



# PUIaudio



## Data Sheet

AR03450MR

### Features:

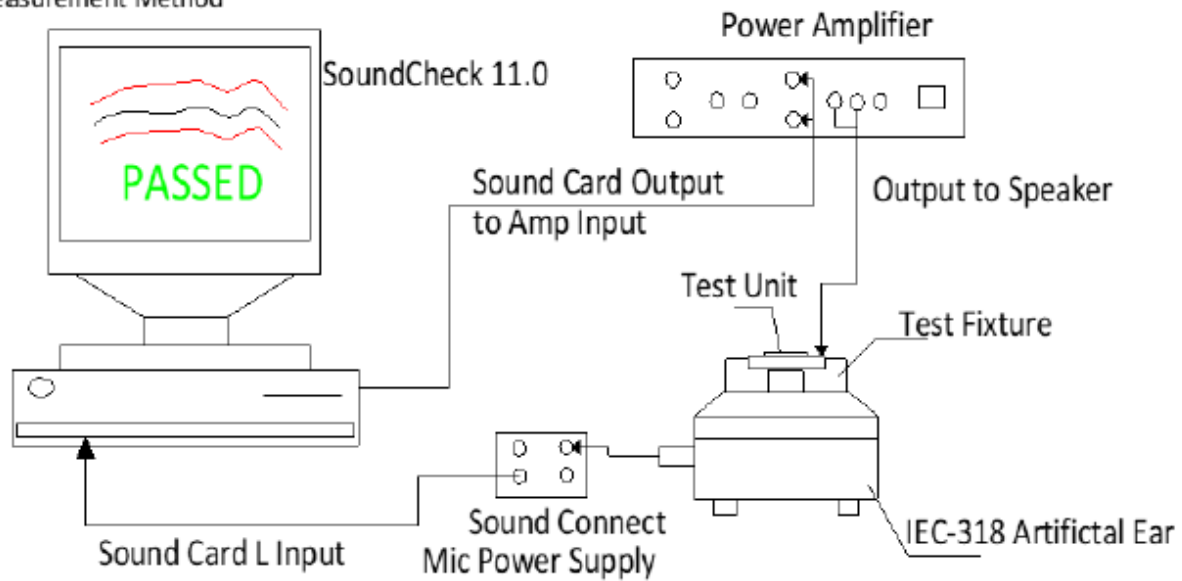
- Low 100 Hz resonant frequency
- 50 Ohm Impedance
- High 20mW max input power

### Specifications

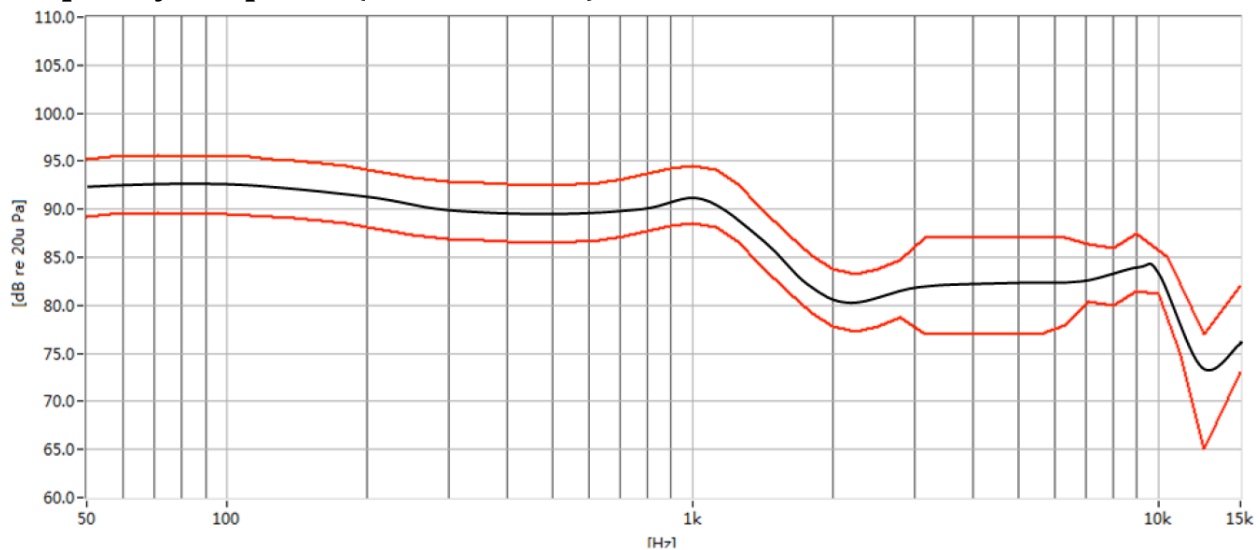
Parameters	Values	Units
Rated Input Power	10	mWatts
Max Input Power	20	mWatts
Impedance	$50 \pm 15\%$	Ohms
Sensitivity (SPL @ 300, 500, 600, 800 Hz; 224mV)	$90 \pm 3$	dB Pa/V
Resonant Frequency	$100 \pm 20\%$	Hz
Frequency Range	50 ~ 10,000	Hz
Distortion (@ 50 ~ 1000 Hz/ 224mV)	5% Max	-
Frame Material	A3 Metal	-
Magnet Material	NdFeB	-
Diaphragm Material	Mylar	-
Weight	1.5	Grams
Ingress Protection	IPX7	-
Environmental Compliances	ROHS/REACH	-
Buzz, Rattle, etc.	Should not be audible with 707 mV sine wave from 50 Hz to 15 kHz	-
Polarity	When positive voltage is applied to the positive terminal, the diaphragm will move outward	-
Operating Temperature	-25 ~ +60	°C
Storage Temperature	-25 ~ +60	°C

## Measurement Method (measured with 224mV, Temperature: 25 ~ 35°C, Relative Humidity: 25%~75%)

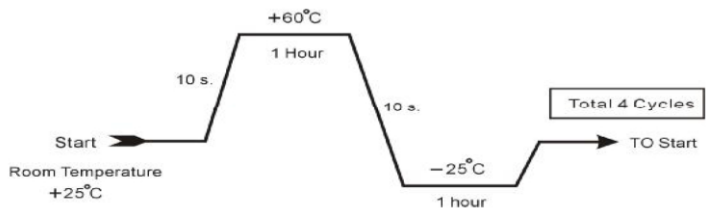
### 1. Measurement Method



## Frequency Response (measured at 224mV)

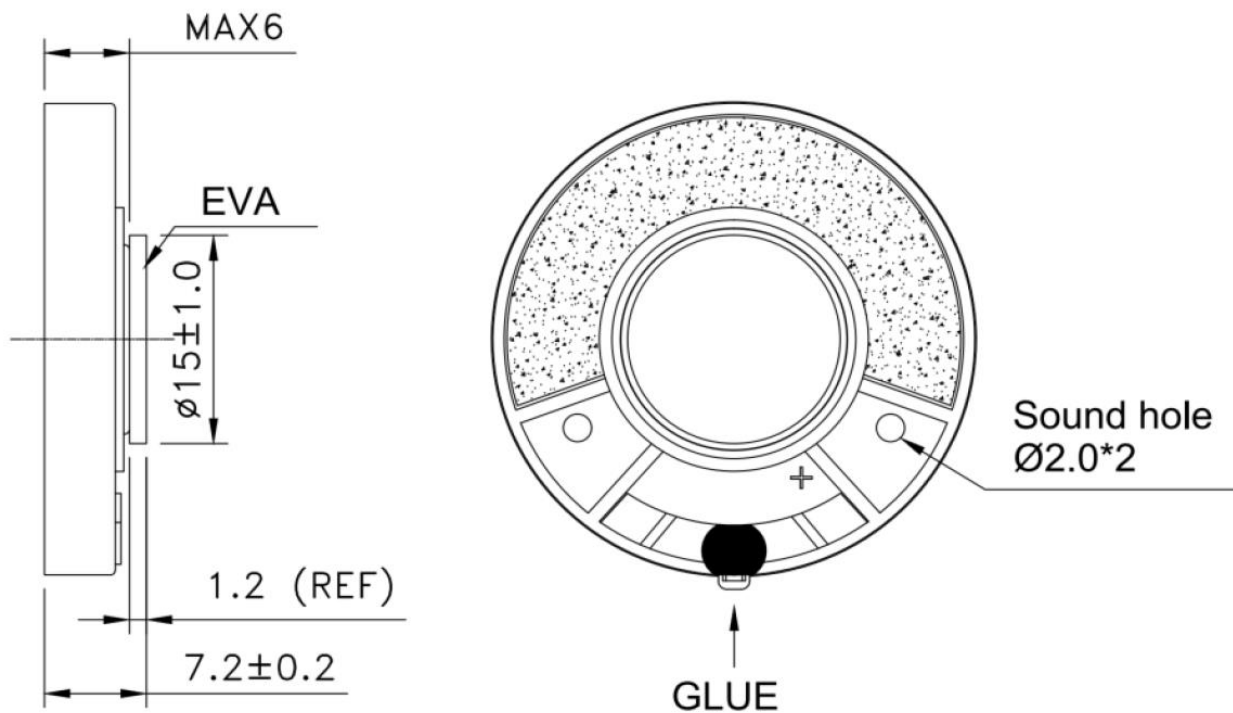


## Reliability Testing

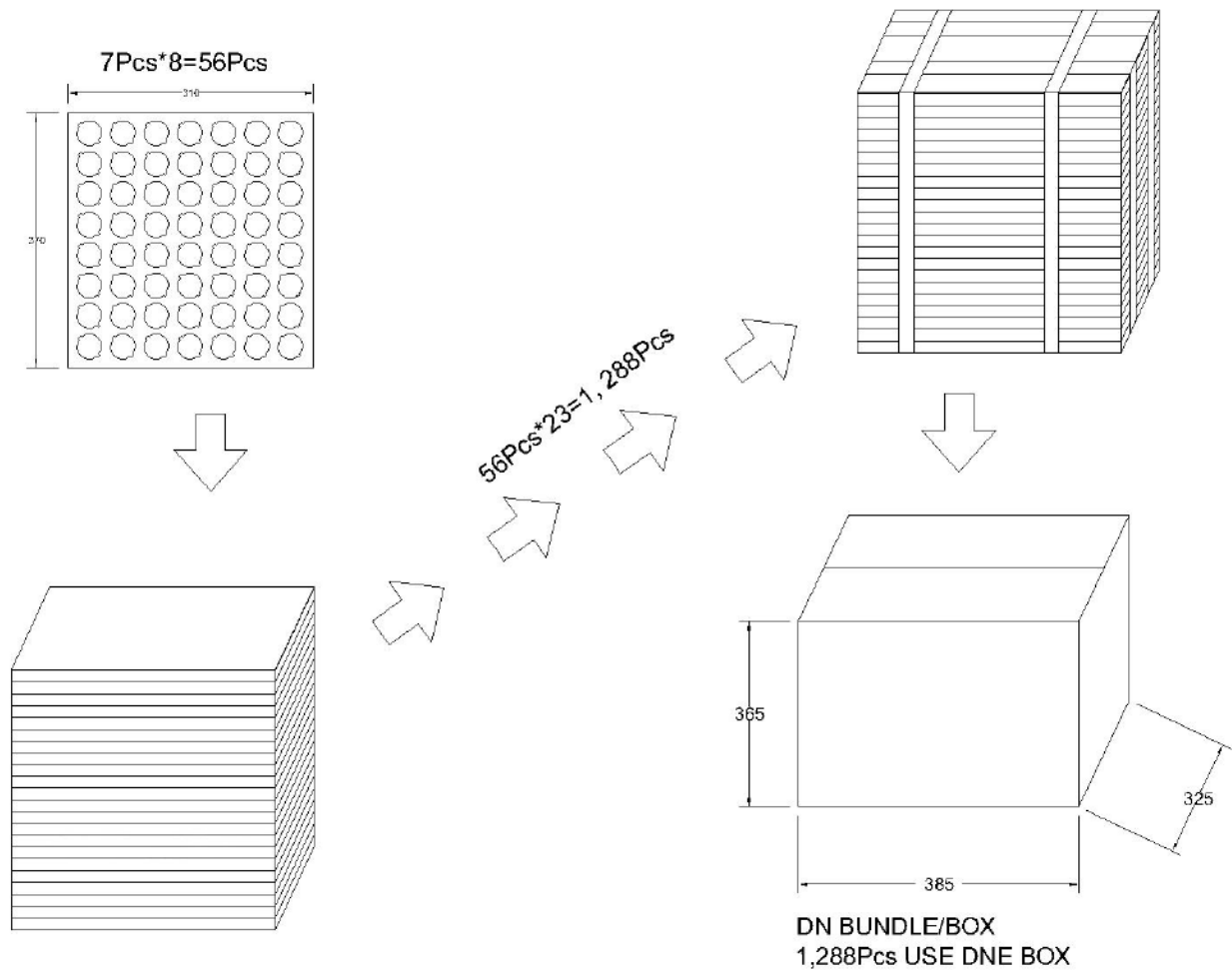
Type of Test	Test Specifications
High Temperature Test	48 hours at +60°C ± 2°C
Low Temperature Test	48 hours at -25°C ± 2°C
Humidity Test	48 hours at +40°C ± 2°C with relative humidity at 90~95% relative humidity
Temperature Cycle Testing	<p>The part shall be subjected to 4 cycles. One cycle shall be 2 hours and consist of:</p>  <p>The diagram shows a temperature cycle starting at 'Room Temperature +25°C'. It rises at 10 s to +60°C, holds for 1 Hour, falls at 10 s to -25°C, and holds for 1 hour. A box labeled 'Total 4 Cycles' indicates the repetition of this cycle. The cycle ends with an arrow pointing 'TO Start'.</p>
Vibration Test	Frequency 15~55 Hz, Amplitude 1.5 mm for 2 hours
Drop Test	100 cm free fall on concrete floor, 10 times

After each test, the speaker's SPL shall be ±4 dB of the original SPL after 1 hour of recovery.

## Dimensions



Packaging



Specifications Revisions

Revision	Description	Date	Approved
A	Released from Engineering	3/21/2025	JD

- 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.