



PUI audio

Data Sheet

AT-1224-TWT-4-R

Features:

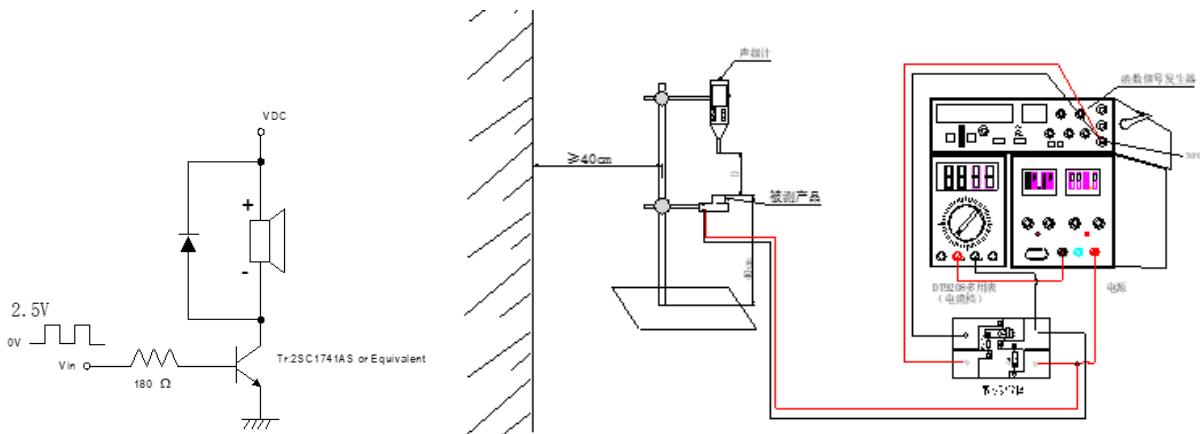
- High Temp 12Vpk, 2400Hz Magnetic Transducer
- Pin Type
- Wave Solder and Washing Allowed

Specifications

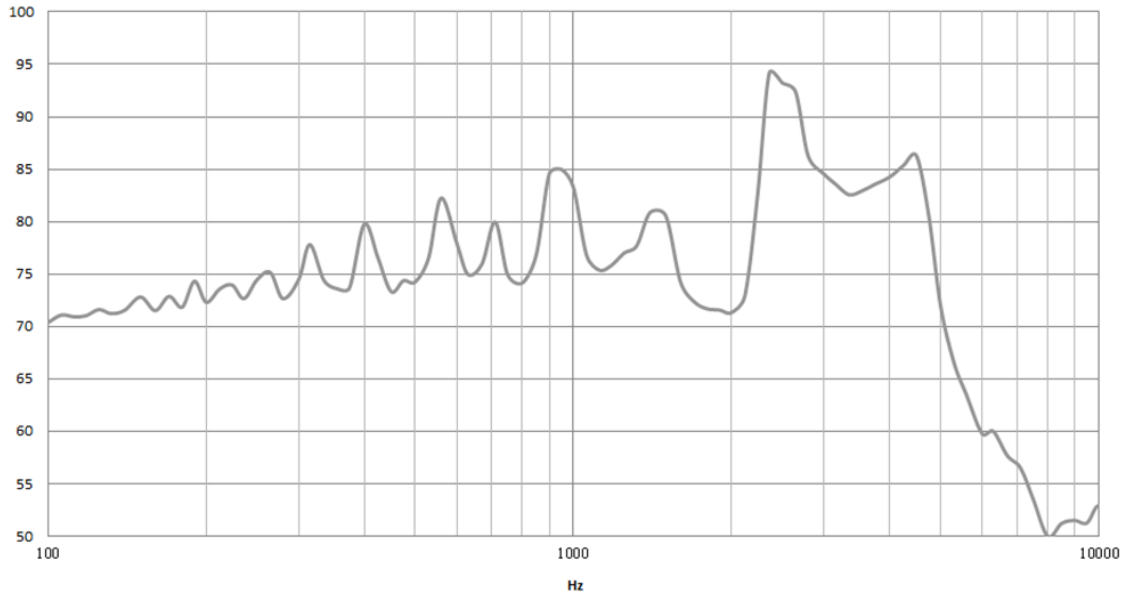
Parameters	Values	Units
Rated Voltage	12	V0-p
Operating Voltage Range	6 ~ 15	V0-p
Current Draw at Rated Voltage	40(Max.)	mA
Coil Resistance	140 ± 14	Ohms
Minimum SPL @ 10cm	85	dBa
Resonant Frequency	2,400 ± 500	Hz
Housing Material	PBT	-
Terminal Material	Sn Plated Copper	-
Weight	2	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	See following pages for details
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-40 ~ +110	°C
Operating Temperature	-40 ~ +105	°C

Measurement Method (Temperature: 25±3°C; Relative Humidity: 60% ~ 70%)

Standard Test Fixture (Distance: 10cm, 12 V0-p, 2400Hz square wave)



Response Curve (12Vpk, 2400Hz square wave @ 10cm)

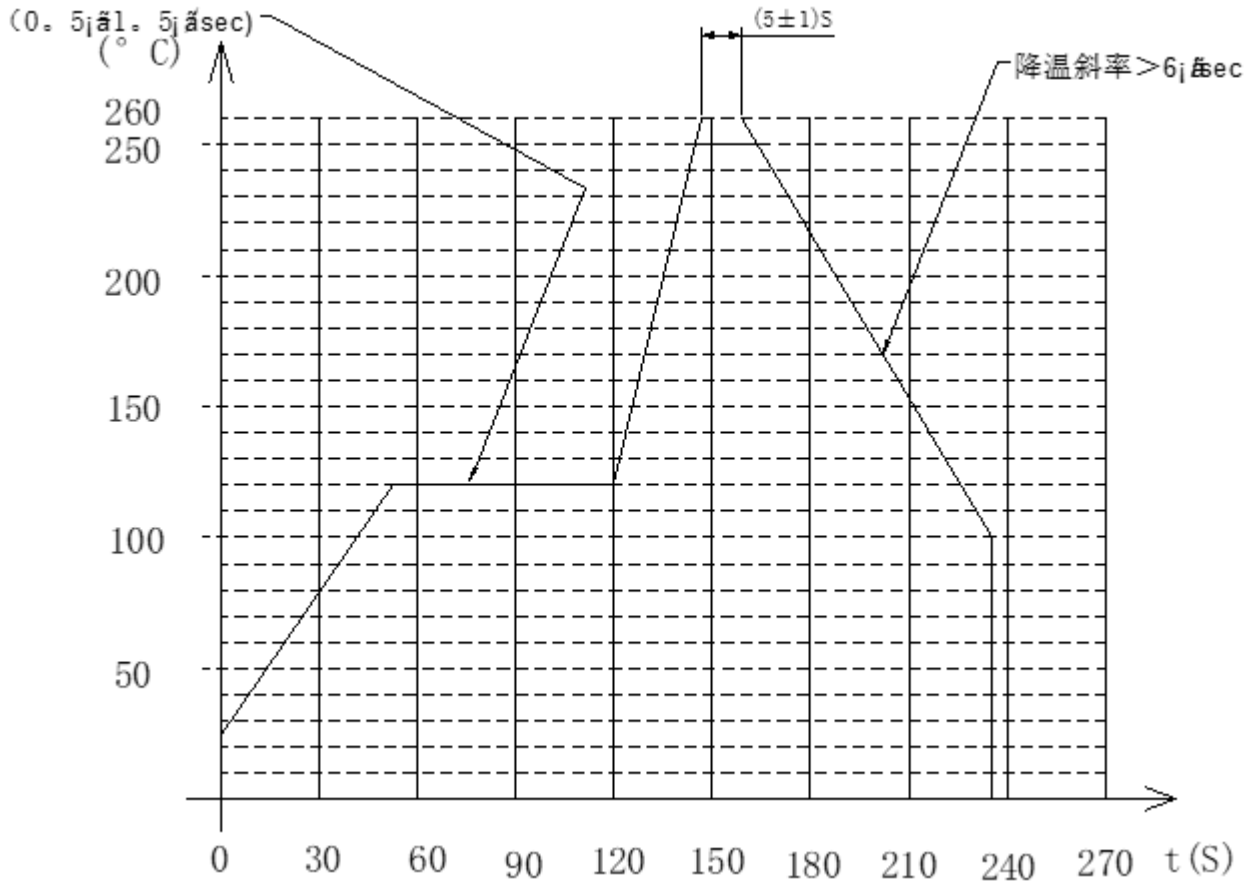


Reliability Testing

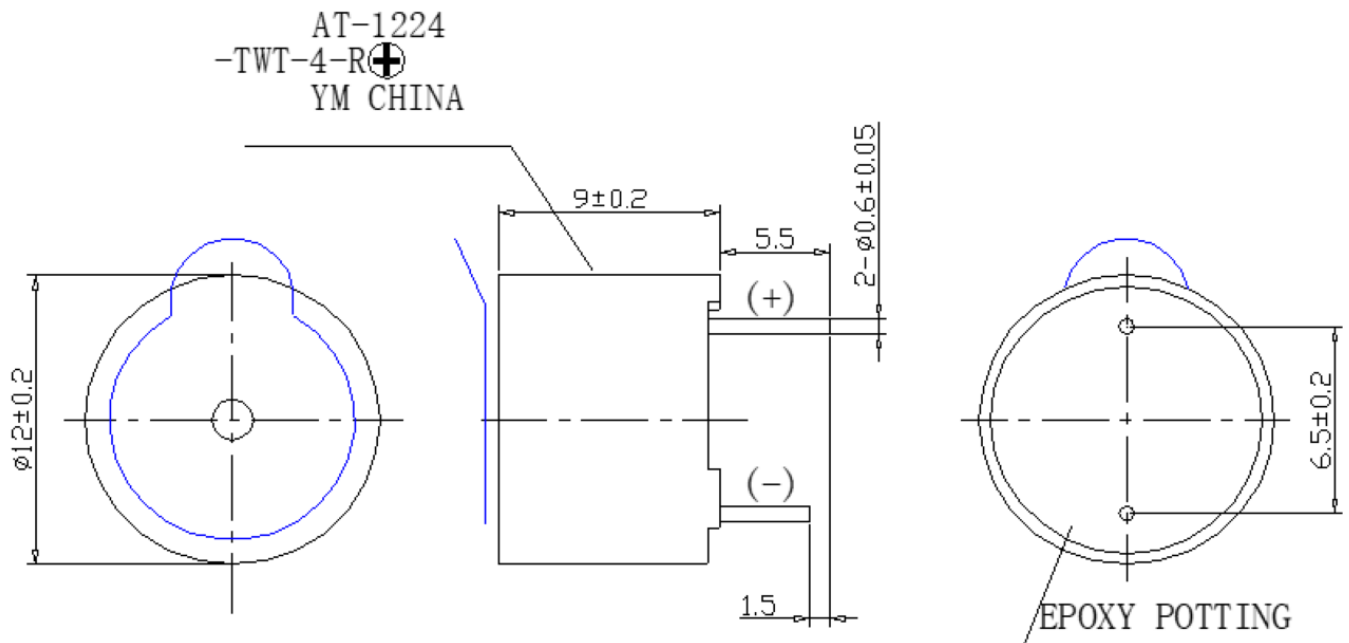
Type of Test	Test Specifications
High Temperature Test	96 hours at +110°C±2°C then rest at room temperature for 2 hours without applying power
Low Temperature Test	96 hours at -40°C±2°C then rest at room temperature for 2 hours without applying power
Humidity Test	96 hours at +40°C±2°C with relative humidity at 90-96% then rest at room temperature for 2 hours without applying power
Temperature Cycle Testing	<p>Test for 5 cycles without applying power, then expose to room temperature for 2 hours</p>
Vibration Test	<p>Amplitude: 1.5mm Time : 1min/axis</p> <p>In X,Y,Z directions for 2 hours each (6 hours total)</p>
Drop Test	Drop a piece from a height of 1m to the surface of a 10mm thick board, drop the piece on the X, Y, Z axis

After these tests, the piece should test within ± 5dB of the original SPL

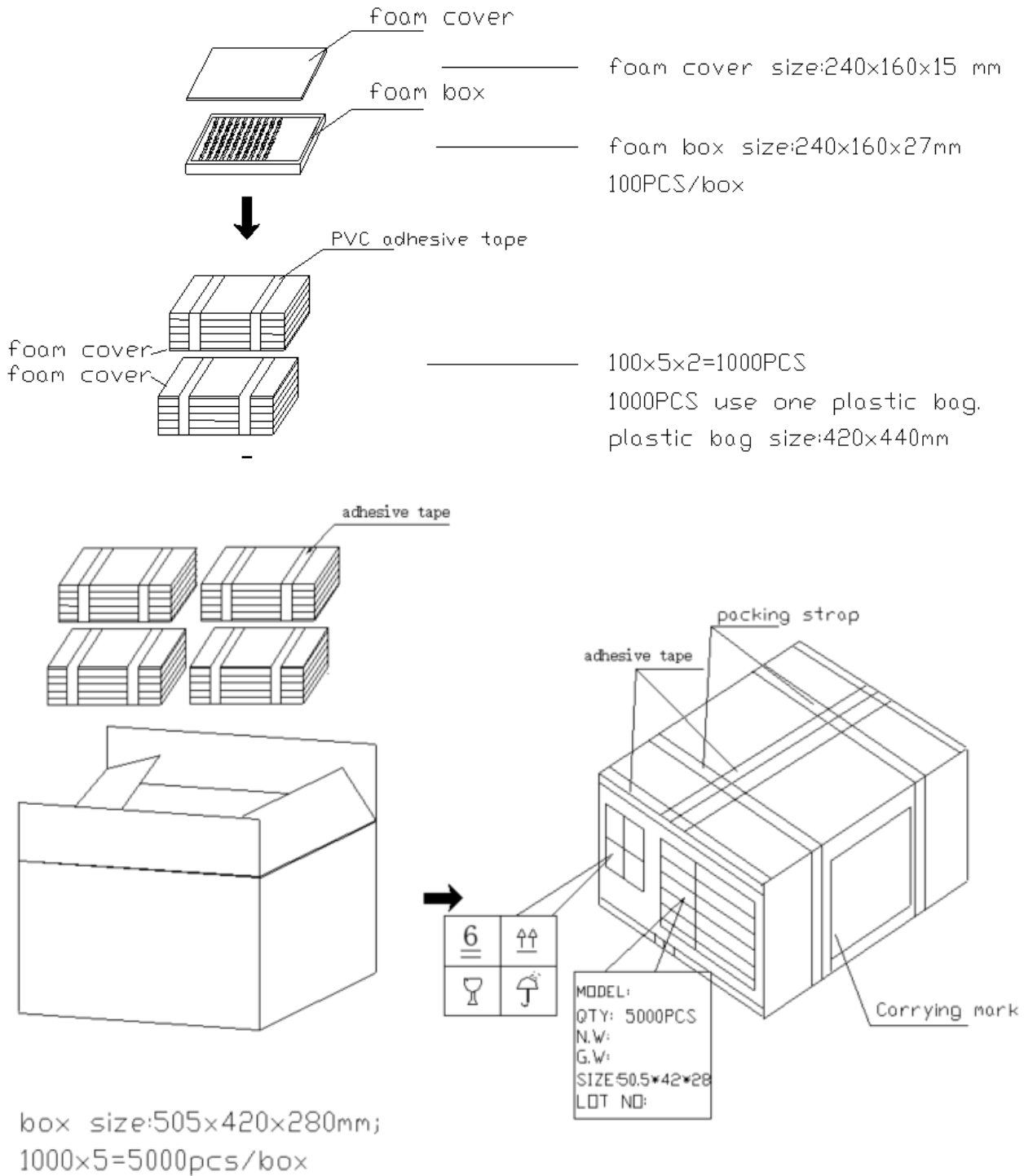
Recommended Wave Solder Profile



Dimensions



Packaging



Specification Revisions

Revision	Description	Date	Approved
-	RELEASED FROM ENGINEERING	07/21/2005	-
A	REVISED BODY DIMENSION	11/27/2007	RW
B	REVISED TO 3D DRAWING TEMPLATE	04/07/2008	BR
C	REVISED OPERATING TEMPERATURE	11/07/2012	BR
D	CHANGE VOLTAGE FROM VPP TO VPK, UPDATED ROHS	05/16/2019	ML
E	Update Spec Format, Add Details for Reliability, Packaging, etc.	09/18/2024	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.