



# PUI audio



Data Sheet

AT-1620-TWT-R

## Features:

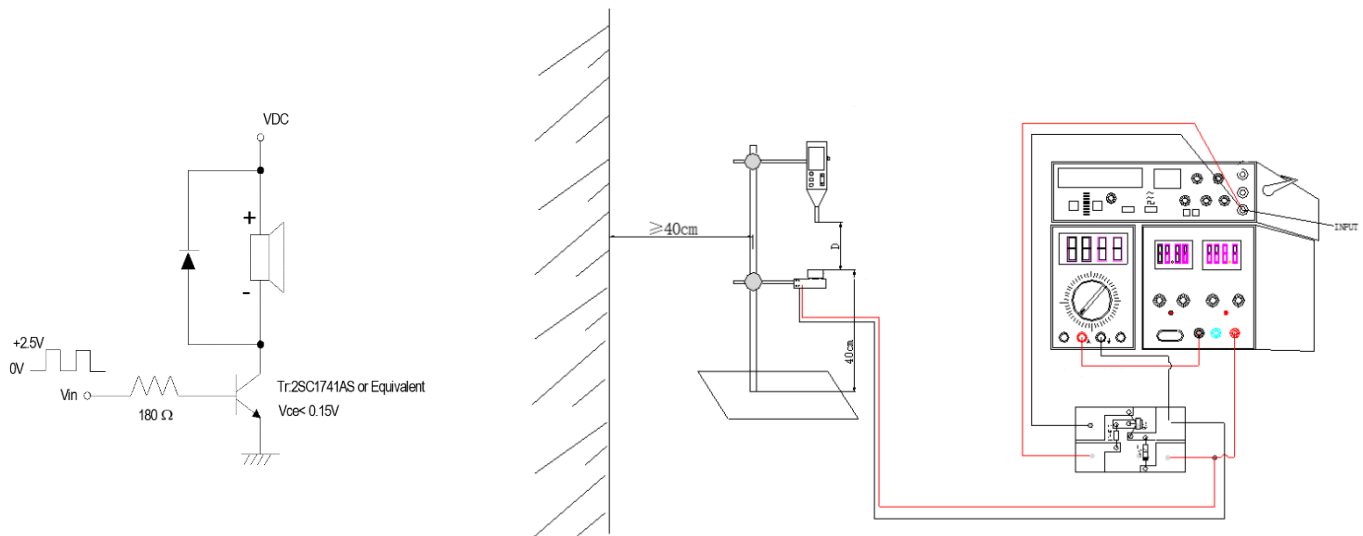
- 6V0-pk, 2048Hz Magnetic Transducer
- Pin Type
- Wave Solder and Washing Allowed

## Specifications

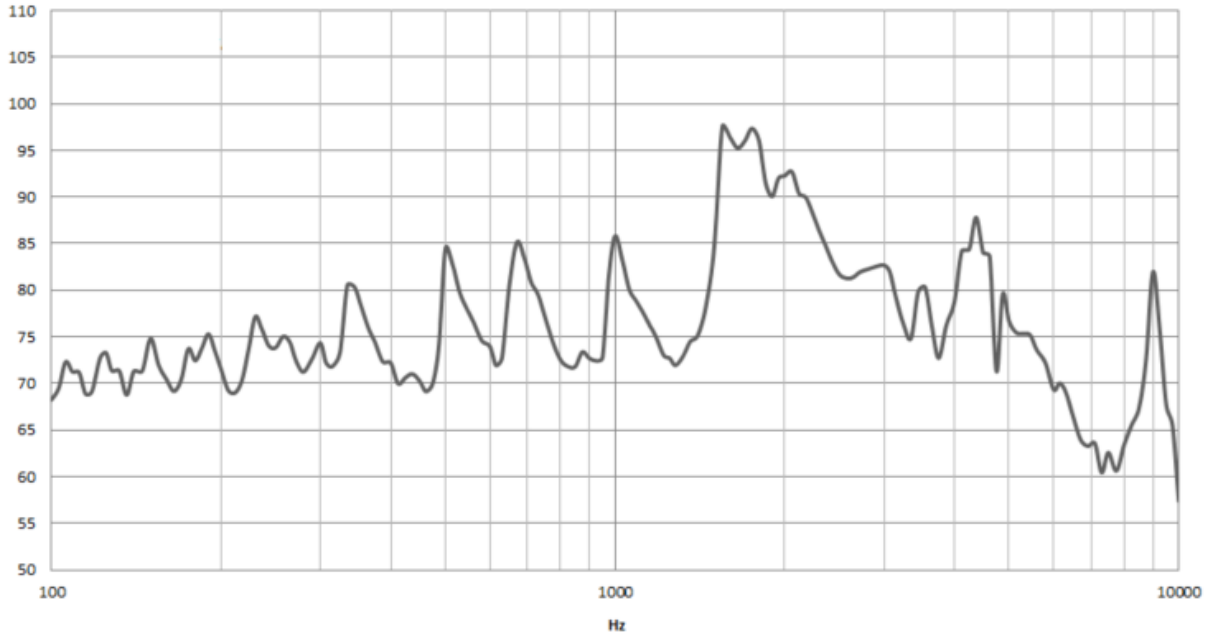
Parameters	Values	Units
Rated Voltage	6	V0-p
Operating Voltage Range	4 ~ 8	V0-p
Current Draw at Rated Voltage	40(Max.)	mA
Coil Resistance	50 ± 5	Ohms
Minimum SPL @ 10cm	90	dBA
Resonant Frequency	2,048 ± 500	Hz
Housing Material	NORYL	-
Terminal Material	Sn Plated Copper	-
Weight	2	Grams
Acceptable Soldering Methods	Hand Solder, Wave Solder	See following pages for details
Environmental Compliances	RoHS/REACH	-
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-30 ~ +70	°C

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

Standard Test Fixture (Distance: 10cm, 6Vpk, 2048Hz square wave)



## Typical Frequency Response (6Vpk, 2048Hz square wave, 10cm)

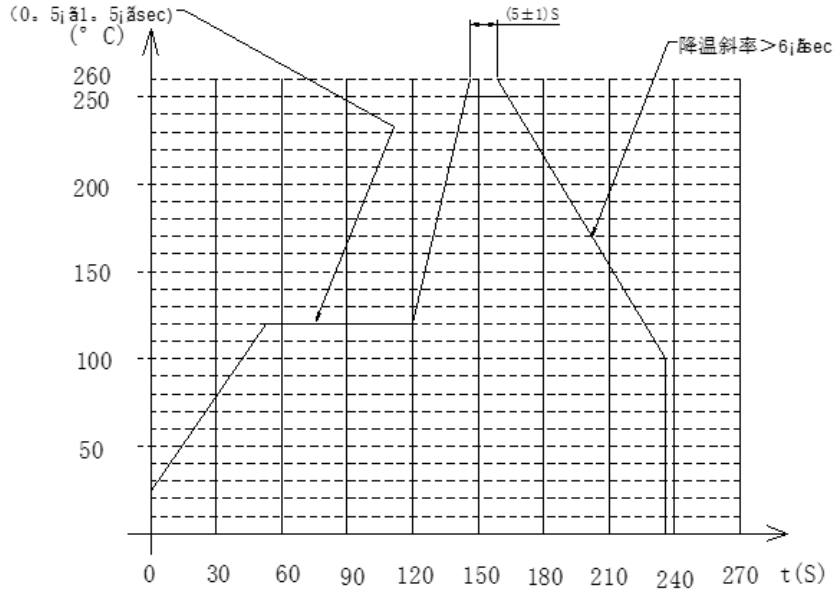


## Reliability Testing

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**

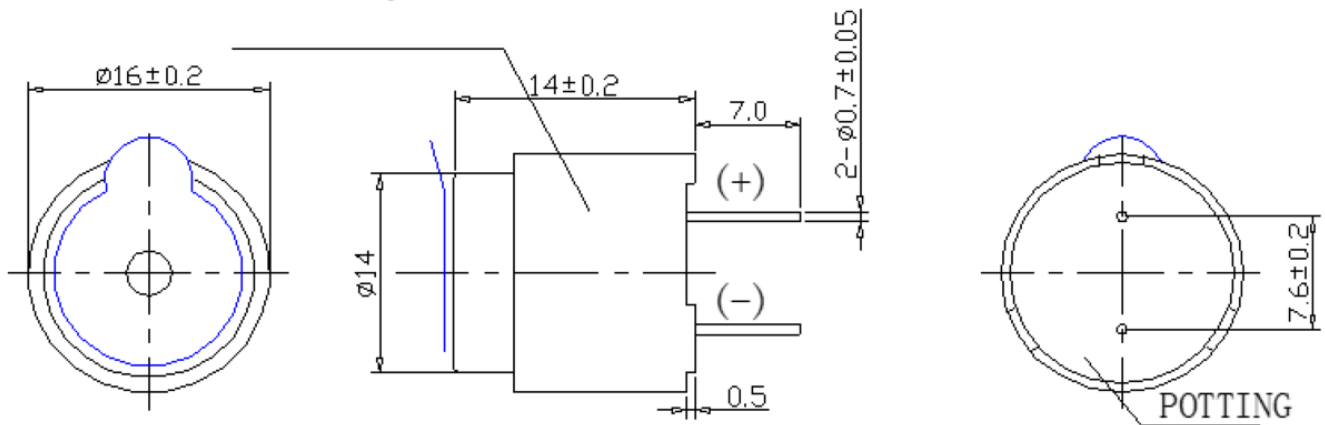
## Recommended Wave Solder Profile



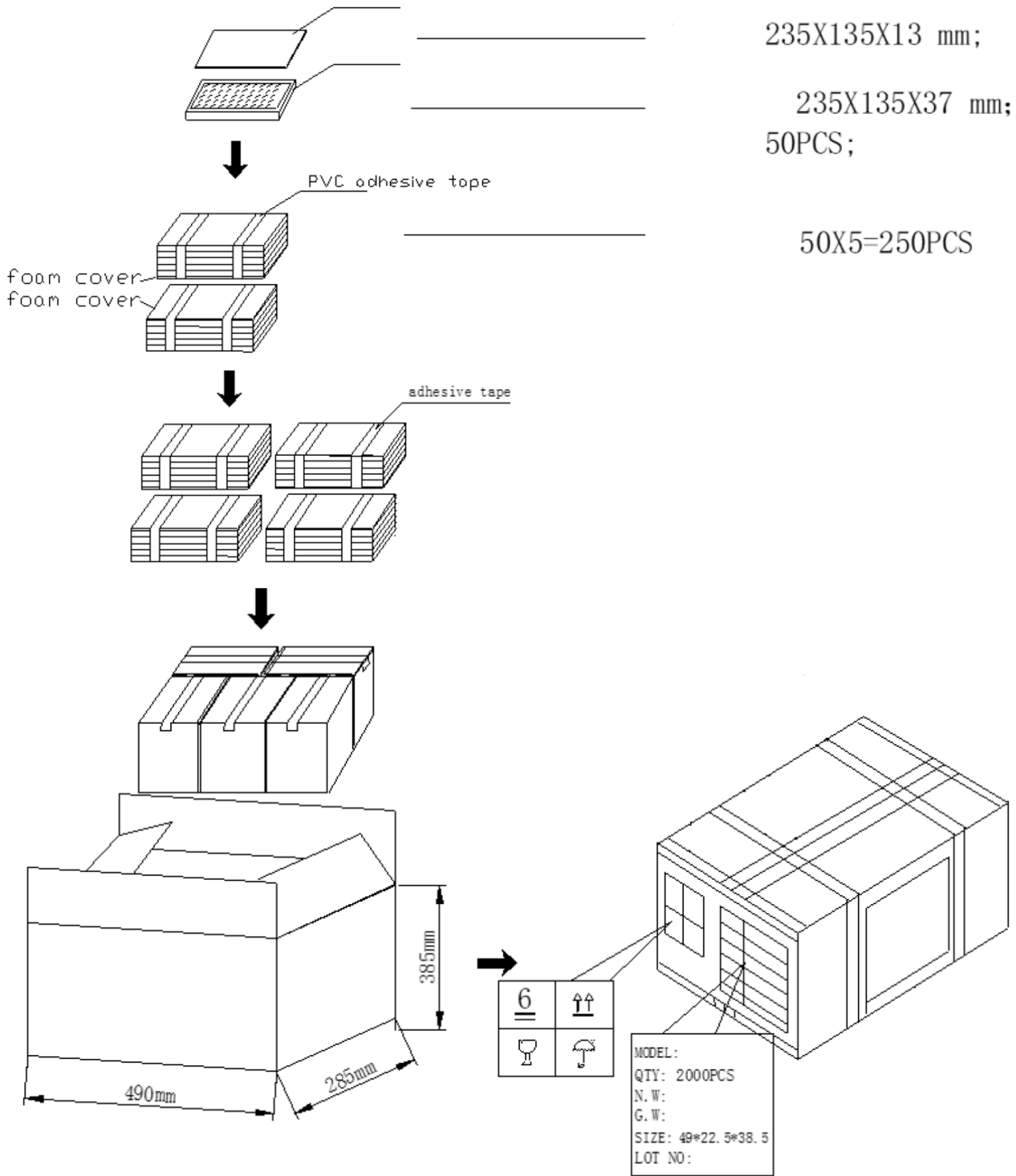
**\*Manual Soldering Temp 350C, Soldering Time < 3 Seconds**

## Dimension

AT-1620  
-TWT-R  
P. U. I ⊕ YM



## Packaging



**Specification Revisions**

<b>Revision</b>	<b>Description</b>	<b>Date</b>	<b>Approved</b>
-	RELEASED FROM ENGINEERING	09/24/2004	-
A	REMOVED LEAD FREE ADDED ROHS	08/10/2005	-
B	REVISED TERMINAL MATERIAL	03/21/2006	-
C	REVISED TO 3D DRAWING TEMPLATE	10/15/2007	BR
D	REVISED MIN SPL LEVEL	02/24/2014	BR
E	REVISED TEMPERATURES AND WEIGHT	02/19/2020	ML
F	Update Spec Format and Drawing Image, 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.