



PUIaudio



Data Sheet

AT-1442-TT-WP-R

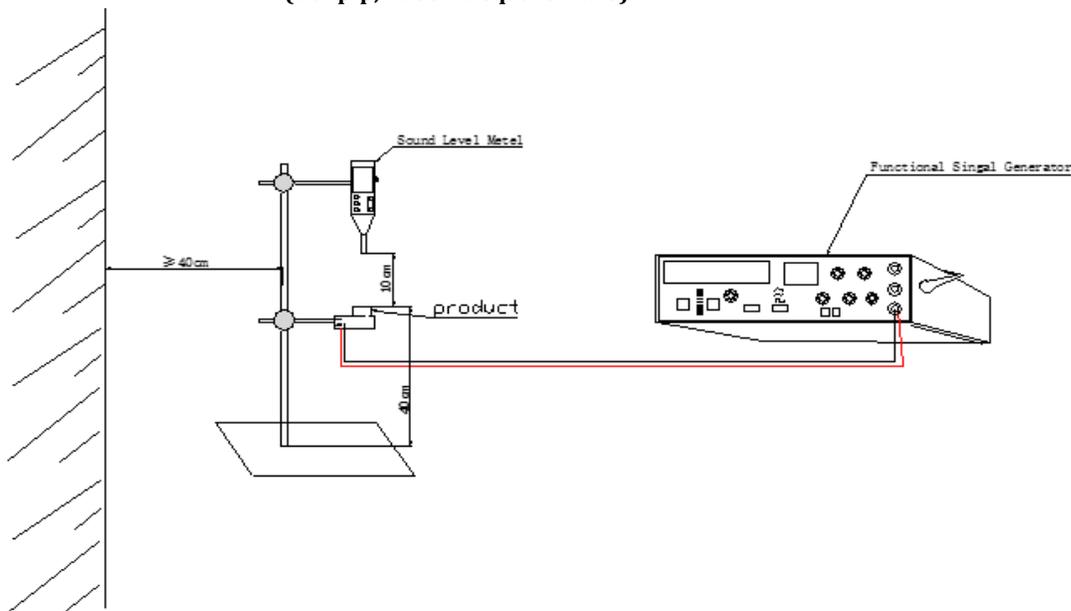
Features:

- Piezo Transducer
- 10Vpp rated, 4250Hz
- IP67

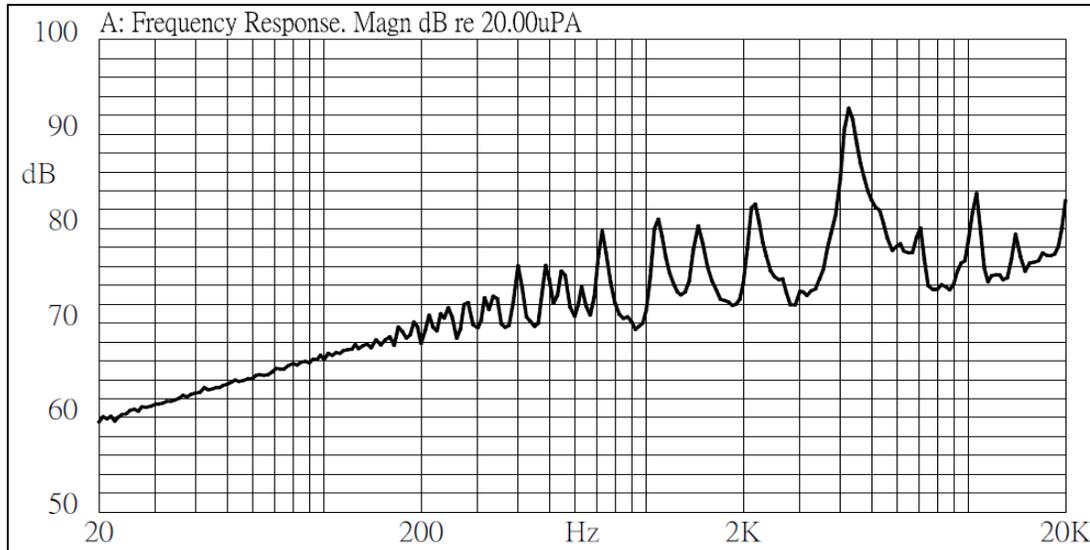
Specifications

Parameters	Values	Units
Rated Voltage	10	Vp-p
Operating Voltage Range	1 ~ 30	Vp-p
Current Draw at Rated Voltage	12	mA
Capacitance at 120Hz	20,000 ± 30%	pF
Minimum SPL @ 10cm	84	dBA
Resonant Frequency	4250 ± 500	Hz
Housing Material	ABS	-
Terminal Material	Au Plating	-
Weight	2.6	Grams
Ingress Protection Rating	IP67	-
Acceptable Soldering Methods	Hand Solder	Iron 360°C for 3 seconds or less
Environmental Compliances	ROHS/REACH	Exemption 7c-1
Storage Temperature	-40 ~ +95	°C
Operating Temperature	-30 ~ +85	°C

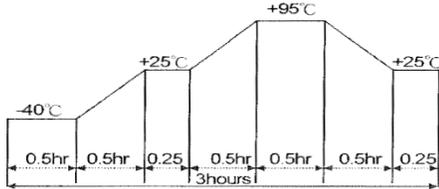
Measurement Method (10Vpp-p, 4250 Hz square wave)



Typical Frequency Response (10Vp-p, 4250 Hz square wave)

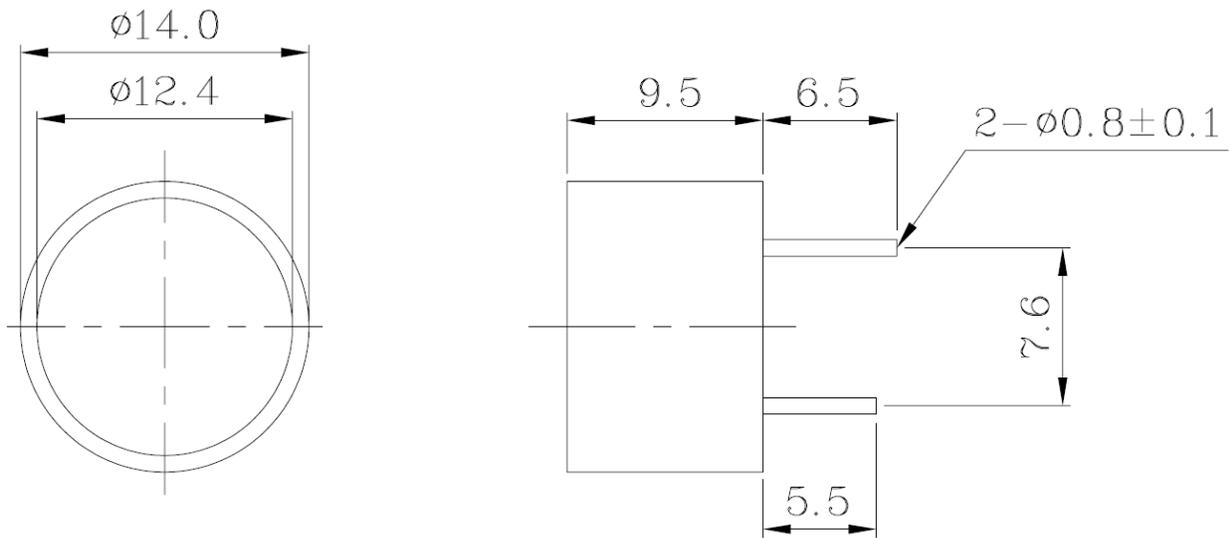


Reliability Testing

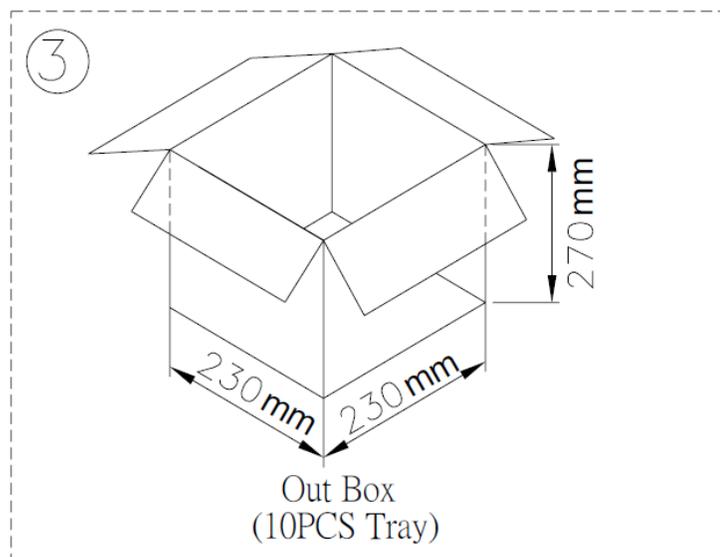
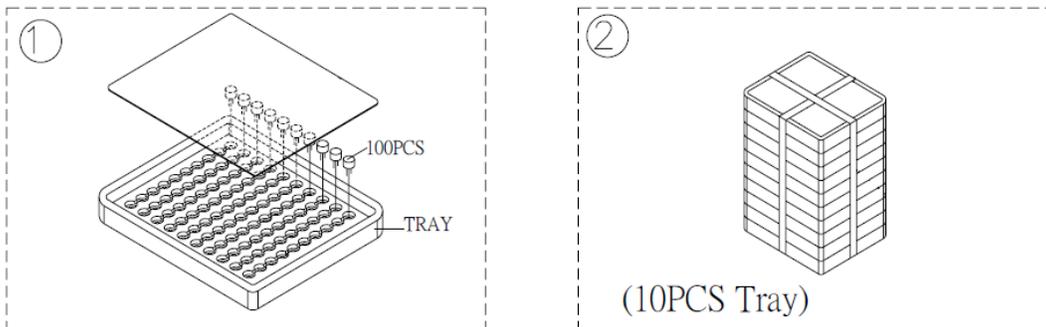
Type of Test	Test Specifications
High Temperature Test	Placed in chamber at +95°C for 240 hours, then rested at +25°C for 4 hours.
Low Temperature Test	Placed in chamber at -40°C for 240 hours, then rested at +25°C for 4 hours.
Humidity Test	Placed in chamber at +40°C & 90±5% RH for 240 hours, then rested at +25°C for 4 hours
Temperature Cycle Testing	 <p>Part subjected to 5 cycles of test, then rested at +25°C for 4 hours.</p>
Solderability	Stripped lead wires immersed in rosin for 5 seconds then immersed in solder bath of +270±5°C for 3±0.5 seconds.
Lead Wire Pull Strength	3.0N horizontal force applied for 30 seconds 2.0N vertical force applied for 30 seconds
Vibration Test	Vibration applied with amplitude of 1.5mm and 10 ~ 55Hz band of vibration frequency to each direction (X, Y, Z) for 2 hours each (6 hours total).
Drop Test	Free drop a unit from the height 70cm to the surface of 10mm thick board, 3 times in each direction (X, Y, Z) (9 times total).
Continuous Life Test	48 hours continuous operation at +70°C with rated voltage applied.
Intermittent Life Test	Duty cycle of 1 minute on, 1 minute off, minimum of 5000 times at +25±2°C with rated voltage applied.

- **90% of wires shall be wet with solder after solderability.**
- **Parts pass after tests, values shall be within ±10% of original ones. SPL shall be within ±10dB.**

Dimensions



Packaging



Tray		1x100PCS=100PCS
Out Box	230mmx230mmx270mm	10LAYERx100PCS=1000PCS

Specifications Revisions

Revision	Description	Date
-	RELEASED FROM ENGINEERING	11/8/2019
A	REVISED DIMENSIONS	2/27/2020
B	REVISED VOLTAGE RANGE	12/6/2021

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.