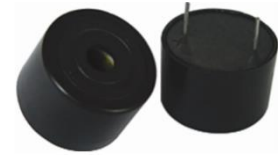




PUI audio



DataSheet

AI-2429-TWT-5V-R

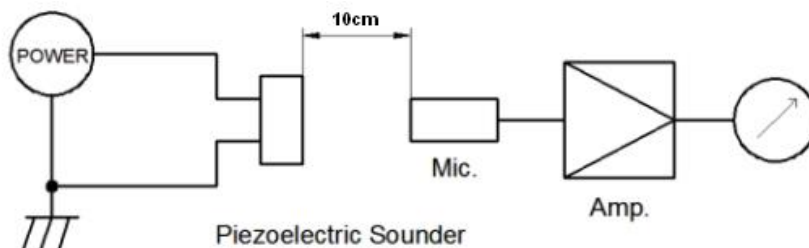
Features:

- Piezo Indicator
- 5VDC rated, 3000Hz
- Top-Firing Thru-Hole Type
- Wave Solder Allowed, Washing NOT Allowed

Specifications

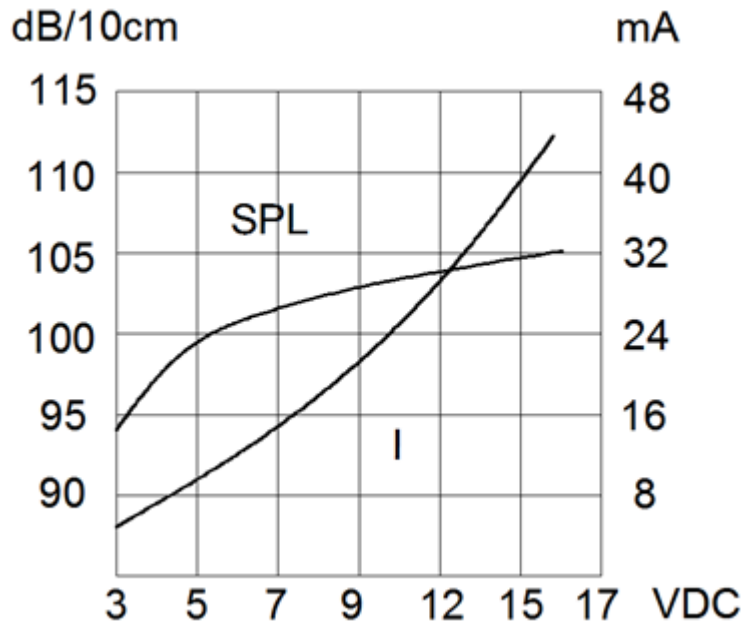
Parameters	Values	Units
Rated Voltage	5	VDC
Operating Voltage Range	3 ~ 16	VDC
Current Draw at Rated Voltage	25(Max.)	mA
Minimum SPL @ 10cm	98	dBA
Resonant Frequency	3000 ± 500	Hz
Tone or Pulse Rate	Continuous	-
Housing Material	PBT	-
Terminal Material	Tin-Plated Copper	-
Acceptable Soldering Methods	Hand Solder, Wave Solder	See pages 2 and 3
Weight	5.4	Grams
Environmental Compliances	RoHS/REACH	Ex. 7c-1
Storage Temperature	-30 ~ +80	°C
Operating Temperature	-30 ~ +70	°C

Measurement Method (Conditions: 20°C ±2°C, 40%~70% Relative Humidity, 860~1060 hPa Air Pressure)



MIC: ND10 Sound Meter or equivalent
 DC Power Supply: QJ6003S or equivalent

Typical SPL vs Voltage



Reliability Testing

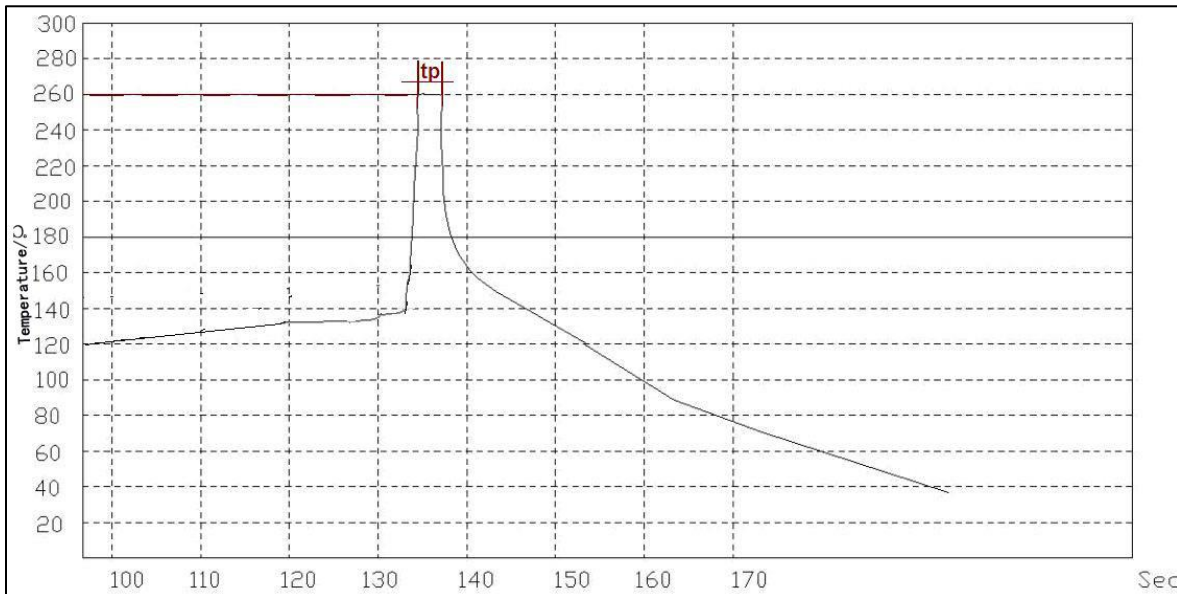
Type of Test	Test Specifications
High Temperature Test	96 hours at +80°C ± 2°C then allowed to rest for 2 to 4 hours.
Low Temperature Test	96 hours at -30°C ± 2°C then allowed to rest for 2 to 4 hours.
Humidity Test	96 hours at +40°C ± 2°C with relative humidity at 93% +2%/-3% then allowed to rest for 2 to 4 hours.
Temperature Cycle Testing	1.) -80±2°C for 30minutes 2.) +20±2°C for 15 minutes 3.) +80±2°C for 30 minutes 4.) +20±2°C for 15 minutes 5.) 5 cycles
Vibration Test	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 mm is 1 minute.
Drop Test	3 times each XYZ direction from height of 70cm onto the surface of 10mm thick wooden board.

After the test part shall meet specifications, except the SPL shall be in ±10dB.

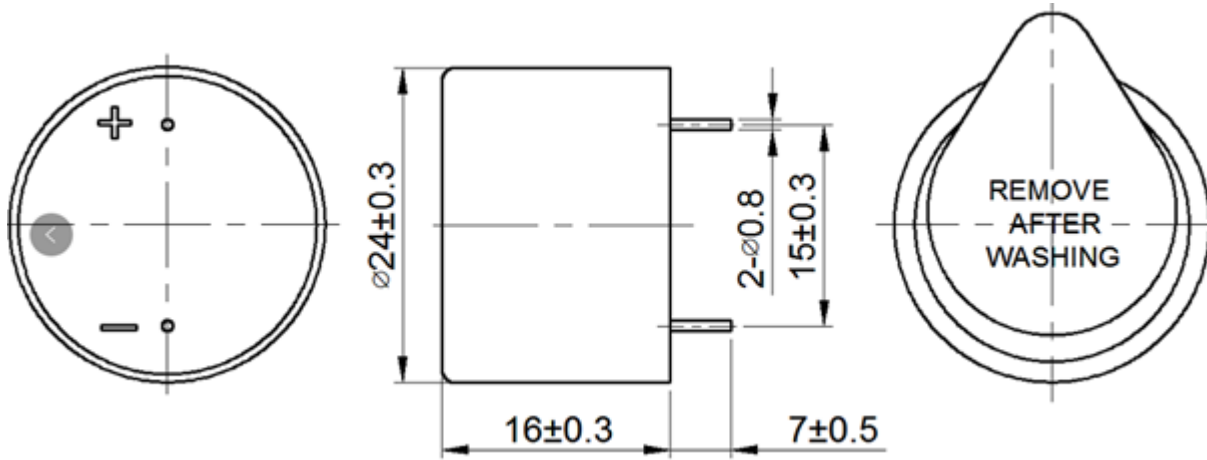
Soldering Method

No.	Item	Test condition
1	Hand soldering	Solder Temp.: $350\pm 10^{\circ}\text{C}$; Time: Max. 3 seconds.
2	Wave Soldering	Preheat 1 : 120°C Preheat 2 : 130°C Preheat 3 : 140°C Tin oven Temp (Tp)/ Time: $260\pm 5^{\circ}\text{C}/3\text{s}$ Transit speed : 1200mm/min

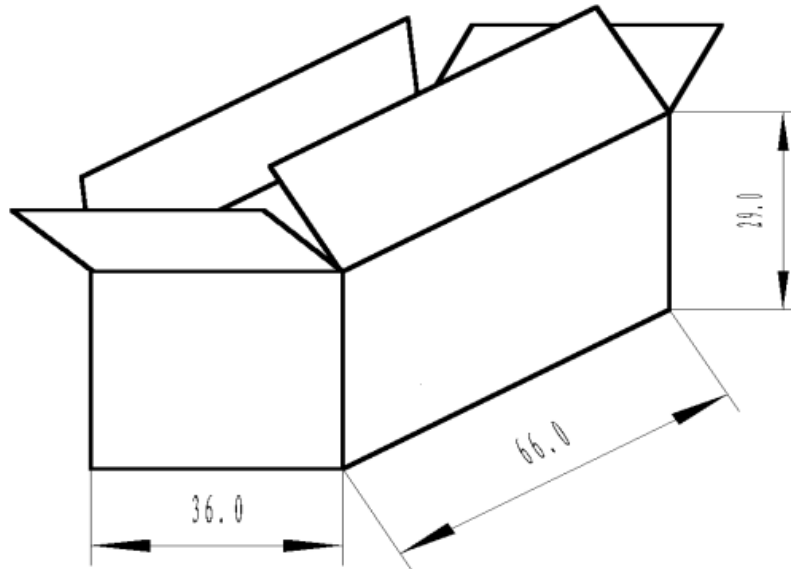
Recommended Wave Solder Profile



Dimensions (Positive pin is the top pin in the drawing below)



Packaging



NOTES:

- 1.50 PCS per box
- Total 40 boxes per carton
- Total 2000 PCS a carton
- Volume: $66 \times 36 \times 29$ cm

Specifications Revisions

Revision	Description	Date	Approved
A	RELEASED FROM ENGINEERING	03/21/2019	-
B	Update Spec Logo and Company Information, Add details for SPL curve, Revised Temperature Ranges	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.