



PUI audio



Data Sheet	AI-1027-TWT-5V-R
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Features:

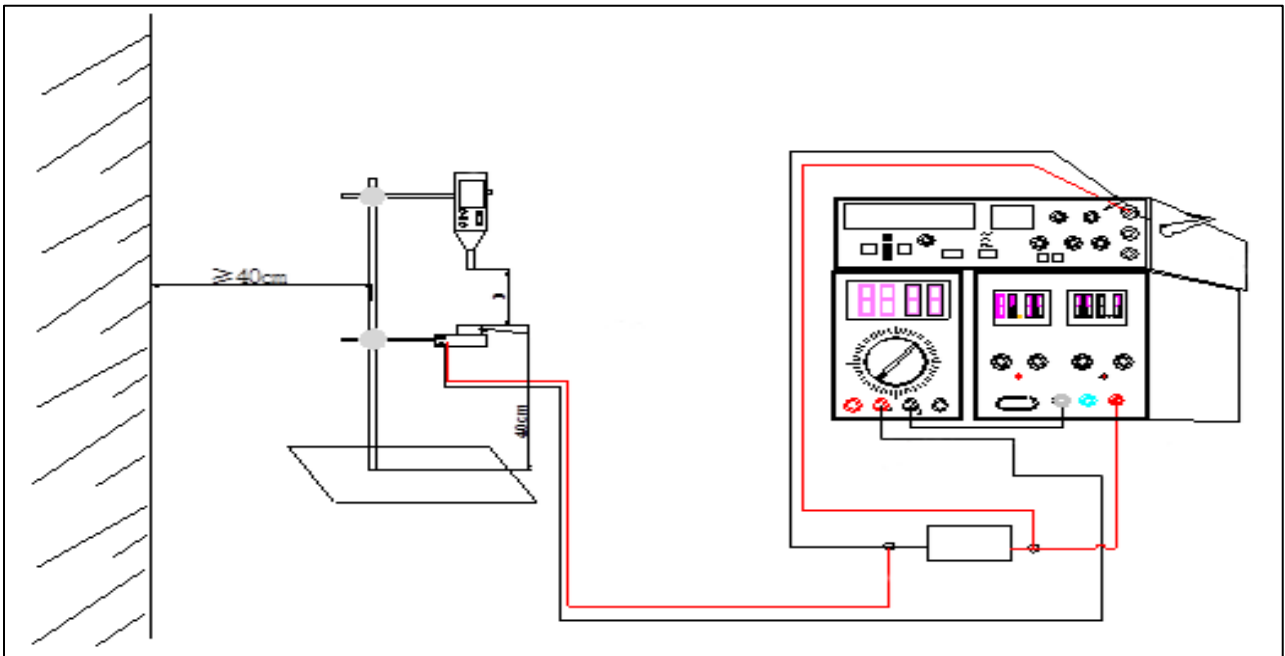
- Top-firing, thru-hole magnetic indicator
- 5 V_{DC}, 2700 Hz resonant frequency
- Wave solder and wash allowed

Specifications

Parameters	Values	Units
Rated Voltage	5	V _{DC}
Operating Voltage Range	3 ~ 7	V _{DC}
Current Draw at Rated Voltage	30	mA
Minimum SPL @ 10cm	80	dBA
Resonant Frequency	2,700±200	Hz
Tone or Pulse Rate	Continuous	-
Housing Material	PBT	-
Terminal Material	Sn Plated Brass (DSn)	-
Weight	1	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	-
Environmental Compliances	RoHS	-
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-30 ~ +70	°C

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

Standard test fixture (Distance: 10cm; Voltage: 5V_{DC}; Resonant Frequency: 2,700Hz)

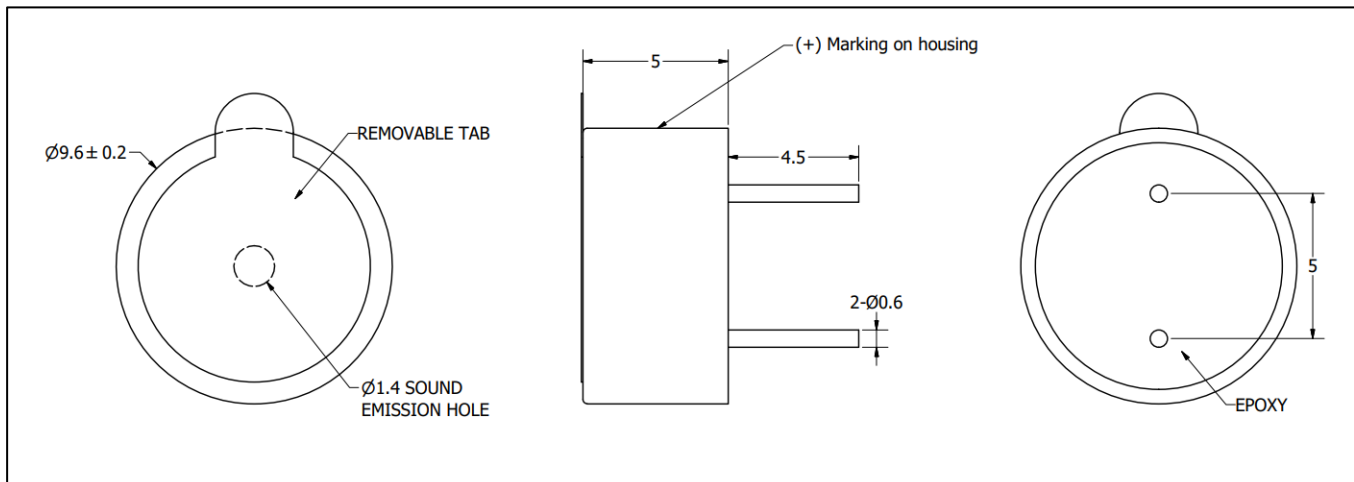


Reliability Testing

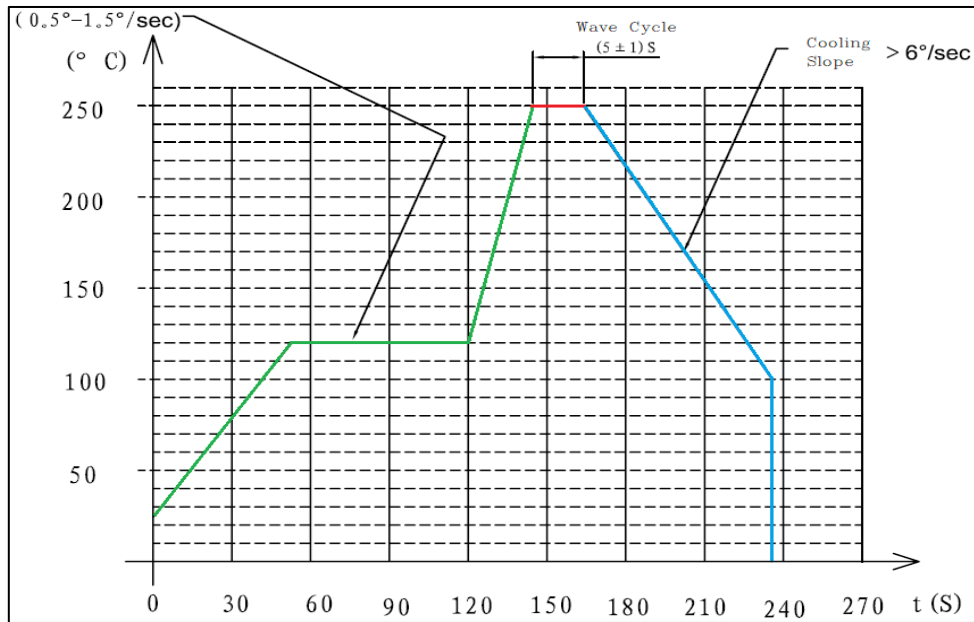
Type of Test	Test Specifications
High Temperature Test	96 hours at +85±2°C, then rest at room temperature for 2 hours without applying power
Low Temperature Test	96 hours at -40±2°C, then rest at room temperature for 2 hours without applying power
Humidity Test	96 hours at +80±2°C with relative humidity 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 in each direction (X, Y, Z)

All parts shall meet specifications after testing. SPL shall be within ± 5dB.

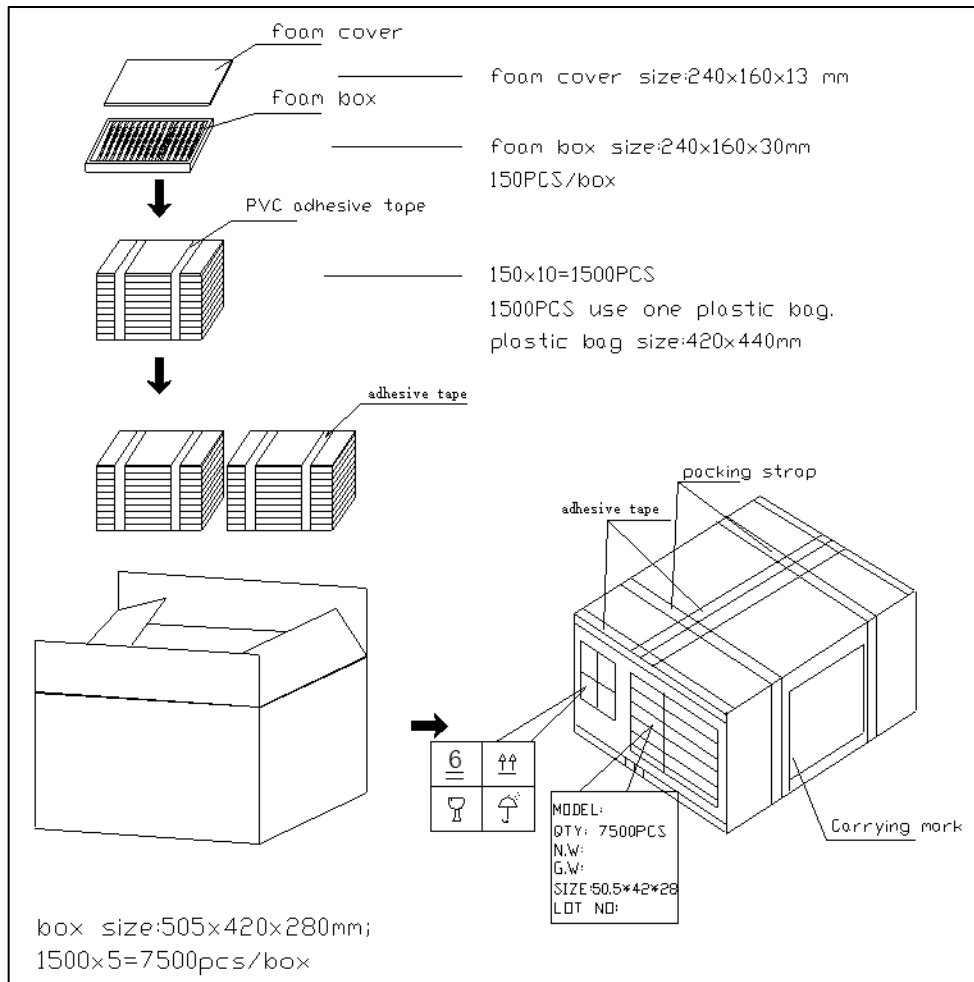
Dimensions



Recommended Wave Solder Profile



Packaging



Specifications Revisions

Revision	Description	Date	Approved
-	RELEASED FROM ENGINEERING	04/29/2005	-
A	REVISED DIMENSION SIZE AND STYLE	11/28/2005	BR
B	ADDED POSITIVE TERMINAL LOCATION	11/03/2006	BR
C	REVISED PART NUMBER ON LABEL	01/23/2007	DF
D	REMOVED PRODUCT LABELING	08/07/2008	BR
E	REVISED TO INVENTOR 3D DRAWING TEMPLATE	10/11/2008	BR
F	REMOVED POLARITY MARKING FROM WASH TAB, UPDATED HOUSING MATERIAL TO PBT	10/21/2015	BR
G	REVISED OPERATING TEMPERATURE	02/14/2020	ML
H	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.