



PUIaudio



Data Sheet

AR03032MR-3

Features:

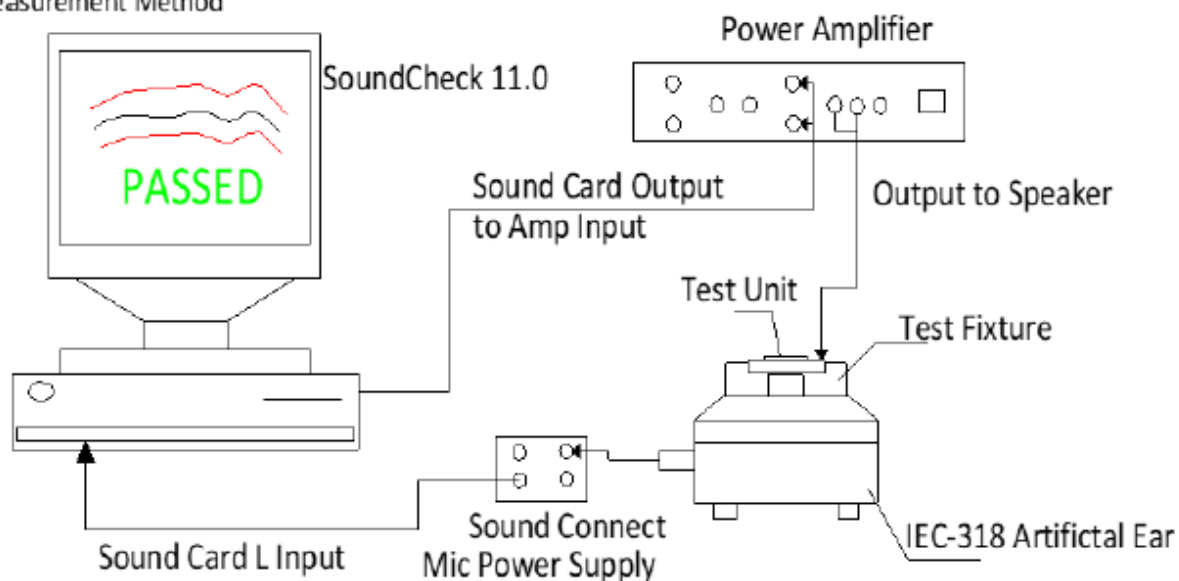
- Low 160 Hz resonant frequency
- High 133 dB output with 800mV in Artificial Ear (1cm)
- High 25mW max input power

Specifications

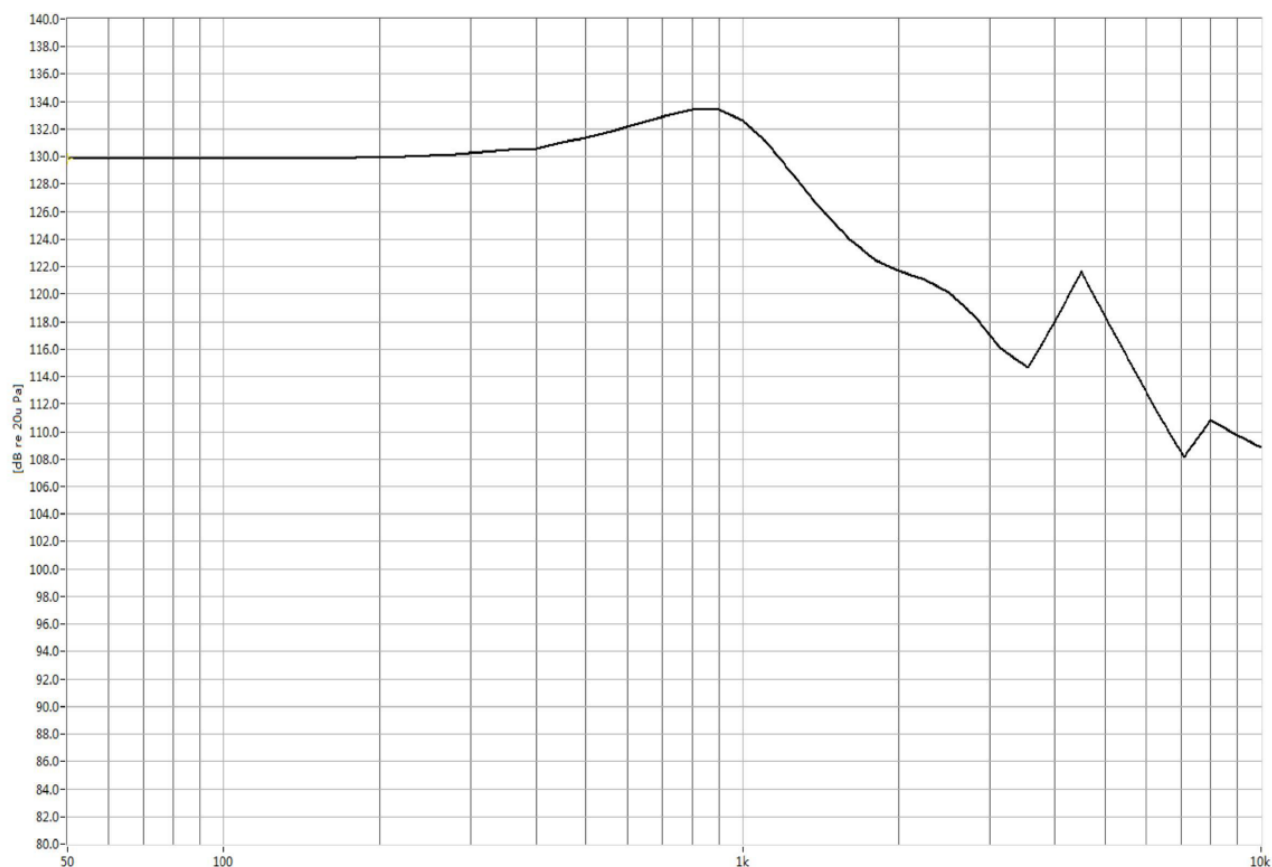
Parameters	Values	Units
Rated Input Power	15	mWatts
Max Input Power	25	mWatts
Impedance	$32 \pm 15\%$	Ohms
Sensitivity (SPL @ 1kHz, 1mW)	133 ± 3	dB
Resonant Frequency	$160 \pm 20\%$	Hz
Frequency Range	20 ~ 20,000	Hz
Distortion (@ 50 ~ 3000 Hz/ 3mW)	5% Max	-
Frame Material	Plastic	-
Magnet Material	NdFeB	-
Diaphragm Material	PET	-
Weight	2	Grams
Environmental Compliances	ROHS/REACH	-
Buzz, Rattle, etc.	Should not be audible with 693 mV sine wave from 50 Hz to 4 kHz	-
Polarity	When positive voltage is applied to the positive terminal, the diaphragm will move outward	-
Operating Temperature	-20 ~ +55	°C
Storage Temperature	-20 ~ +60	°C

Measurement Method (measured with 1mV, Temperature: 25 ~ 35°C, Relative Humidity: 25%~75%)

1. Measurement Method



Frequency Response

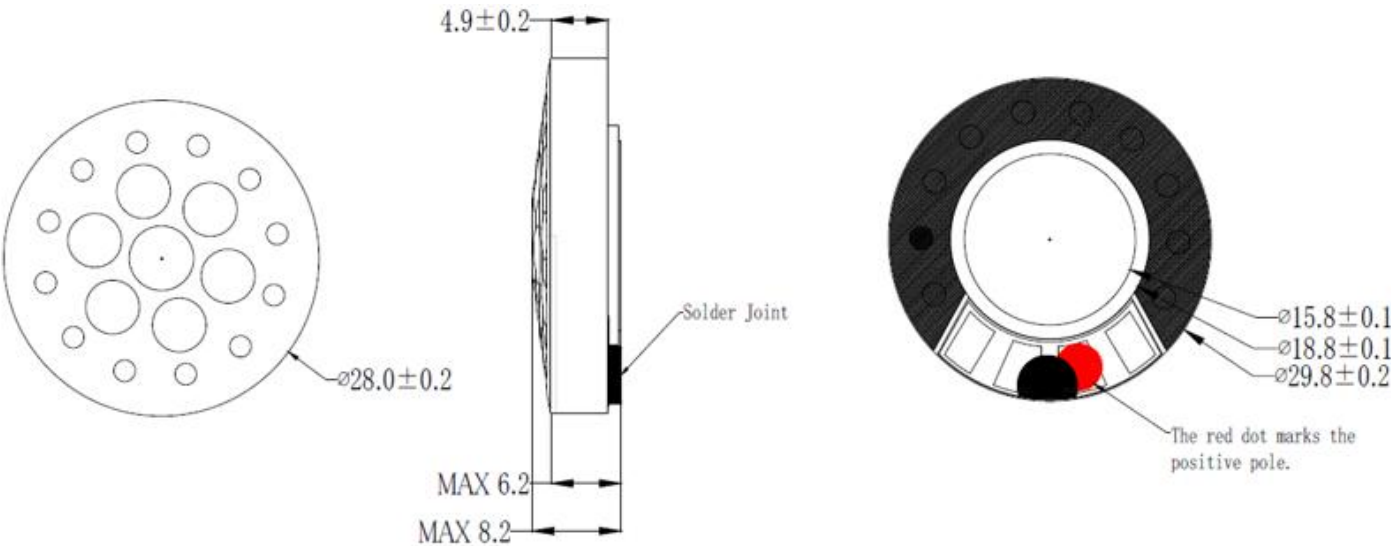


Reliability Testing

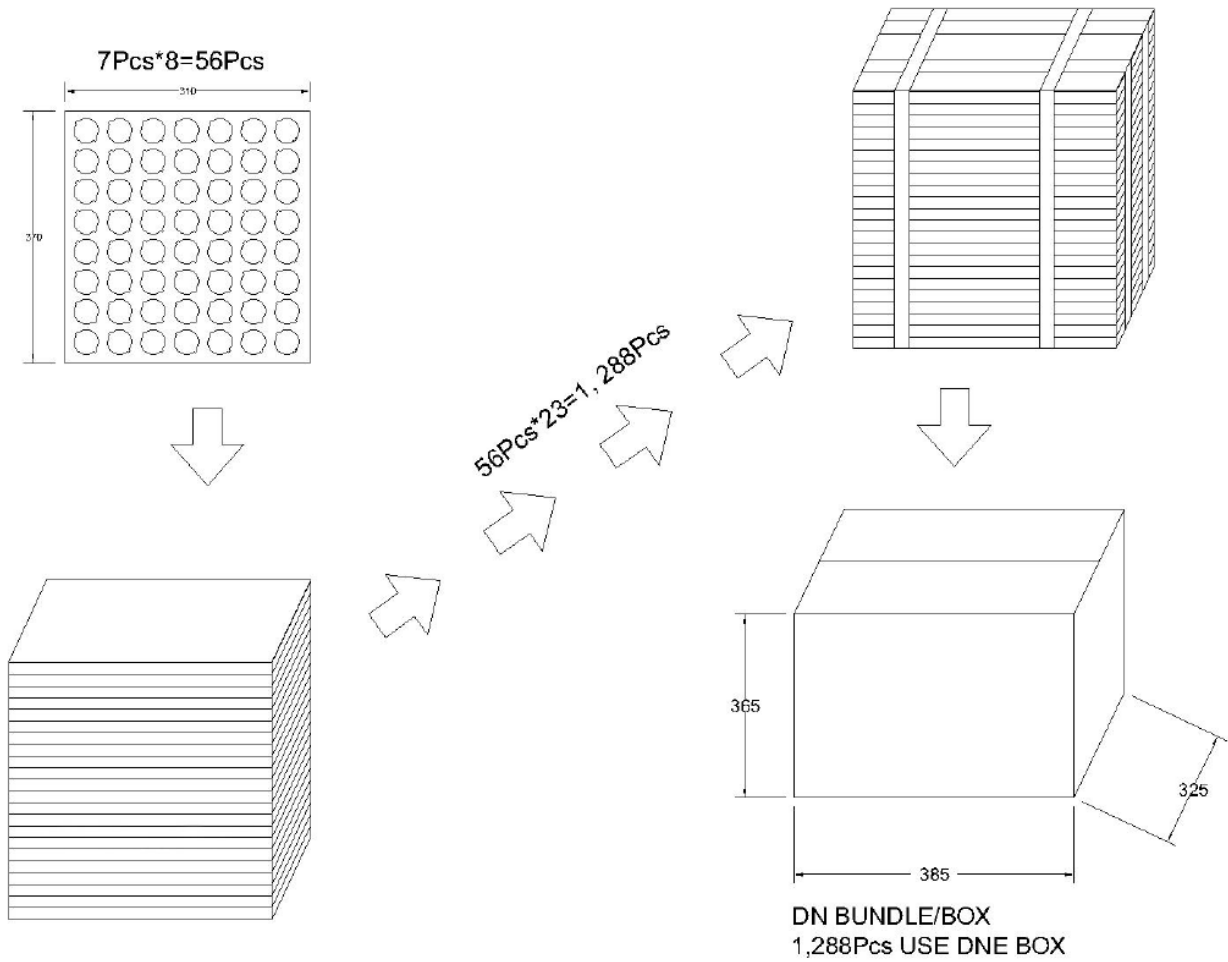
Type of Test	Test Specifications
High Temperature Test	48 hours at +60°C ± 2°C
Low Temperature Test	48 hours at -20°C ± 2°C
Humidity Test	24 hours at +50°C ± 2°C with relative humidity at 90~95% relative humidity
Temperature Cycle Testing	The part shall be subjected to 15 cycles. One cycle shall be 3 hours and consist of: 50°C+1°C/0.5h→20°C/0.5h→-20°C/0.5h→20°C/0.5h
Vibration Test	Frequency 15~55 Hz, Amplitude 1.5 mm for 2 hours
Drop Test	Drop from a height of 100 cm onto a dry concrete surface at an angle of 75° ± 2°.

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
B	Revised Drawing and Sensitivity	6/13/2025	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.