



PUIaudio



Data Sheet

AI-1027-TWT-5V-HT-R

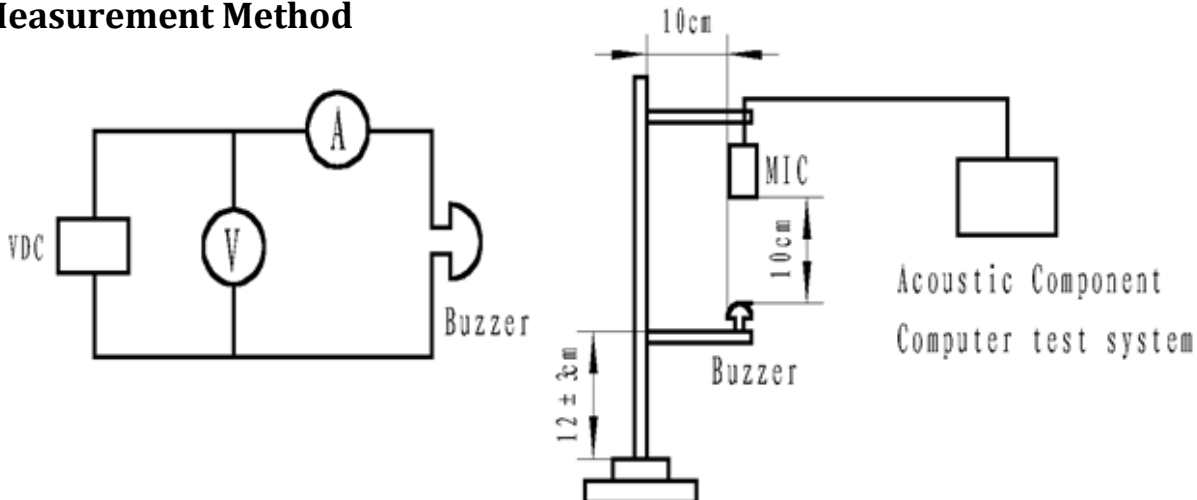
PUI Audio's **High-Temp** line of products is designed with ultra-wide operating temperatures. The **AI-1027-TWT-5V-HT-R** is built for high output at 2700 Hz in a small package.

- Light weight of only 1 gram
- Low current draw of less than 30mA with 5 VDC input
- 85 dB, 2700 Hz output at 10cm

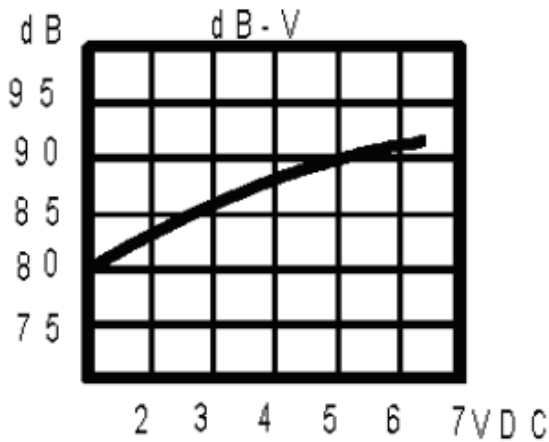
Specifications

Parameters	Values	Units
Rated Voltage	5	VDC
Operating Voltage Range	3 ~ 6.5	VDC
Current Draw at Rated Voltage	≤30	mA
Minimum SPL @ 10cm	≥85	dBA
Resonant Frequency	2700±300	Hz
Housing Material	PBT	-
Weight	1	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	See page 3 for wave solder information
Environmental Compliances	RoHS	-
Storage Temperature	-40 ~ +90	°C
Operating Temperature	-40 ~ +85	°C

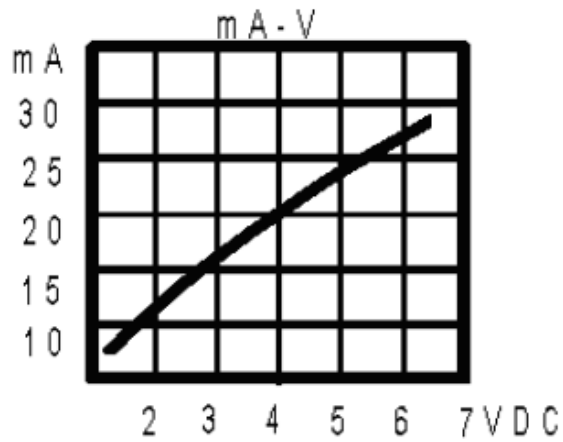
Measurement Method



Typical SPL vs Input Voltage



Typical Current Draw vs Voltage

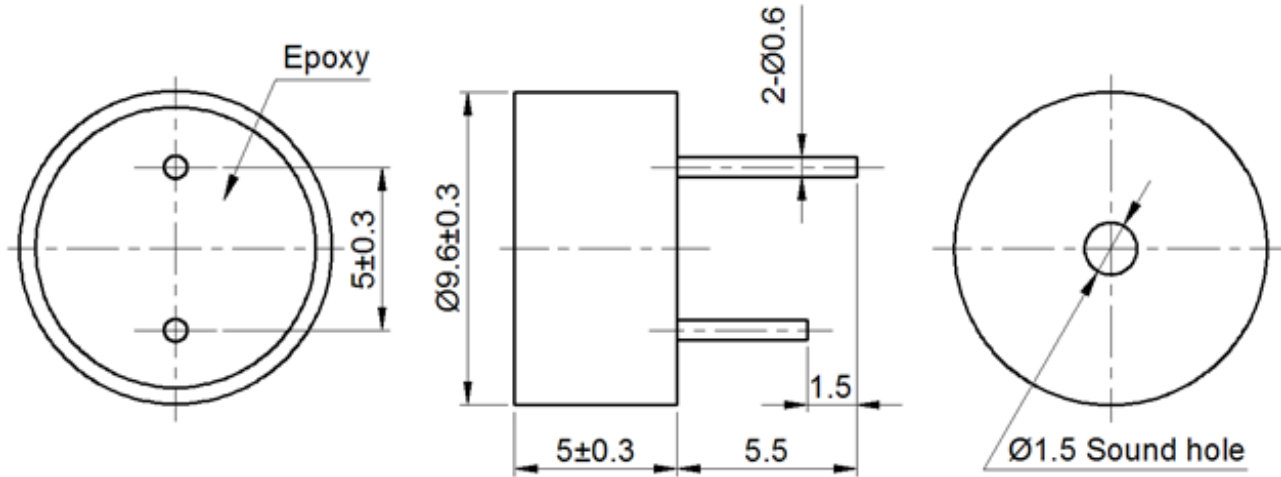


Reliability Testing

Type of Test	Test Specifications
High Temperature Test	+90±2°C, 96HRS
Low Temperature Test	-40±2°C, 96HRS
Humidity Test	40±2°C, 90~95% RH, 96HRS
Temperature Cycle Testing	5 cycles with 1 cycle consisting of: -40±2°C, 30minutes Room temp., 15 minutes +90±2°C, 30 minutes Room temp., 15 minutes
Vibration Test	Test part in the directions of X, Y, and Z (total 0.5 hours). To-and-fro sweep time (from 10 to 55 Hz and then from 55 to 10 Hz) under single amplitude of 1.0mm is 1 minute.
Drop Test	Drop 3 times from a height of 70cm onto the surface of a 10mm thick wooden board

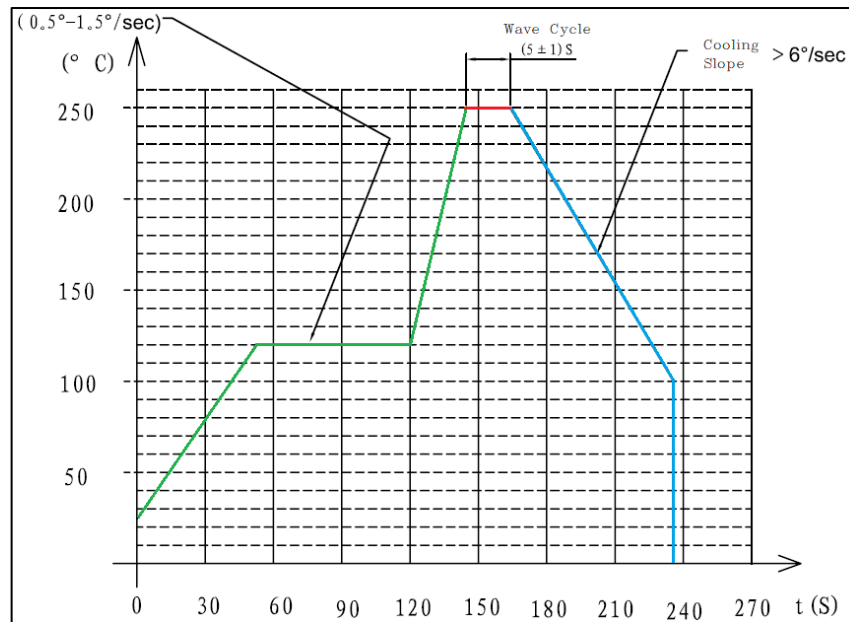
All specifications must be satisfied after testing.

Dimensions (Tolerance: $\pm 0.5\text{mm}$ unless specified otherwise. Positive pin is 5.5mm in length)

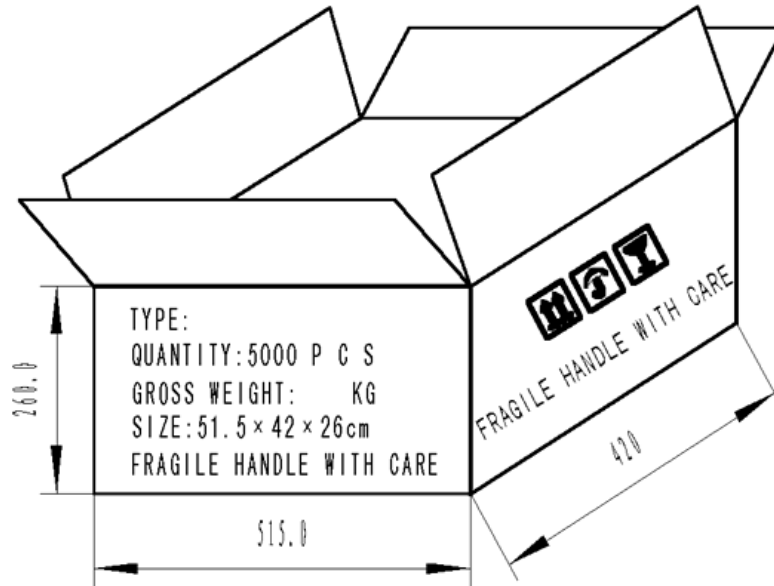


***Wave Solder Allowed, Washing Not Allowed**

Recommended Wave Solder Profile



Packaging



NOTES:

1. 100 PCS per box
2. Total 50 boxes per carton
3. Total 5000 PCS carton

Specifications Revisions

Revision	Description	Date	Approved
A	RELEASED FROM ENGINEERING	03/23/2020	MV
B	Update Logo and Company Footer, Add Washing Not Allowed Statement	06/18/2024	ML

Note:

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