



PUI audio



Data Sheet

AT-2428-TWT-R

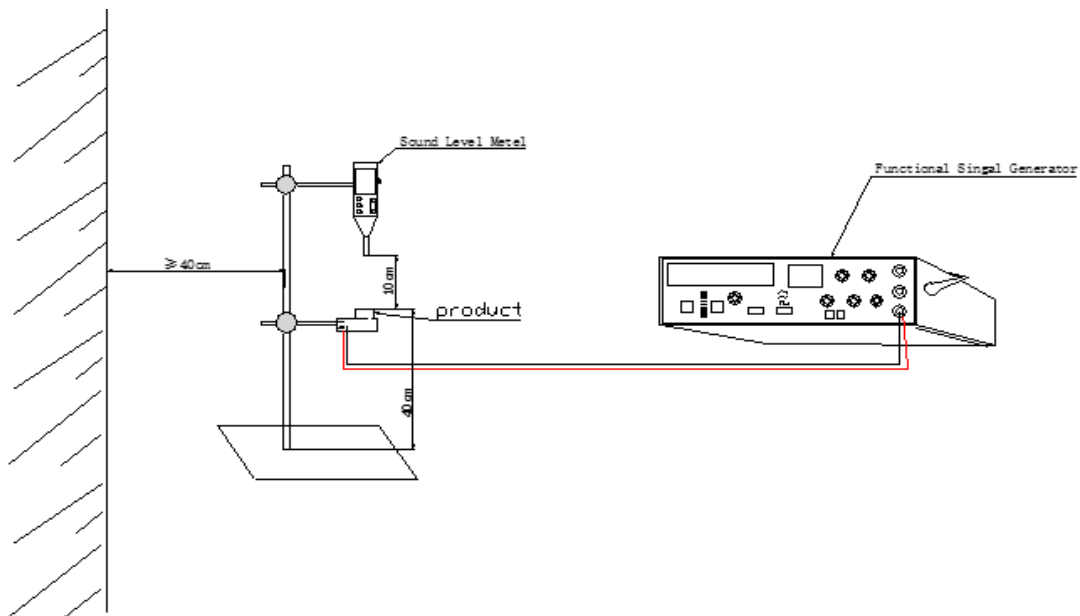
Features:

- Piezo Transducer with Feedback
- 12Vp-p, 3000Hz
- Wave Solder Allowed, Washing NOT Allowed

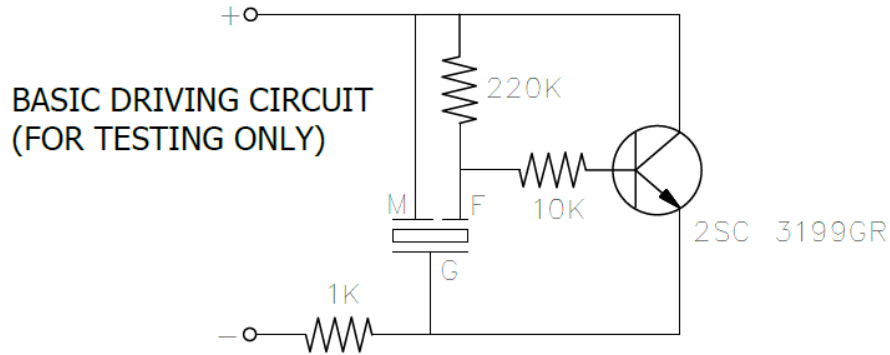
Specifications

Parameters	Values	Units
Rated Voltage	12	Vdc
Operating Voltage Range	3 ~ 28	Vdc
Current Draw at Rated Voltage	8(Max.)	mA
Capacitance at 120Hz	17,000 ± 30%	pF
Minimum SPL @ 10cm	92	dBA
Resonant Frequency	3,000 ± 500	Hz
Housing Material	PBT	-
Terminal Material	Au Plated Brass	-
Weight	3.4	Grams
Acceptable Soldering Methods	Hand Solder Only	Temp. 350C, < 3 seconds
Environmental Compliances	ROHS/REACH	Exemption 7c-1
Storage Temperature	-30 ~ +95	°C
Operating Temperature	-20 ~ +85	°C

Measurement Method (12Vp-p, 3000Hz square wave)



Basic Drive Circuit (For Testing Only)

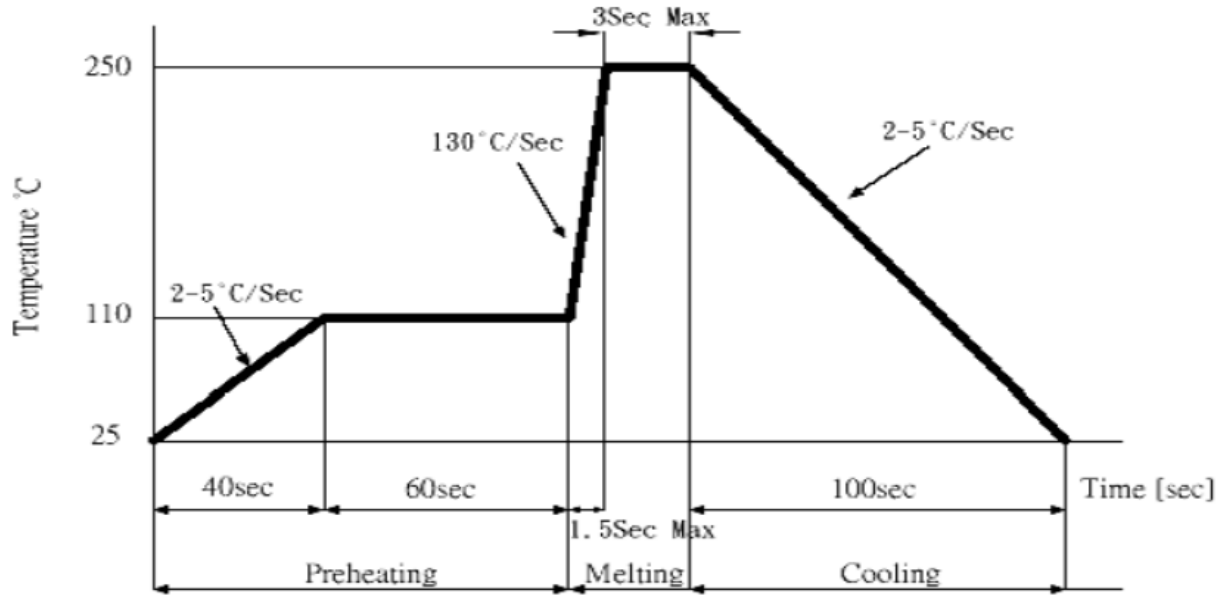


Reliability Testing

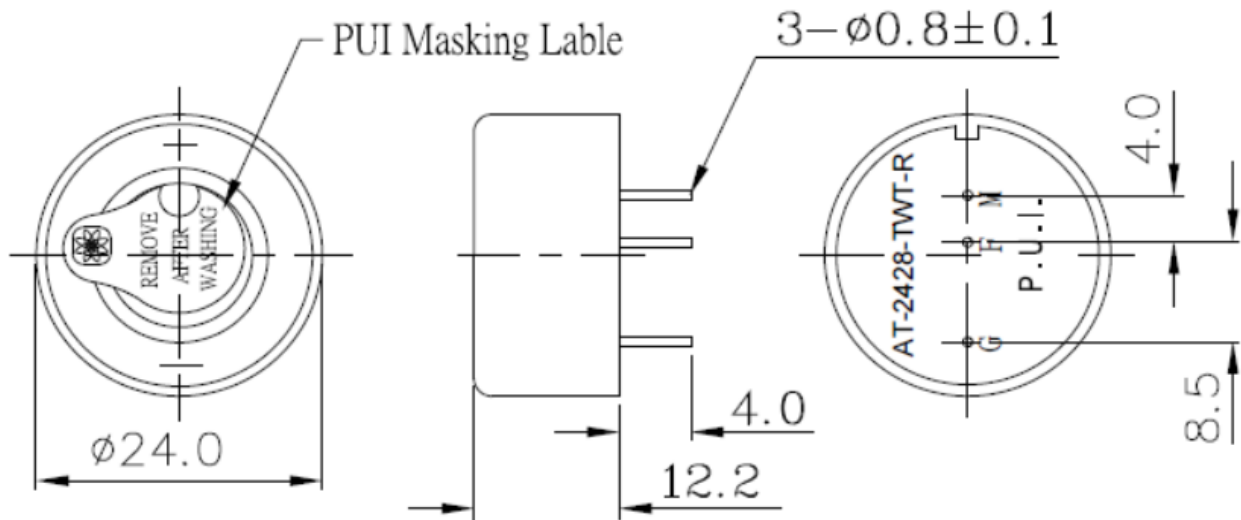
Type of Test	Test Specifications
High Temperature Test	Placed in chamber at +95°C for 240 hours, then rested for 4 hours at +25°C.
Low Temperature Test	Placed in chamber at -30°C for 240 hours, then rested for 4 hours at +25°C.
Humidity Test	Placed in chamber at +40°C and 90±5% RH for 240 hours, then rested for 4 hours at +25°C.
Temperature Cycle Testing	<p>Cycle repeated 5 times, then rested for 4 hours at +25°C.</p>
Solderability	Lead terminals immersed in rosin for 5 seconds then immersed in solder bath of 270±5°C for 3±1 seconds.
Soldering Heat Resistance	Lead terminals immersed up to 1.5mm from parts body in solder bath of +300±5°C for 3±0.5 seconds or +260±5°C for 10±1 seconds.
Terminal Strength	9.8N (1.0kg) force applied in each axial direction (X, Y, Z) to each terminal for 10 seconds.
Vibration Test	1.5mm amplitude vibration band between 10 ~ 55Hz applied 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 40mm thick wooden board, 3 times in each direction (X, Y, Z) (9 times total).
Continuous Life Test	10 minutes continuous operation at +70°C with rated voltage.
Intermittent Life Test	1 minute on, 0.5 minutes off, minimum of 960 times at +25±2°C with rated voltage.

*Allow part to rest at room temperature for 4 hours. SPL shall be within ±10dB of stated value, other values within ±10%.

Wave Solder Profile

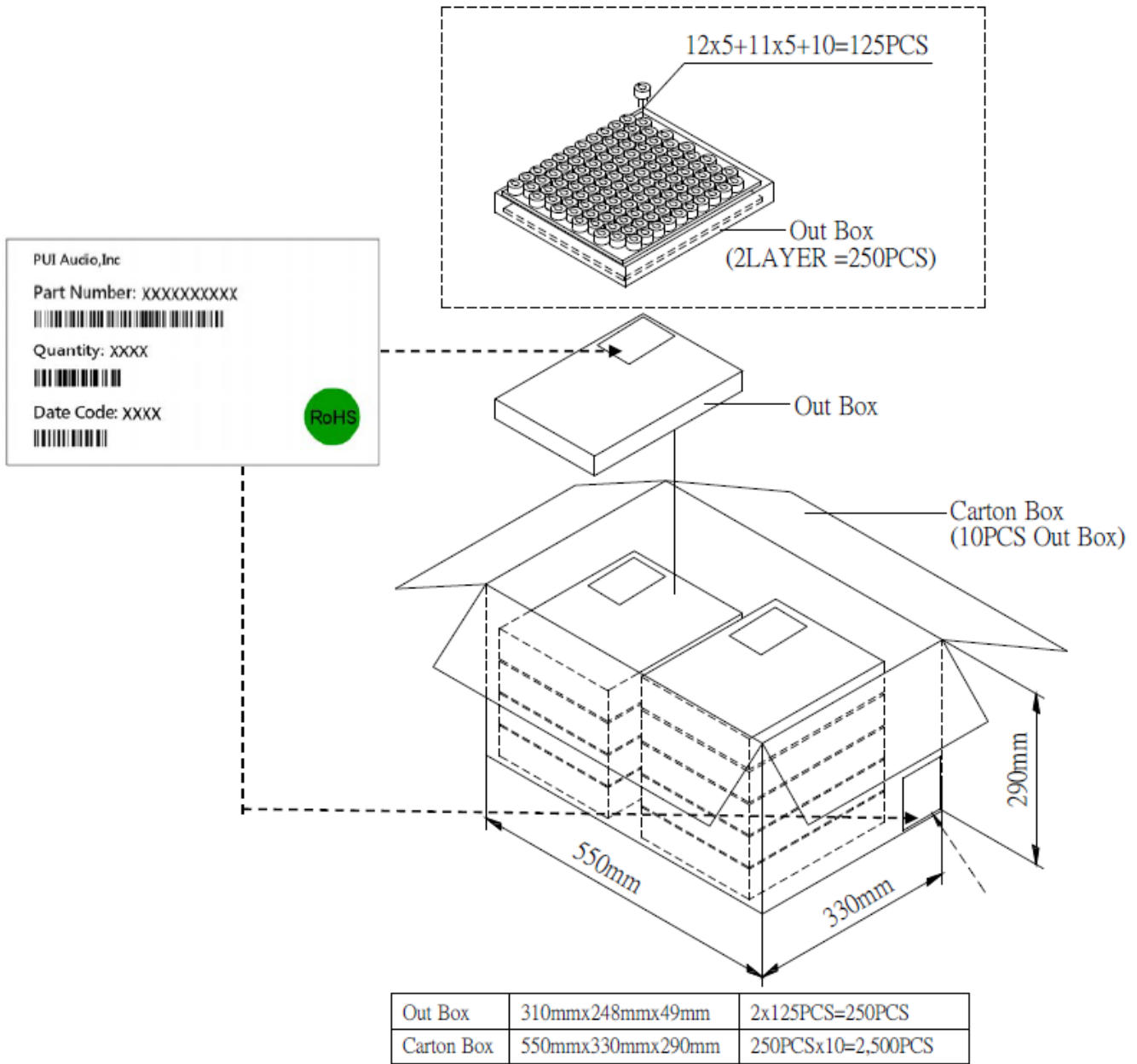


Dimensions



***Tolerances ± 0.5 mm unless otherwise specified.**

Packaging



Specifications Revisions

Revision	Description	Date	Approved
-	RELEASED FROM ENGINEERING	06/12/2006	-
A	ADDED DRIVE CIRCUIT DIAGRAM	01/04/2007	RW
B	REVISED TO INVENTOR 3D DRAWING TEMPLATE	08/08/2008	BR
C	REVISED DRIVE CIRCUIT VOLTAGE TO DC	05/30/2018	ML
D	Update Spec Format, Add Details for Reliability, Packaging, Etc.	10/02/2024	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.