



PUI audio



Data Sheet

AT-1224-TWT-R

Features:

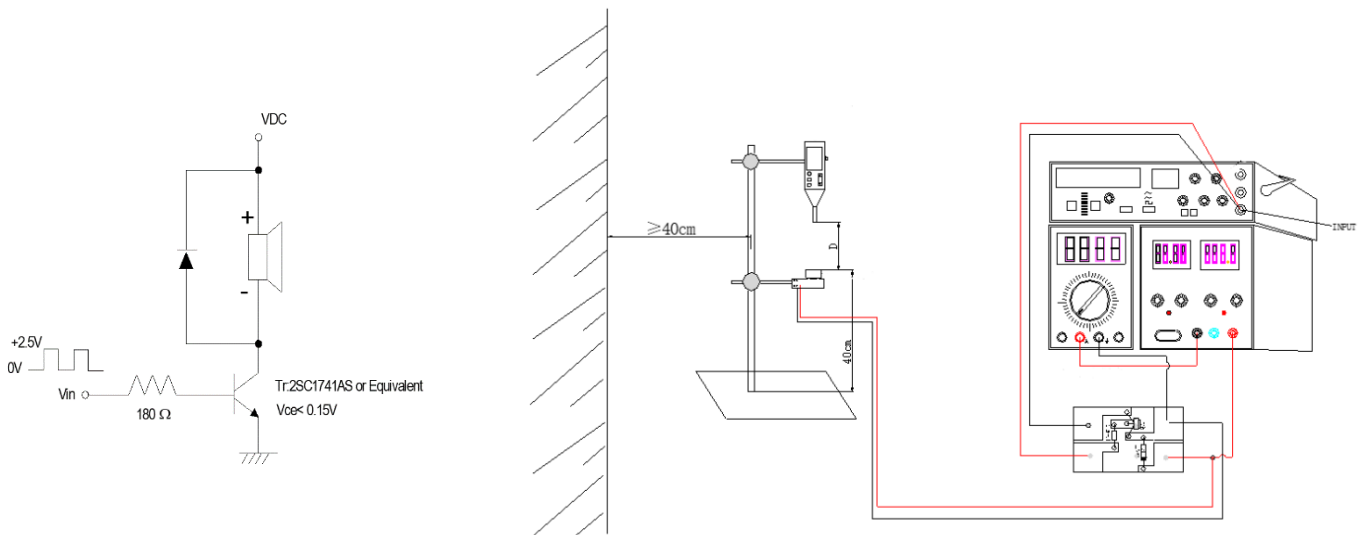
- 5V0-pk, 2048Hz Magnetic Transducer
- Pin Type
- Wave Solder and Washing Allowed

Specifications

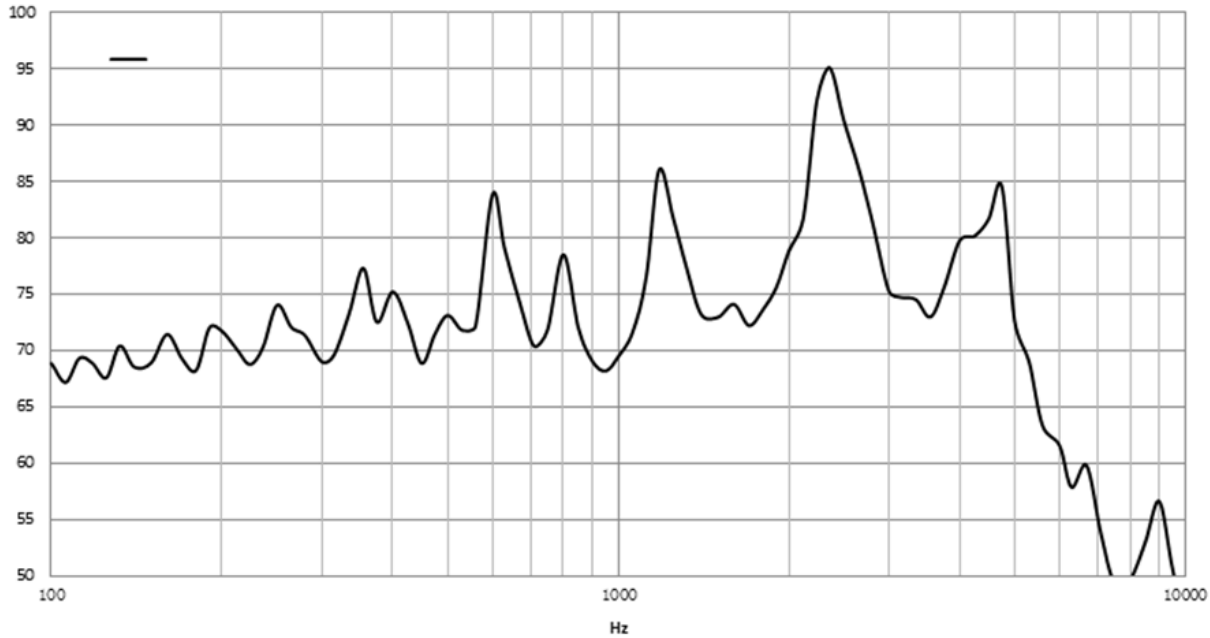
Parameters	Values	Units
Rated Voltage	5	V0-p
Operating Voltage Range	3 ~ 8	V0-p
Current Draw at Rated Voltage	40	mA
Coil Resistance	47 ± 9.4	Ohms
Minimum SPL @ 10cm	85	dBA
Resonant Frequency	2,400 ± 500	Hz
Housing Material	NORYL	-
Terminal Material	Sn Plated Copper	-
Weight	2	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	-
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-30 ~ +70	°C

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

Standard Test Fixture (Distance: 10cm, 5 V0-p, 2400 Hz square wave)



Frequency Response Curve (5Vpk, 2400Hz Square Wave @ 10cm)

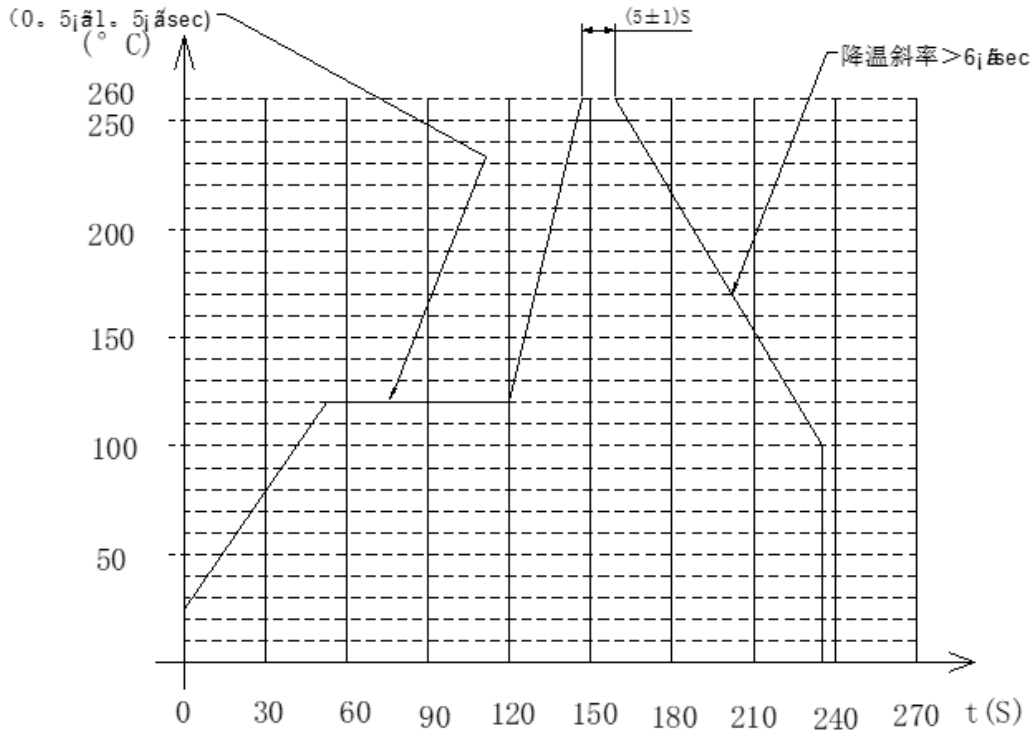


Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at +85°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

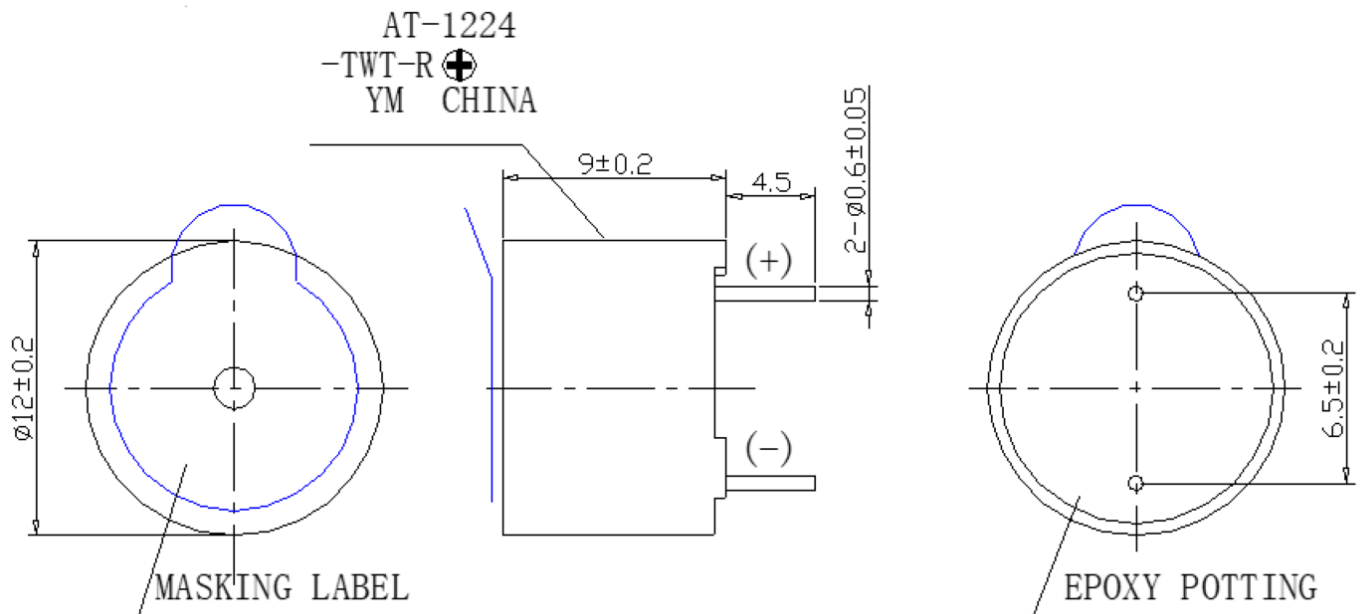
After these tests, the piece should test within ± 5dB of the original SPL

Recommended Wave Solder Profile

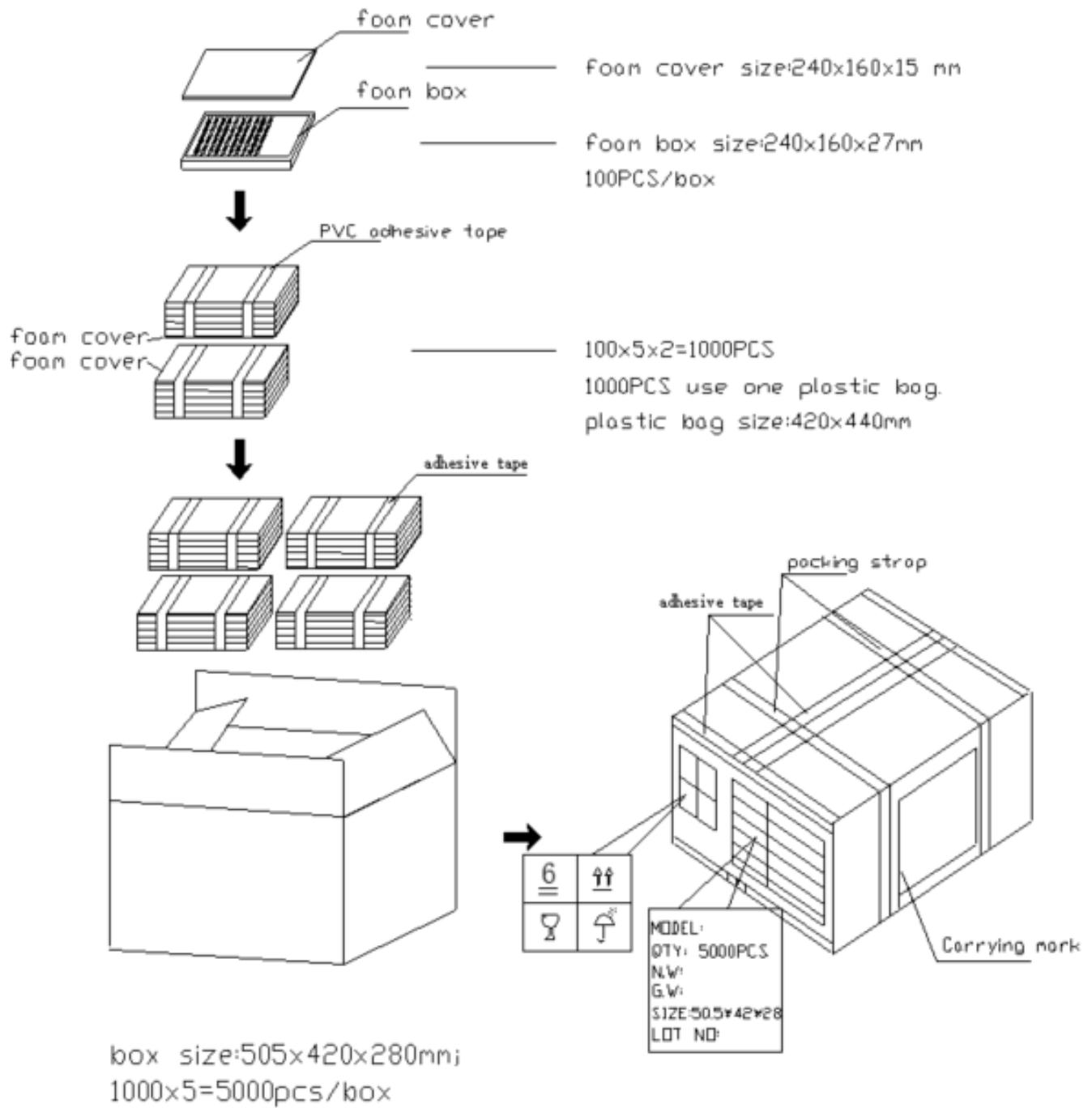


***Manual Soldering Temp 350C, soldering time < 3 seconds**

Dimensions



Packaging



Specification Revisions

Revision	Description	Date	Approved
-	RELEASED FROM ENGINEERING	06/09/2004	-
A	ADDED RESONANT FREQUENCY TOLERANCE	09/13/2004	RW
B	REMOVED LEAD FREE ADDED ROHS	08/10/2005	EP
C	REVISED HEIGHT DIMENSION	04/11/2006	EP
D	ADDED PART NUMBER AND DATE CODE	08/23/2006	BR
E	REVISED TEMPERATURE RATINGS	04/04/2007	DF
F	REVISED ROHS NOTE	02/16/2009	BR
G	REVISED TO INVENTOR 3D DRAWING TEMPLATE	10/15/2009	BR
H	CHANGE VOLTAGE FROM VPP TO VPK, UPDATED ROHS	05/16/2019	ML
I	REVISED TEMPERATURE RATINGS	02/25/2020	ML
J	Update Spec Format and Drawing Image, Add Details for Reliability, Packaging, etc.	09/18/2024	ML

Note:

- Unless otherwise specified:
 - All dimensions are in millimeters.
 - Default tolerances are $\pm 0.5\text{mm}$ and angles are $\pm 3^\circ$.
- Specifications subject to change or withdrawal without notice.