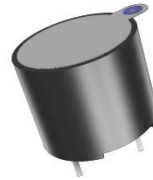




# PUIaudio



Data Sheet

AI-1224-TWT-12V-R

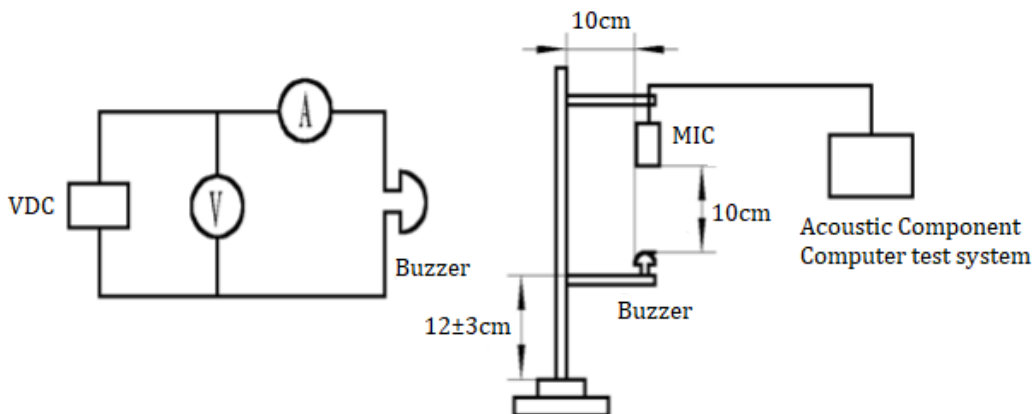
## Features:

- Small 12mm diameter X 9.5mm height
- Minimum 88 dB output at 10cm
- Wave Solder and Washing Allowed

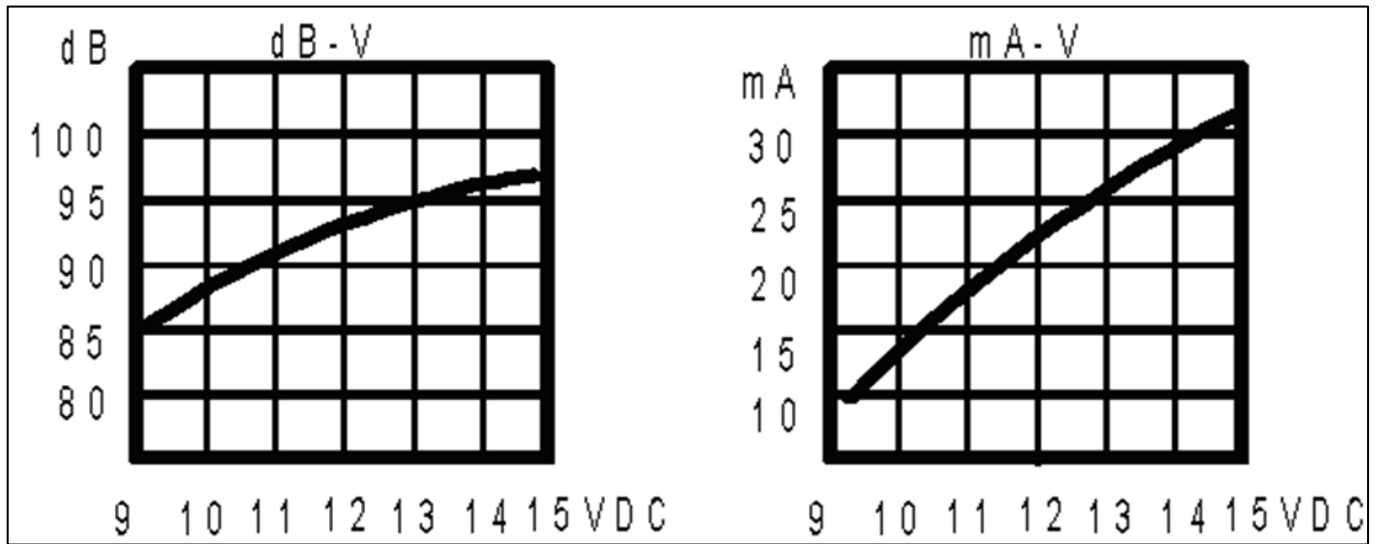
## Specifications

Parameters	Values	Units
Rated Voltage	12	VDC
Operating Voltage Range	8 ~ 16	VDC
Current Draw at Rated Voltage	30 Max.	mA
Minimum SPL @ 10cm	88	dB
Resonant Frequency	2,400 ± 300	Hz
Tone or Pulse Rate	Continuous	-
Housing Material	PBT	-
Terminal Material	Sn Plated Copper	-
Weight	2	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	See page 3 for soldering information
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-30 ~ +80	°C
Operating Temperature	-20 ~ +70	°C

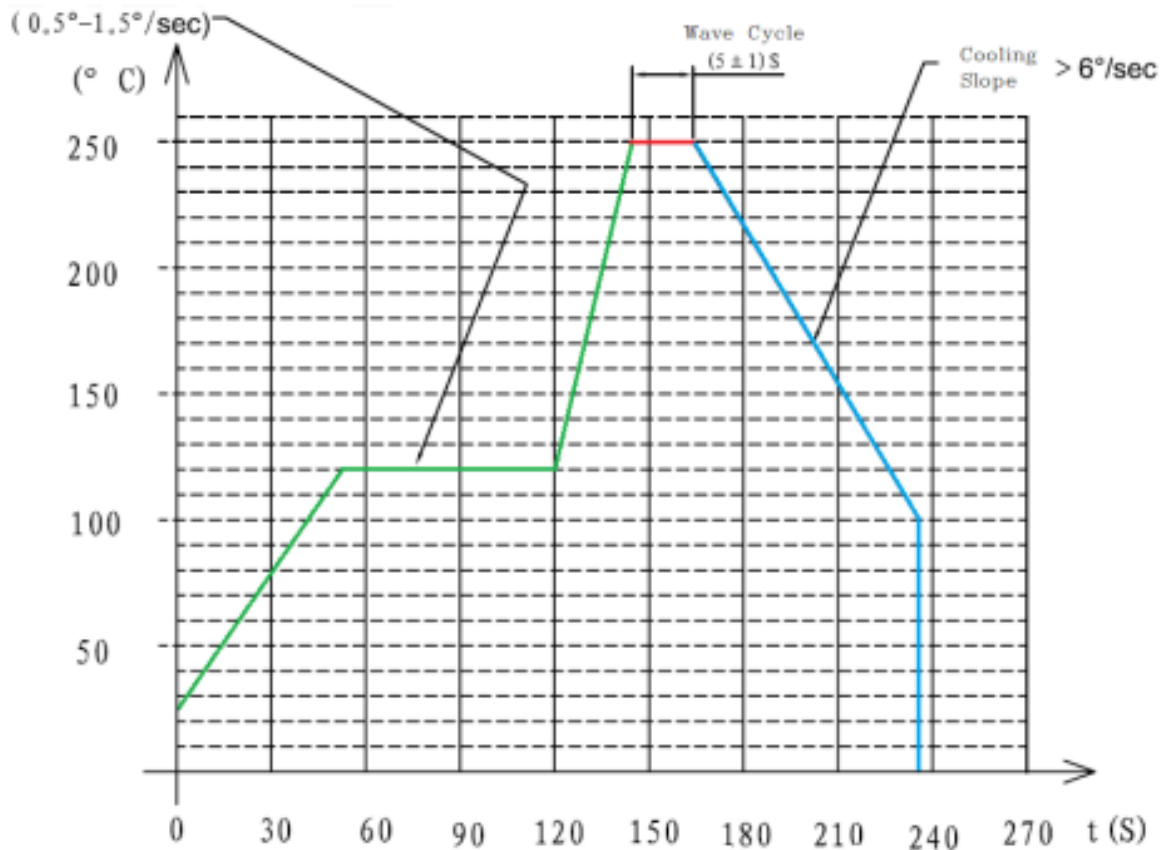
## Measurement Method (12VDC, SPL meter spaced at 10cm)



## Typical SPL vs Input Voltage



## Recommended Soldering Procedure

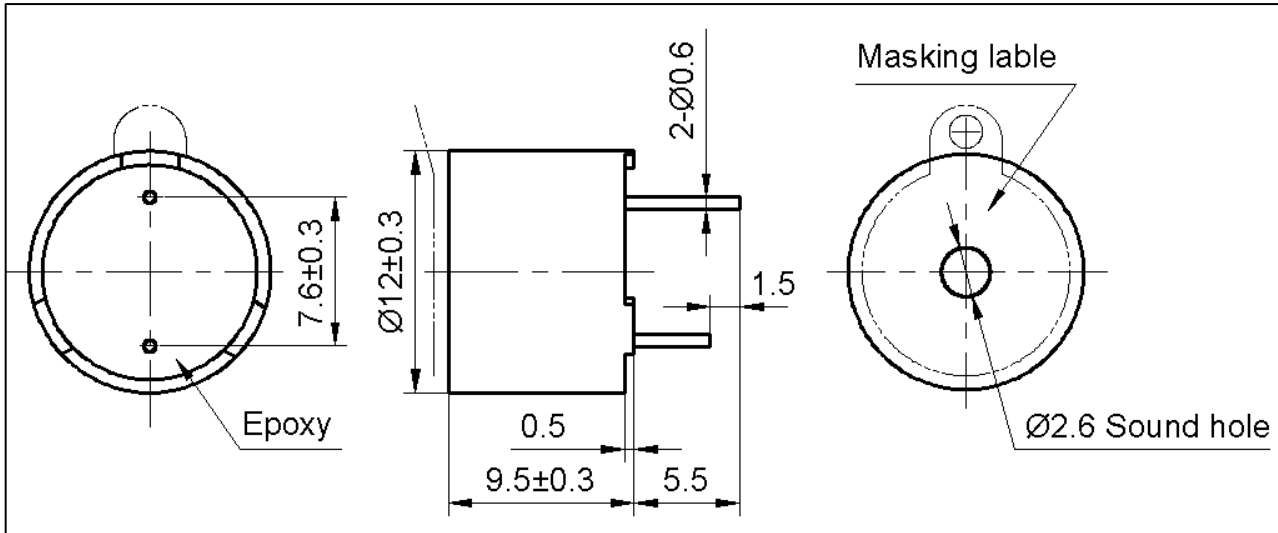


## Reliability Testing

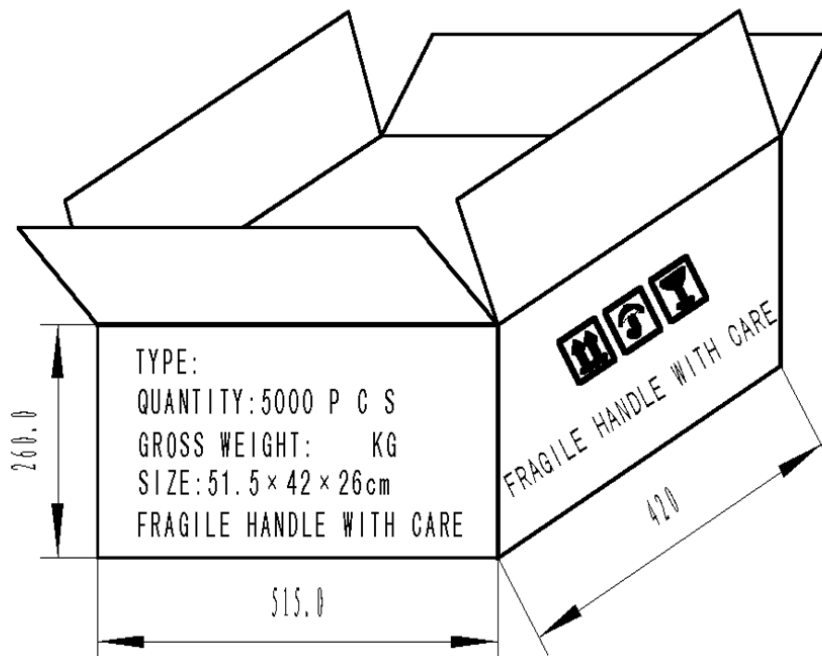
NO	ITEM	TESTING CONDITION	VARIANCE AFTER TEST
1	Humidity	40±5°C, 93(+2/-3)%RH, 96HRS	All specifications must be satisfied after the test
2	High temp.	+80±2°C, 96HRS	
3	Low temp.	-30±2°C, 96HRS	
4	Temperature cycling	-30±2°C, 30 minutes room temp. 15 minutes +80±2°C, 30 minutes room temp. 15 minutes 5 cycles	
5	Drop test	3 times from height of 70cm onto the surface of 10mm thick wooden board.	
6	Vibration test	Make the test for the directions of X Y and Z (total 0.5 hours). To-and-fro sweep time (from 10 to 55 Hz and then 55 to 10) under single amplitude of 1.0mm is 1 minute.	
7	Solder heat resistance	The part leads (pins) shall be immersed in molten solder maintained at 250±10°C for a period of 30 seconds.	

**All specifications must be satisfied after the test.**

## Dimensions



## Packaging



### NOTES:

1. 100 PCS per box
2. Total 50 boxes per carton
3. Total 5000 PCS carton
4. Volume:  $51.5 \times 42 \times 26$  cm

Specifications Revisions

<b>Revision</b>	<b>Description</b>	<b>Date</b>	<b>Approved</b>
A	RELEASED FROM ENGINEERING	08/28/2018	-
B	Add Detail for Wave Solder and Washing Allowed	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.