



PUI audio



Data Sheet

AT-1620-TWT-12V-R

Features:

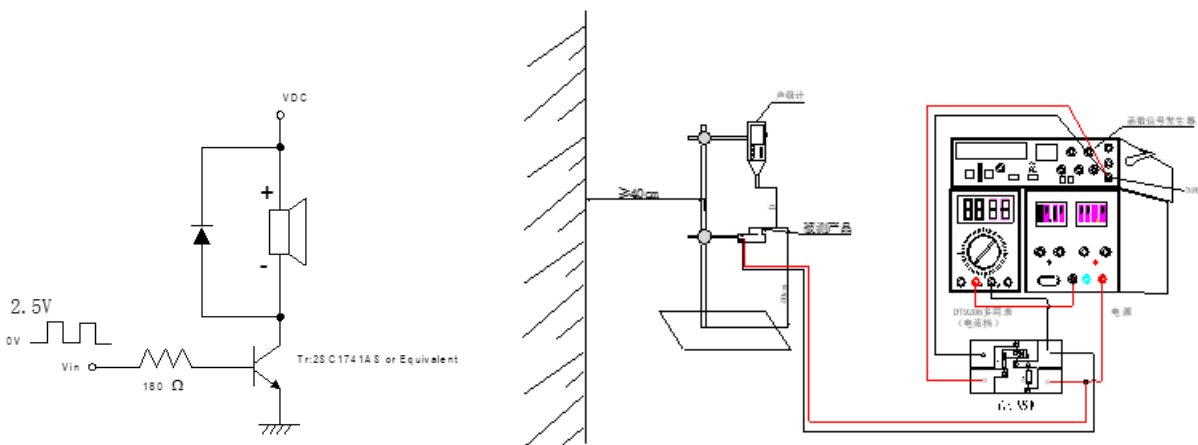
- 12 V0-pk, 2048Hz Magnetic Transducer
- Pin Type
- Wave Solder and Wash Allowed

Specifications

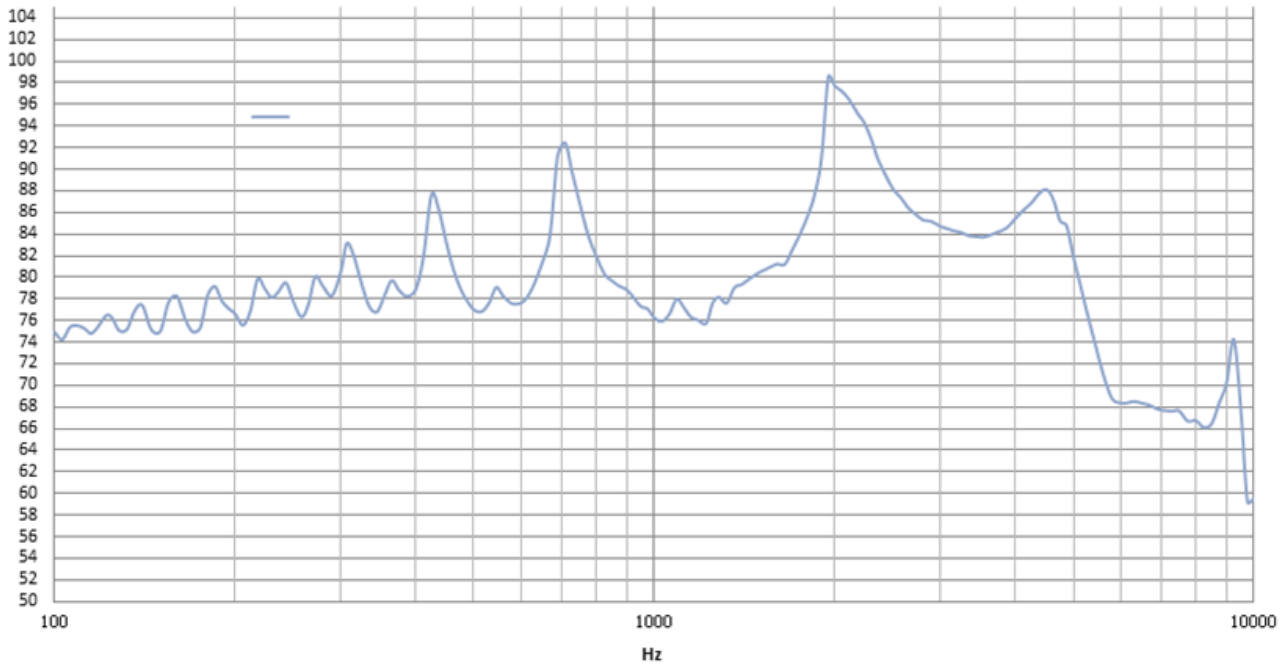
Parameters	Values	Units
Rated Voltage	12	V0-p
Operating Voltage Range	9 ~ 15	V0-p
Current Draw at Rated Voltage	40(Max.)	mA
Coil Resistance	115 ± 12	Ohms
Minimum SPL @ 10cm	85	dBA
Resonant Frequency	2,048 ± 500	Hz
Housing Material	NORYL	-
Terminal Material	Sn Plated Copper	-
Weight	5	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	-
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-30 ~ +80	°C
Operating Temperature	-40 ~ +85	°C

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

Standard Test Fixture (Distance: 10cm, 12V0-p, 2048Hz square wave)



Typical Frequency Response

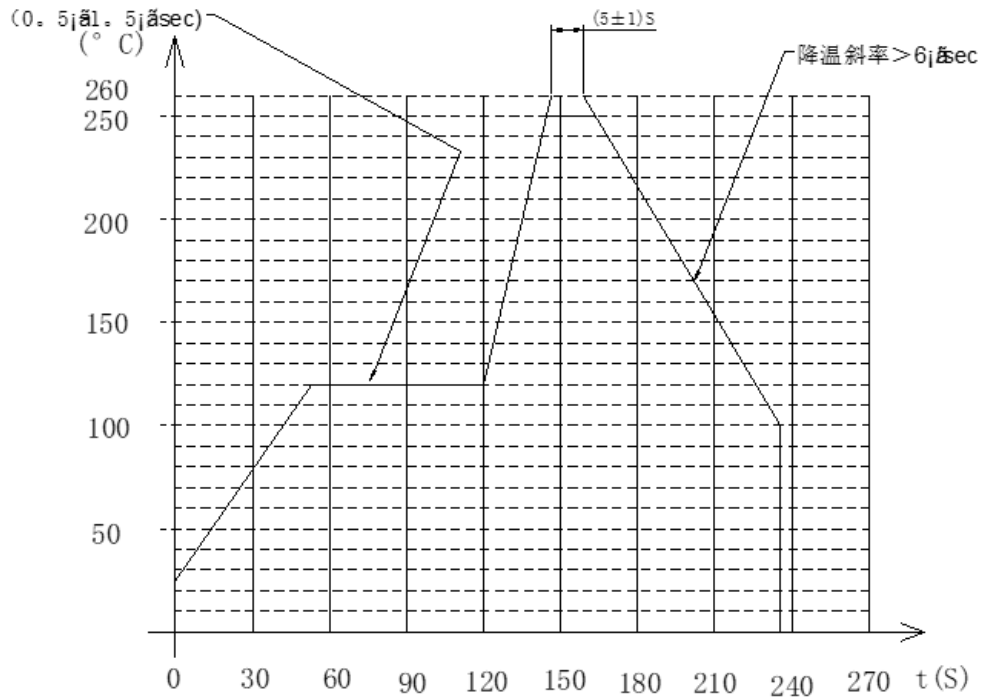


Reliability Testing

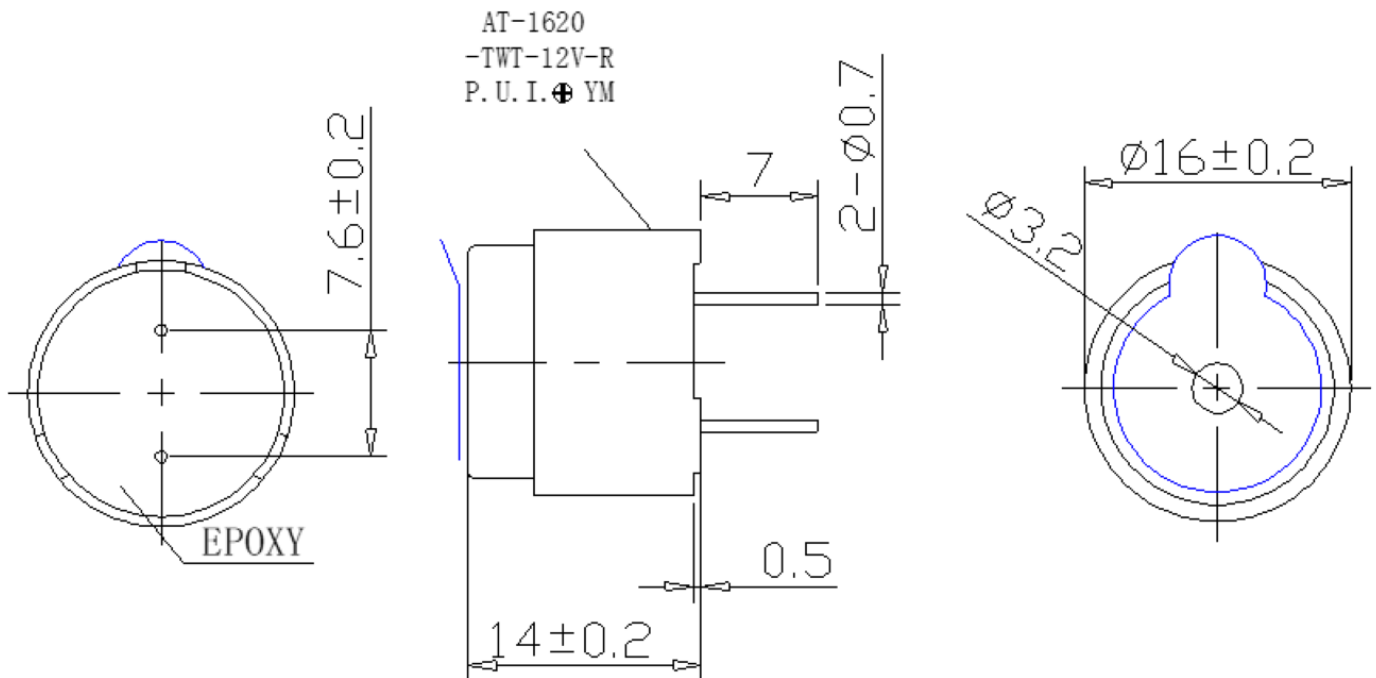
Type of Test	Test Specifications
High Temperature Test	96 hours at $+80^{\circ}\text{C}\pm 2^{\circ}\text{C}$ then rest at room temperature for 2 hours without applying power
Low Temperature Test	96 hours at $-30^{\circ}\text{C}\pm 2^{\circ}\text{C}$ then rest at room temperature for 2 hours without applying power
Humidity Test	96 hours at $+40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 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 $\pm 5\text{dB}$ of the original SPL

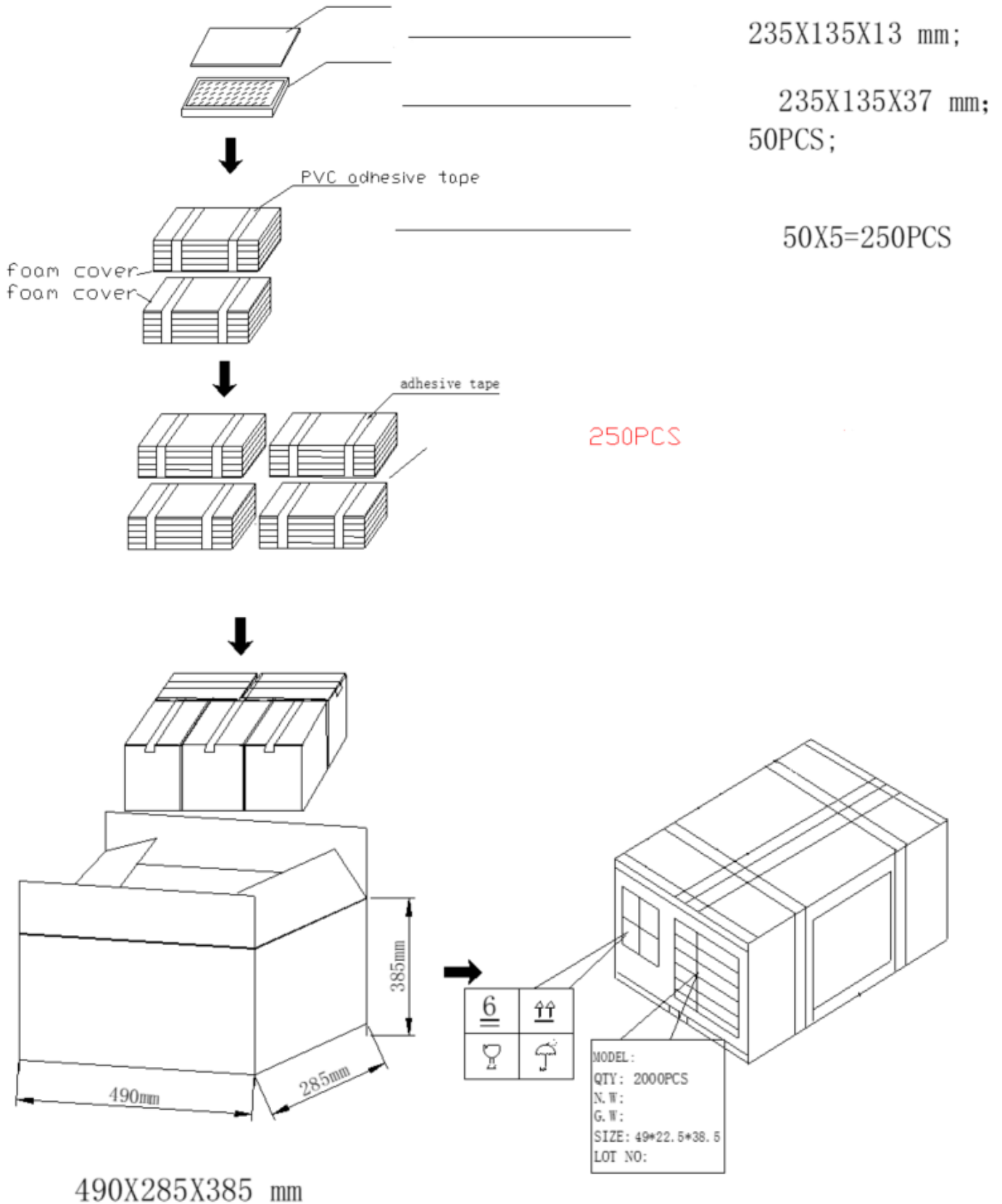
Recommended Wave Solder Profile



Dimensions



Packaging



Specifications Revisions

Revision	Description	Date	Approved
-	RELEASED FROM ENGINEERING	12/31/2003	-
A	ADDED DIMENSIONS	08/27/2004	RW
B	REMOVED LEAD FREE ADDED ROHS	08/10/2005	-
C	REVISED TERMINAL MATERIAL	03/21/2006	-
D	REVISED TERMINAL LENGTH	04/17/2008	BR
E	REVISED TO 3D DRAWING TEMPLATE	04/17/2008	BR
F	REVISED OPERATING TEMPERATURE	07/23/2015	ML
G	REVISED VP-P TO V0-PK	11/03/2021	-
H	Update Spec Format, Add Details for Reliability, Packaging, etc.	09/24/2024	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.