



PUI audio



Data Sheet	AI-5025-TWT-R
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Features:

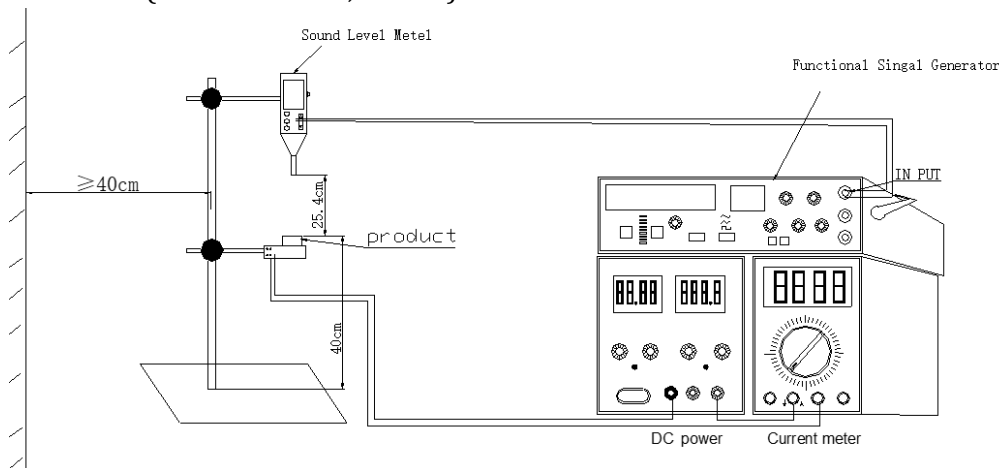
- Piezo Indicator
- 12VDC rated, 2500Hz
- Top-Firing Thru-Hole Type
- Trigger Pin
- Wave Solder and Washing NOT Allowed

Specifications

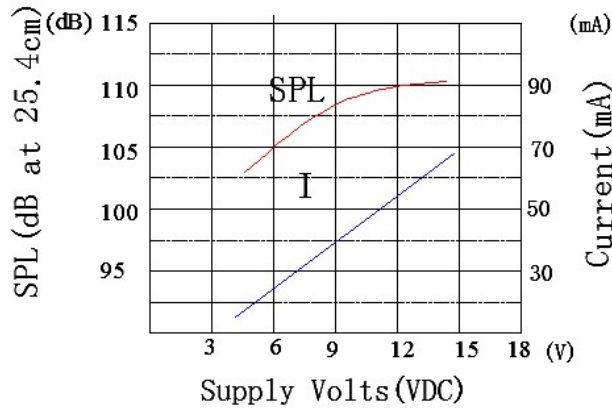
Parameters	Values	Units
Rated Voltage	12	VDC
Operating Voltage Range	5 ~ 13	VDC
Current Draw at Rated Voltage	75	mA
Minimum SPL @ 10cm	115	dBA
Minimum SPL @ 25.4cm	108	
Resonant Frequency	2,500 ± 500	Hz
Tone or Pulse Rate	Continuous	-
Housing Material	ABS	-
Terminal Material	Phosphor Bronze	-
Weight	28	Grams
Acceptable Soldering Methods	Hand Solder	-
Environmental Compliances	RoHS/REACH	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

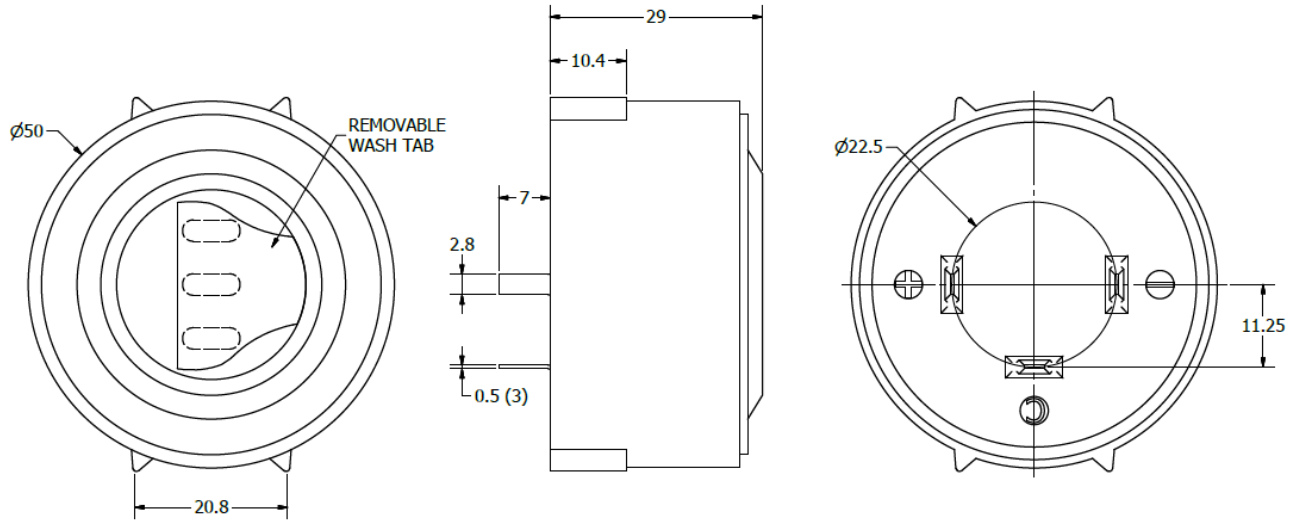


Reliability Testing

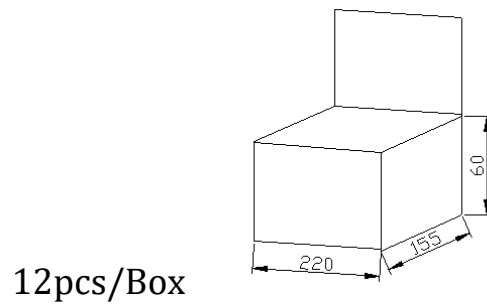
Type of Test	Test Specifications
High Temperature Test	Storage in $+70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
Low Temperature Test	Storage in $-30^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, 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>Amplitude: 1.5mm Time : 1min/axis</p> <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).

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

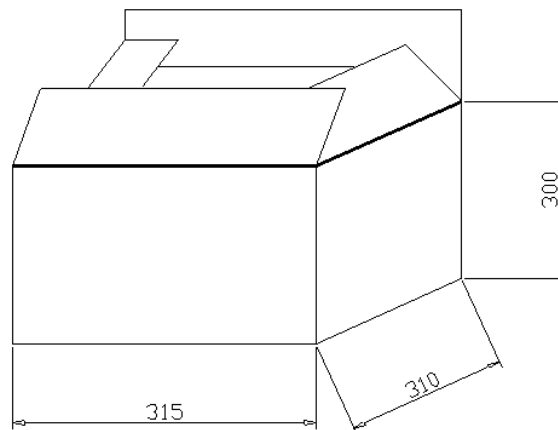
Dimensions



Packaging



12pcs/Box



120pcs Carton

Specifications Revisions

Revision	Description	Date	Approved
-	RELEASED FROM ENGINEERING	08/17/2005	-
A	REVISED TO INVENTOR 3D DRAWING TEMPLATE	03/11/2008	BR
B	ADDED NOTE FOR C-PIN TRIGGER	03/25/2014	ML
C	REVISED PIN MATERIAL	02/25/2020	MV
D	Update Spec Format, Add Details for Reliability, Packaging, etc., Revised Weight to 28g	07/25/2024	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.
3. C-Pin trigger current at 12Vdc is 2mA max