



PUI audio



Data Sheet AI-2429-TWT-12V-2-R

Features:

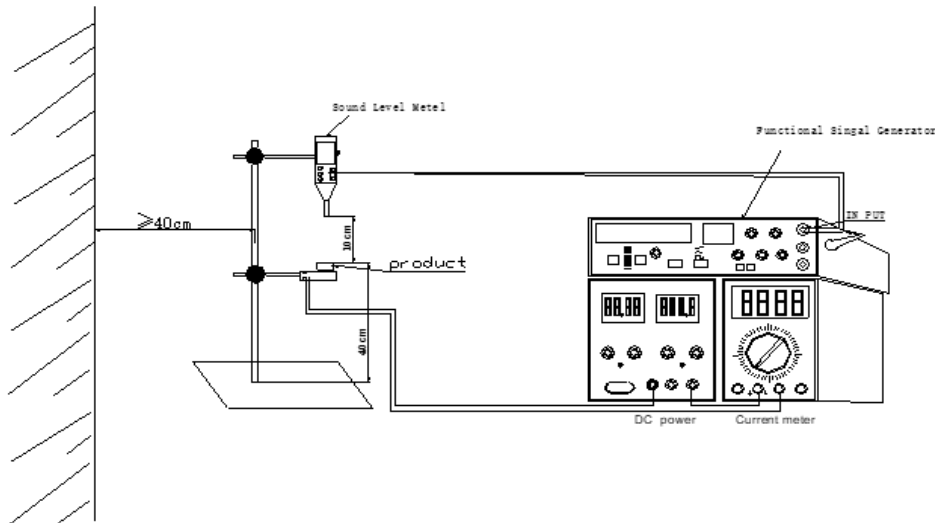
- Piezo Indicator
- 12VDC rated, 2900Hz
- Top-Firing Thru-Hole Type
- Wave Solder and Wash Allowed

Specifications

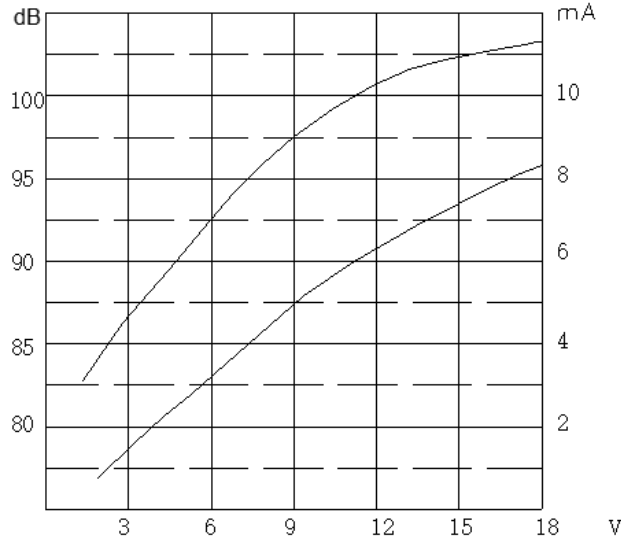
Parameters	Values	Units
Rated Voltage	12	VDC
Operating Voltage Range	3 ~ 20	VDC
Current Draw at Rated Voltage	8(Max.)	mA
Minimum SPL @ 10cm	100	dBA
Resonant Frequency	2,900 ± 500	Hz
Tone or Pulse Rate	Single	-
Housing Material	ABS777	-
Terminal Material	Sn Plated Red Copper(DSn)	-
Weight	6	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	See Following Details
Environmental Compliances	RoHS/REACH	7c-1
Storage Temperature	-40 ~ +80	°C
Operating Temperature	-20 ~ +70	°C

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

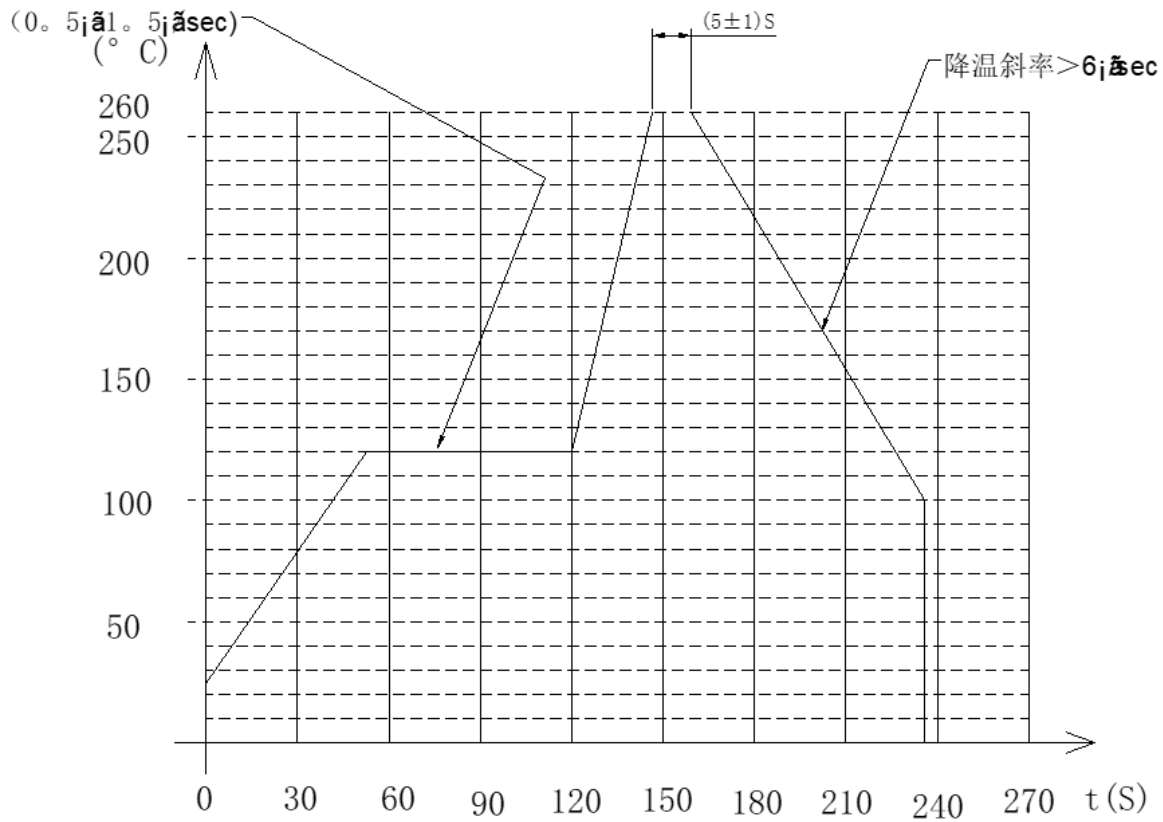
Standard Test Fixture (Distance=10cm, Power=12VDC)



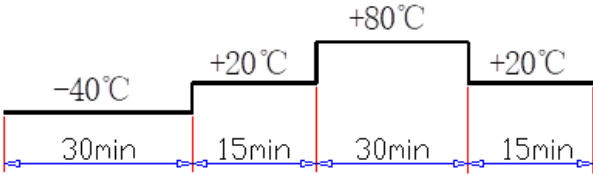
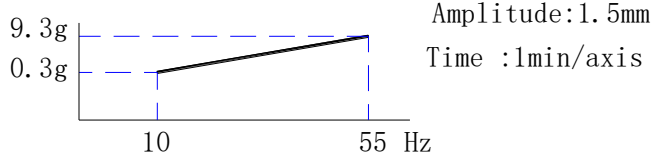
Typical SPL vs Input Voltage



Recommended Wave Solder Process

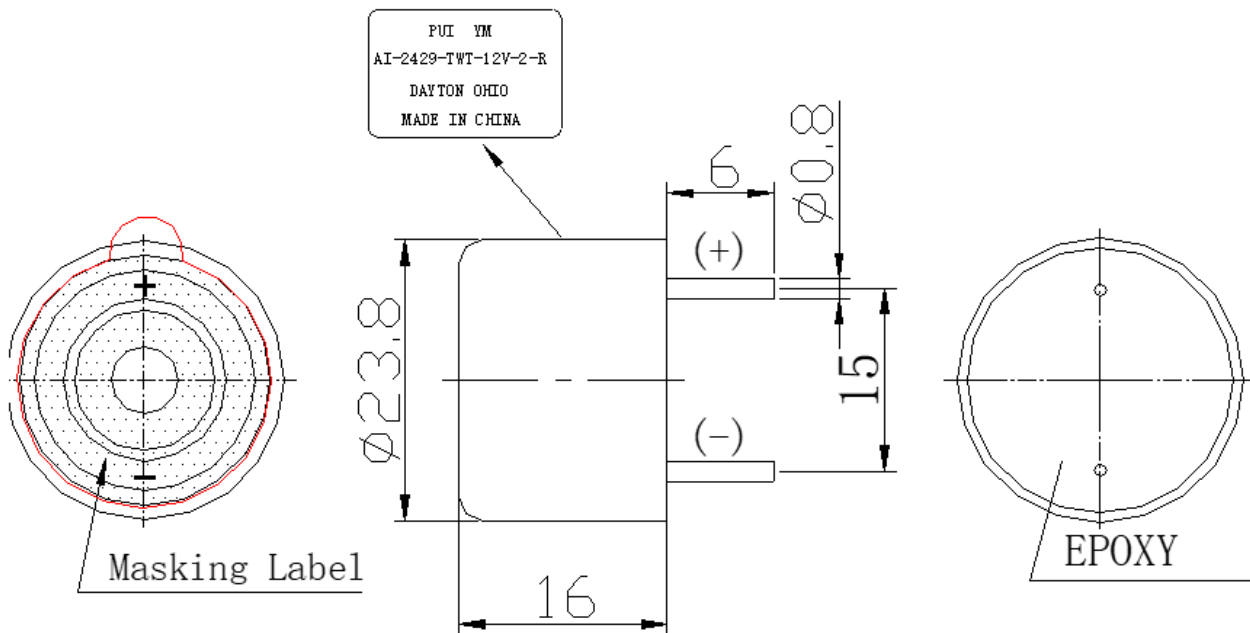


Reliability Testing

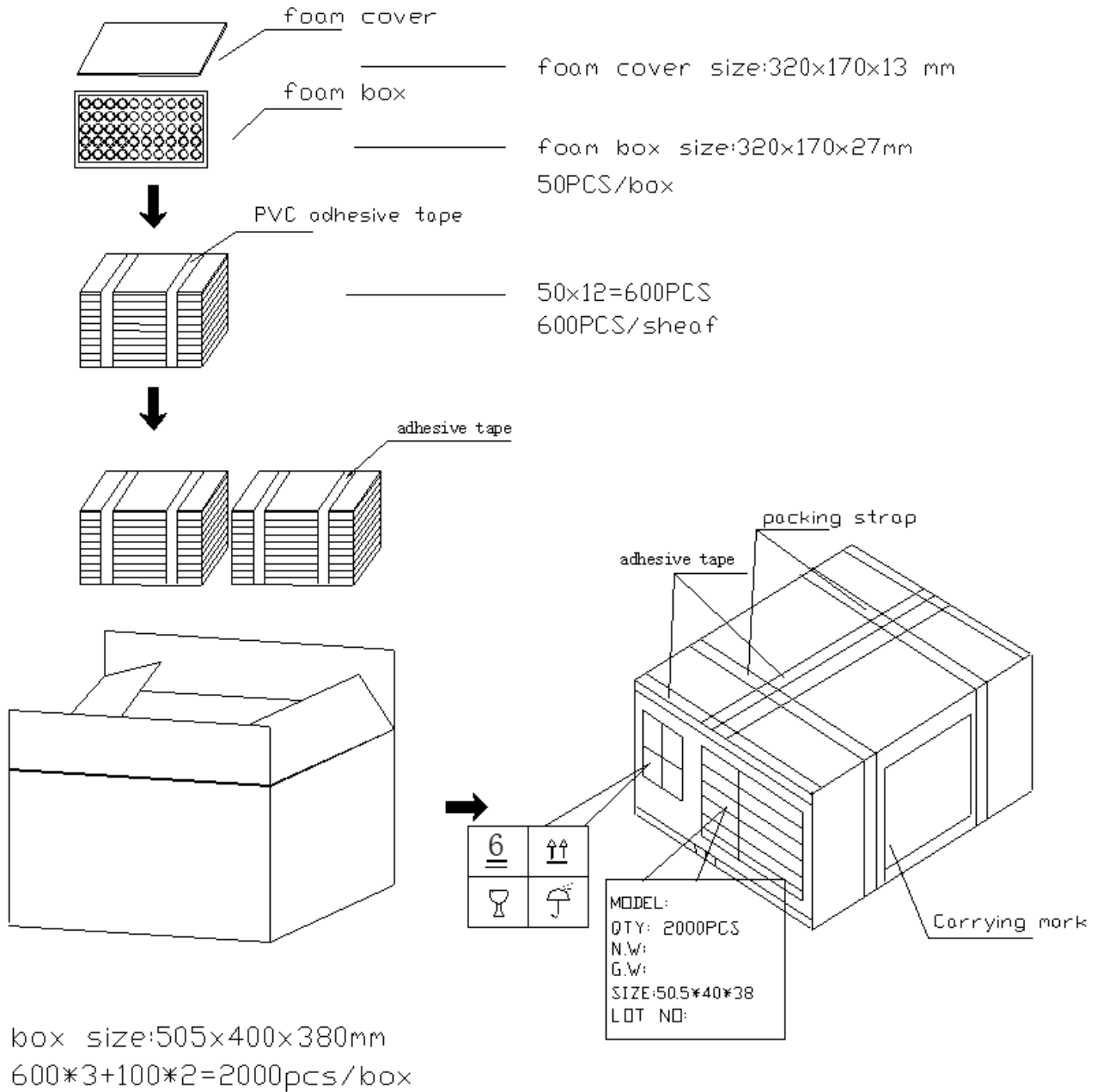
Type of Test	Test Specifications
High Temperature Test	Storage in $+80^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
Low Temperature Test	Storage in $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, 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).

***After tests, part SPL shall pass within $\pm 5\text{dB}$.**

Dimensions



Packaging



Specifications Revisions

Revision	Description	Date	Approved
-	RELEASED FROM ENGINEERING	03/21/2006	-
A	REVISED TONE/PULSE RATE	01/29/2007	RW
B	REVISED TO 3D DRAWING TEMPLATE	01/18/2008	BR
C	Update Spec Format, Add details for Reliability, Packaging, etc.	06/28/2024	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.