



# PUI audio



Data Sheet

AI-2429-TWT-R

## Features:

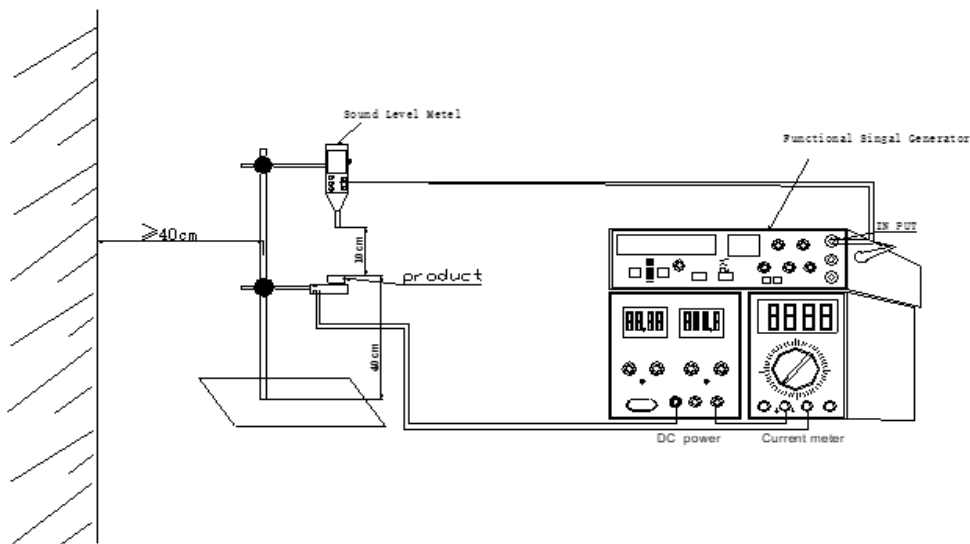
- Piezo Indicator
- 12VDC rated, 2900Hz
- Thru-Hole Top-Firing Type
- Wave Solder Allowed, Washing NOT allowed

## Specifications

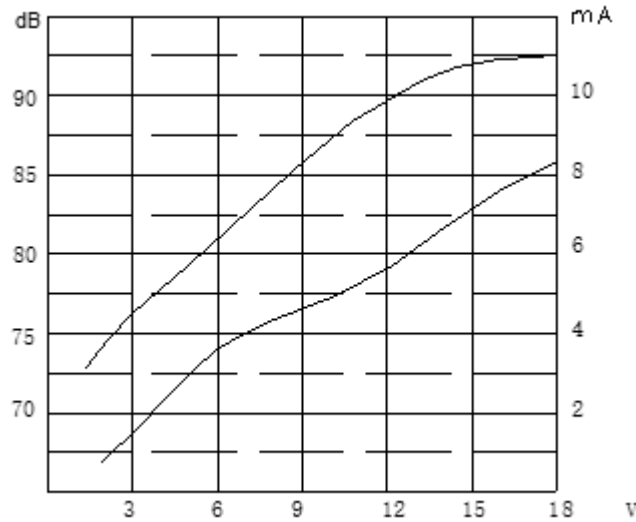
Parameters	Values	Units
Rated Voltage	12	VDC
Operating Voltage Range	3 ~ 20	VDC
Current Draw at Rated Voltage	10(Max.)	mA
Minimum SPL @ 10cm	100	dBa
Resonant Frequency	2,900 ± 500	Hz
Tone or Pulse Rate	Continuous	-
Housing Material	ABS777	-
Terminal Material	Sn Plated Red Copper(DSn)	-
Weight	6	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	-
Environmental Compliances	RoHS/REACH	Ex. 7c-1
Storage Temperature	-30 ~ +70	°C
Operating Temperature	-20 ~ +60	°C

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

Standard Test Fixture (Distance: 10cm, 12VDC)



## Typical SPL vs Input Voltage

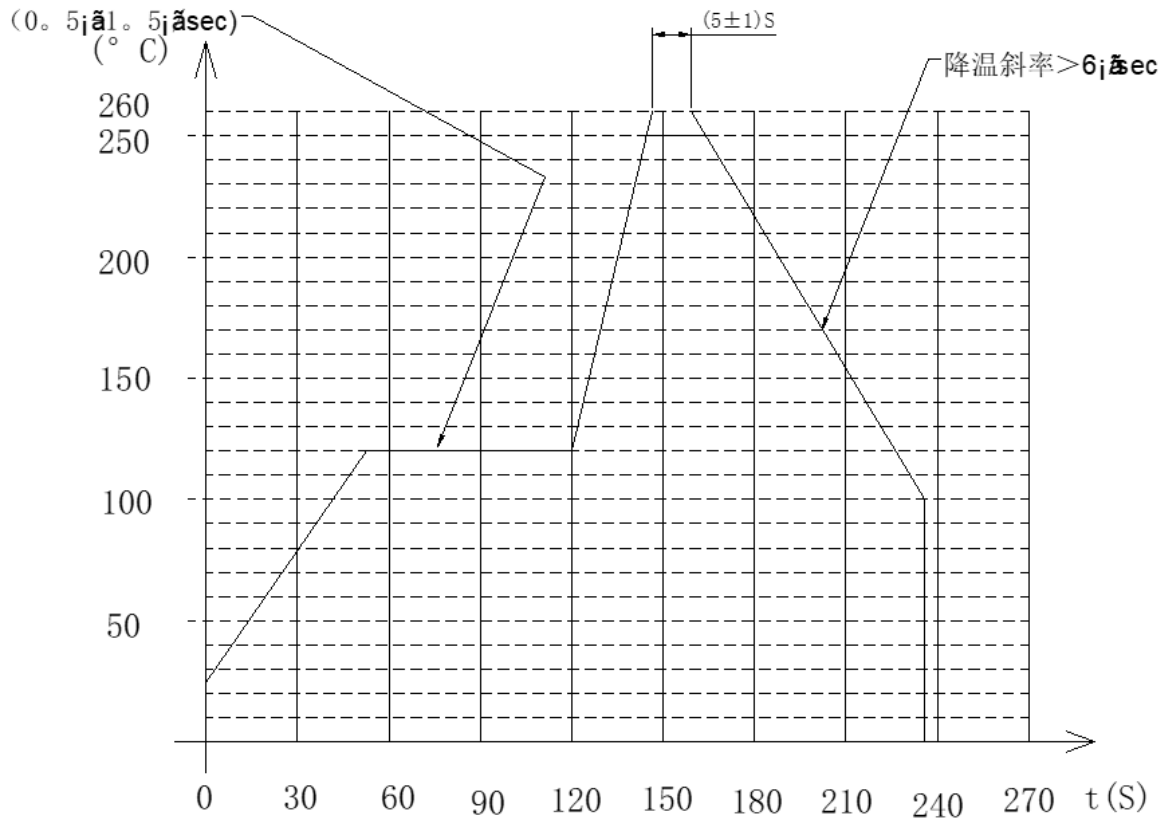


## Reliability Testing

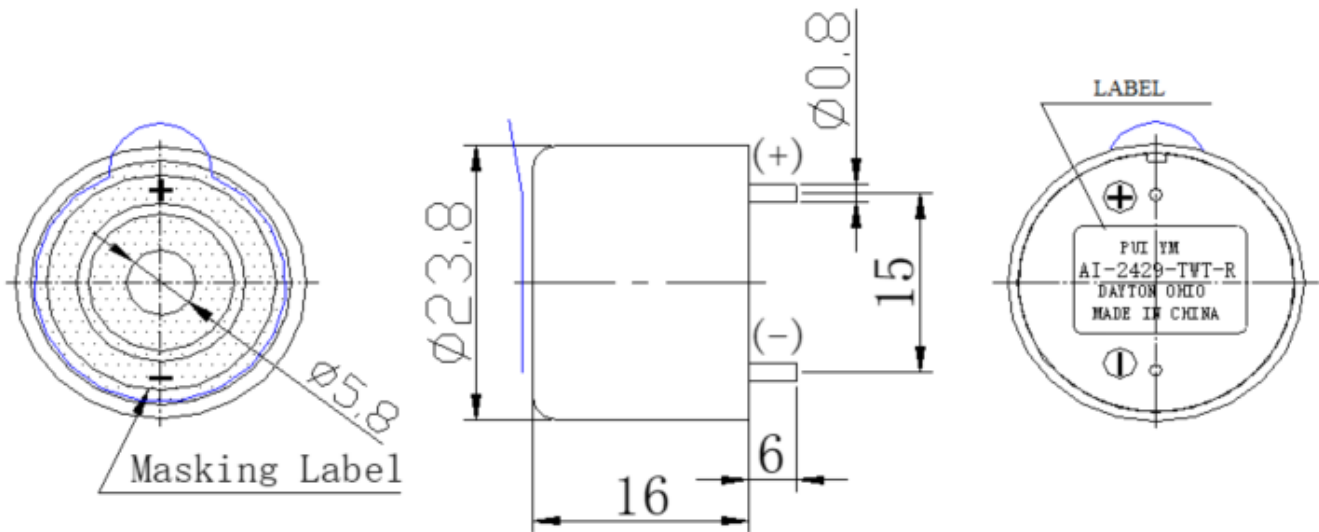
Type of Test	Test Specifications
High Temperature Test	Storage in $+70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
Low Temperature Test	Storage in $-30^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
Humidity Test	Storage in $+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 90-95%RH test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
Temperature Cycle Testing	<p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>
Vibration Test	<p>Make this test for the directions of X, Y, Z for 2 hours each (total 6 hours)</p>
Drop Test	Free drop a unit from the height 70cm to the surface of 10mm thick board, three directions(X,Y,Z).
Load Test	If applicable, state the conditions of the load test

Part shall pass tests within SPL of  $\pm 5\text{dB}$ .

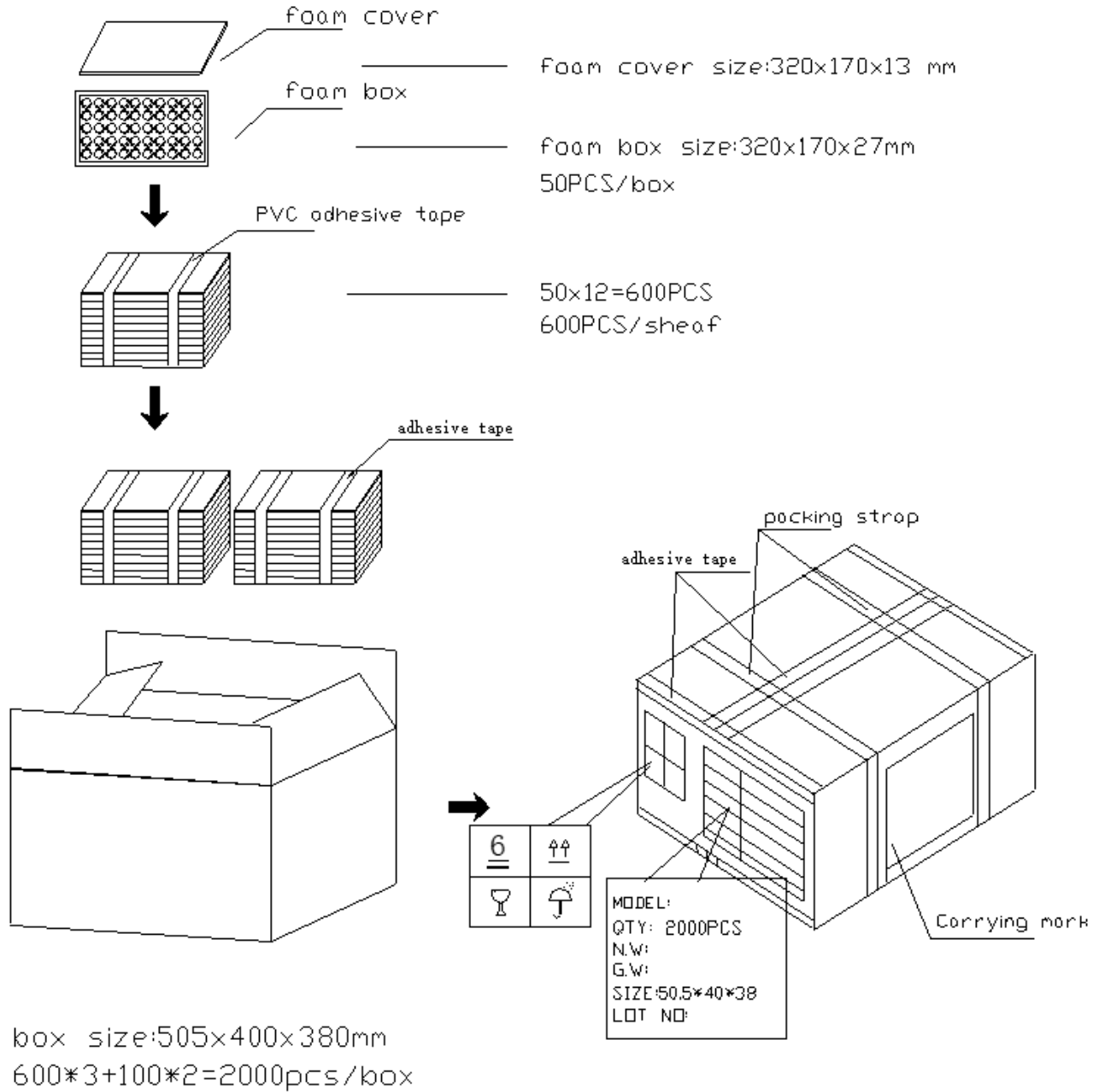
## Recommended Wave Solder Process



## Dimensions



## Packaging



**Specifications Revisions**

<b>Revision</b>	<b>Description</b>	<b>Date</b>	<b>Approved</b>
-	RELEASED FROM ENGINEERING	8/19/2004	-
A	REMOVED LEAD FREE ADDED RoHS	8/10/2005	-
B	REVISED TO INVENTOR 3D DRAWING TEMPLATE	01/28/2008	BR
C	REVISED TERMINAL MATERIAL	02/07/2011	ML
D	Update Spec Format, Add details for Reliability, Packaging, etc., Revised Temperature Ranges, Revised Rated Current	07/08/2024	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.