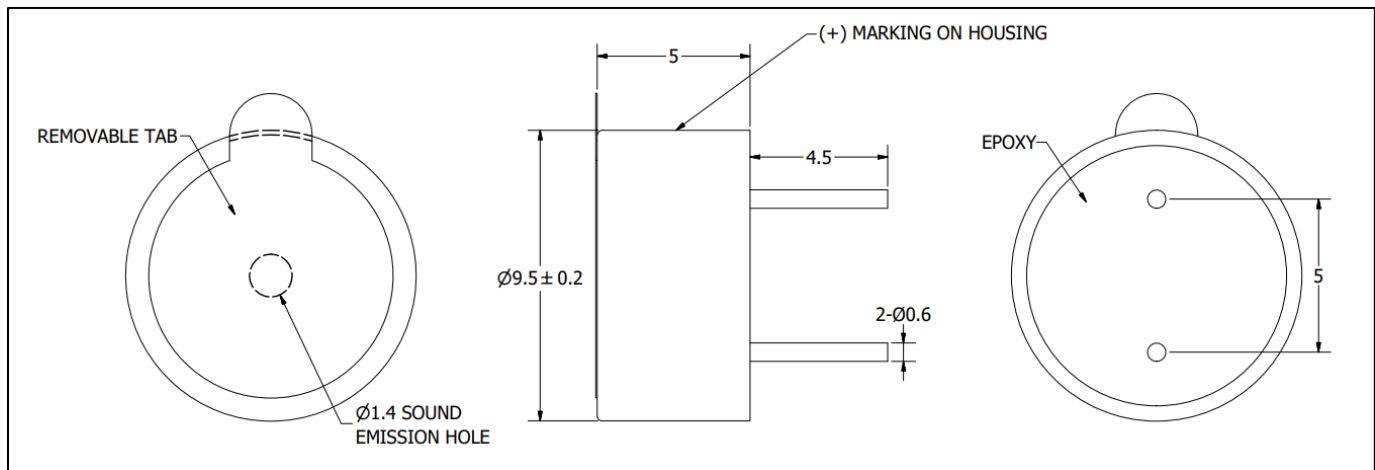


## Reliability Testing

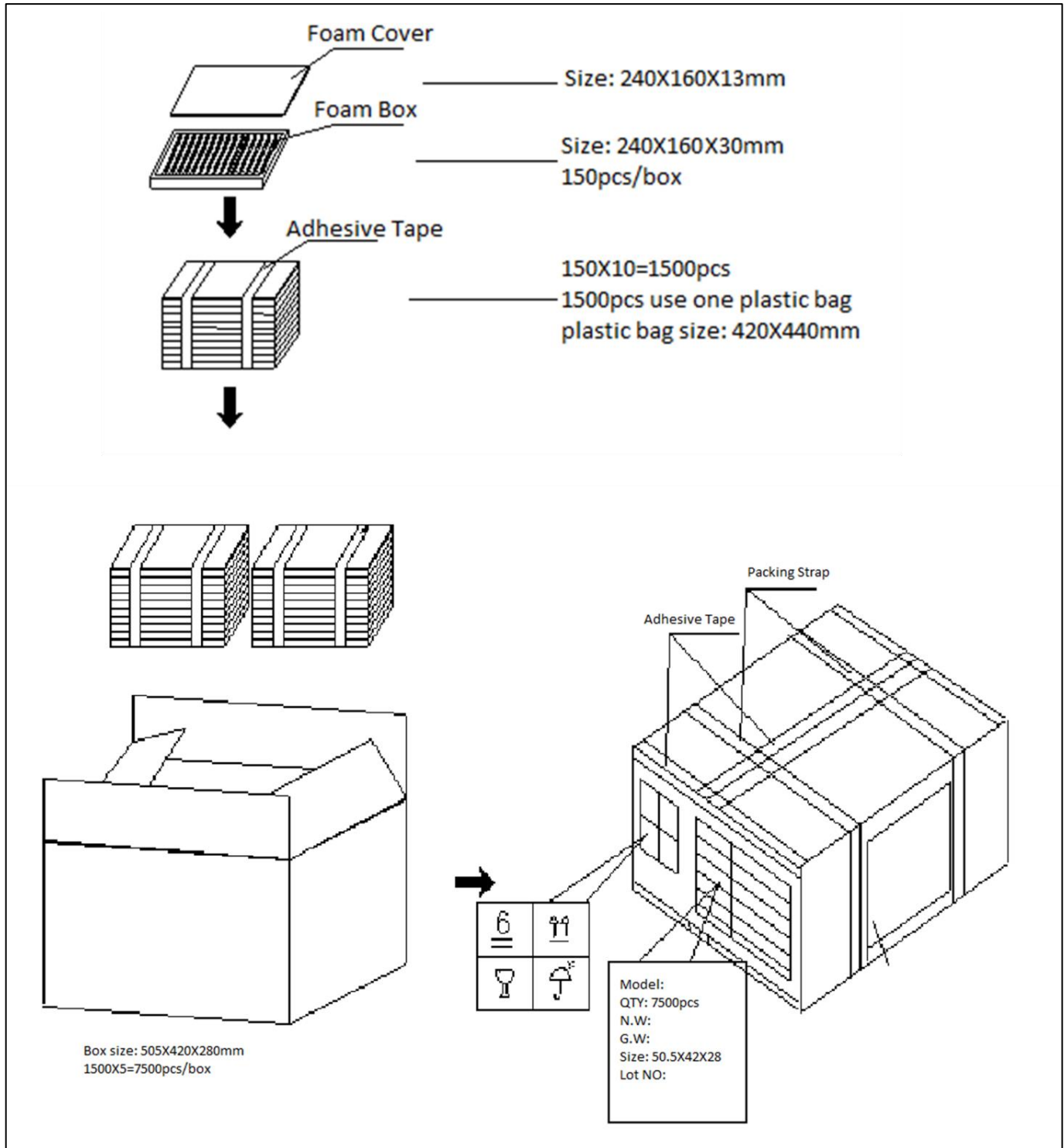
Type of Test	Test Specifications
High Temperature Test	96 hours at $+85\pm 2^{\circ}\text{C}$ , then rest at room temperature for 2 hours without applying power
Low Temperature Test	96 hours at $-40\pm 2^{\circ}\text{C}$ , then rest at room temperature for 2 hours without applying power
Humidity Test	24 hours at $+80\pm 2^{\circ}\text{C}$ with relative humidity at 95% then rest at room temperature for 2 hours without applying power
Temperature Cycle Testing	<p>Test for 5 cycles without applying power then rest at room temperature for 2 hours</p>
Vibration Test	<p>Amplitude: 1.5mm Time : 1min/axis</p> <p>Test each direction for 2 hours (6 hours total)</p>
Drop Test	Drop from 100cm onto the surface of a 1cm thick board

**After these tests, the change in SPL should be within  $\pm 5\text{dB}$**

## Dimensions



## Packaging



### Specifications Revisions

Revision	Description	Date	Approved
-	RELEASED FROM ENGINEERING	04/29/2005	-
A	ADDED POSITIVE TERMINAL LOCATION	11/03/2006	BR
B	REMOVE PRODUCT LABELING	08/07/2008	BR
C	REVISED TO 3D DRAWING TEMPLATE	11/09/2008	BR
D	REMOVED POLARITY INDICATION FROM WASH TAB AND UPDATED HOUSING MATERIAL TO PBT	10/21/2015	BR
E	ADJUST RESONANT FREQUENCY TOLERANCE TO 300HZ	09/13/2017	ML
F	REVISED OPERATING TEMPERATURE	02/14/2020	ML
G	Update Spec Format, Add Details for Packaging, Reliability, etc.	06/18/2024	ML

Note:

- Unless otherwise specified:
  - All dimensions are in millimeters.
  - Default tolerances are  $\pm 0.5\text{mm}$  and angles are  $\pm 3^\circ$ .
- Specifications subject to change or withdrawal without notice.