



PUIaudio



Data Sheet

AS05008MO-WP-HT

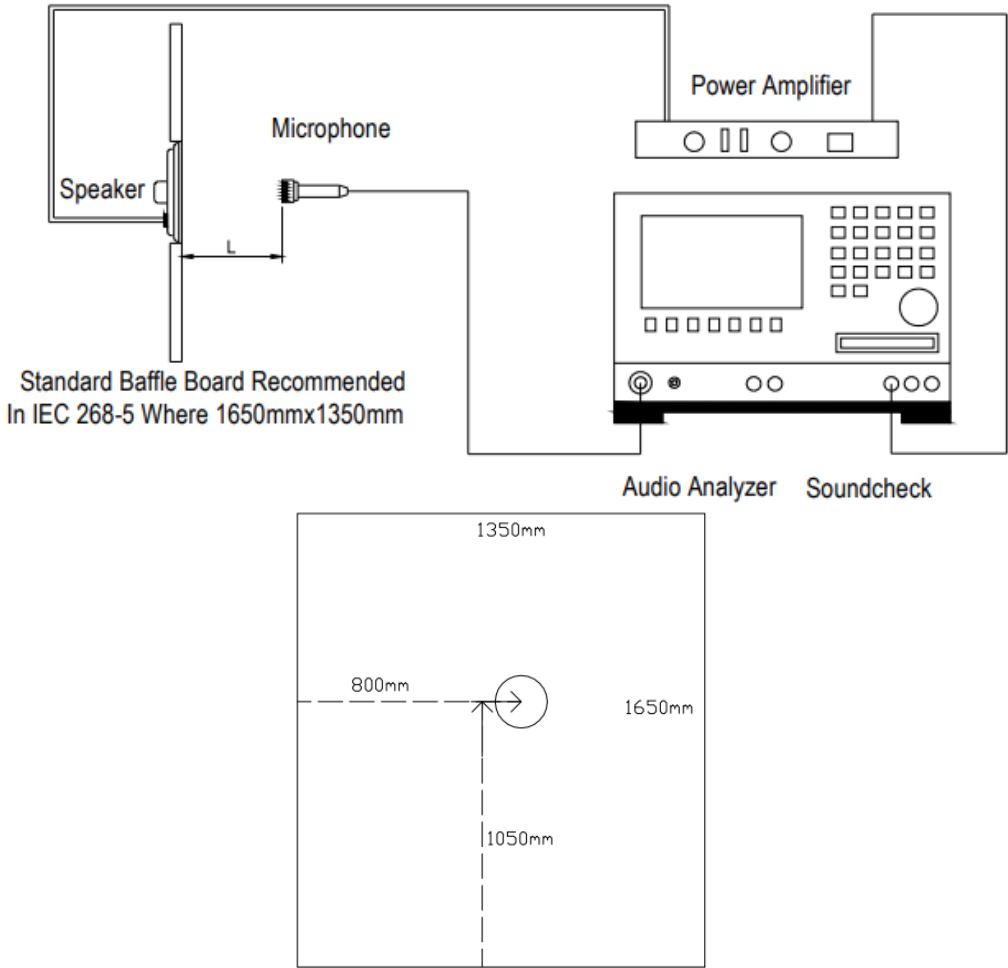
Features:

- IP65 Rating
- High Temperature grading

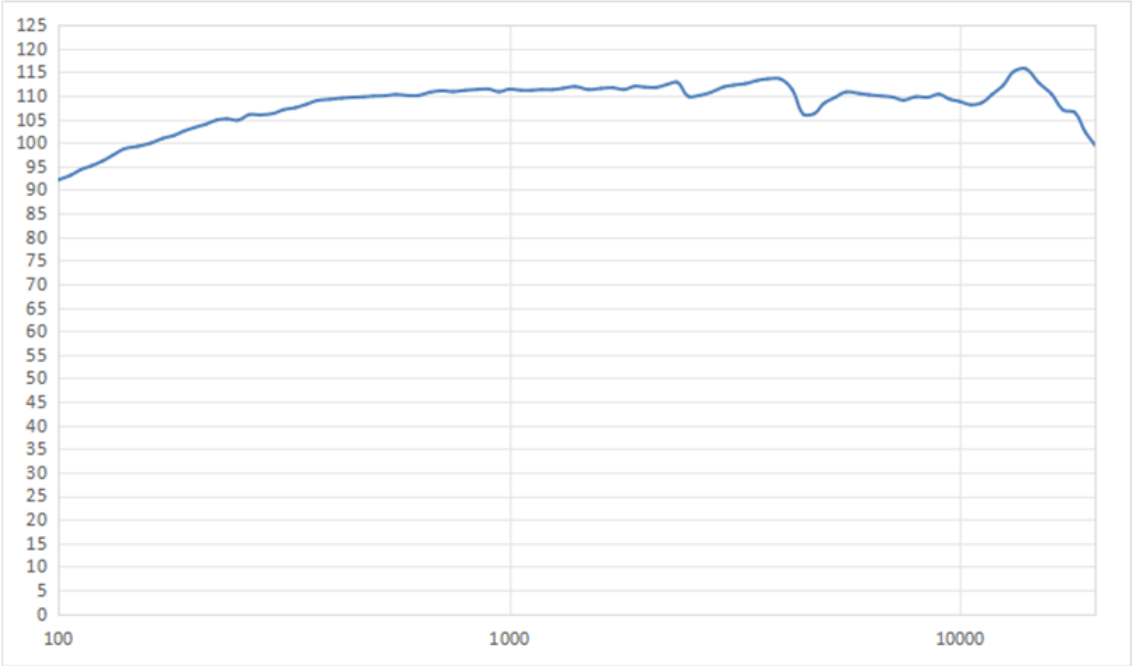
Specifications

Parameters	Values	Units
Rated Input Power	5	Watts
Max Input Power	8	Watts
Impedance	8±15%	Ohms
Output SPL (At (0.8K, 1K, 1.18K, 1.5K); 5W/0.1M)	111±3	dB
Resonant Frequency (t 1.0 V in free air)	320±20%	Hz
Frequency Range (based on -10 dB limits on frequency response graph)	150~20K	Hz
THD	<5%	
Frame Material	SPCC	-
Magnet Material	NdFeB	-
Diaphragm Material	Rubber + Carbon fiber	-
Weight	56	Grams
Ingress Protection Rating	IP65	-
Buzz, Rattle, etc.	Must be normal at sine wave between 50 ~ 10K Hz (6.32 V)	-
Environmental Compliances	ROHS/REACH	-
Polarity	Cone will move forward with positive DC current to "+" terminal	-
Storage Temperature	-40~+105	°C
Operating Temperature	-40~+85	°C

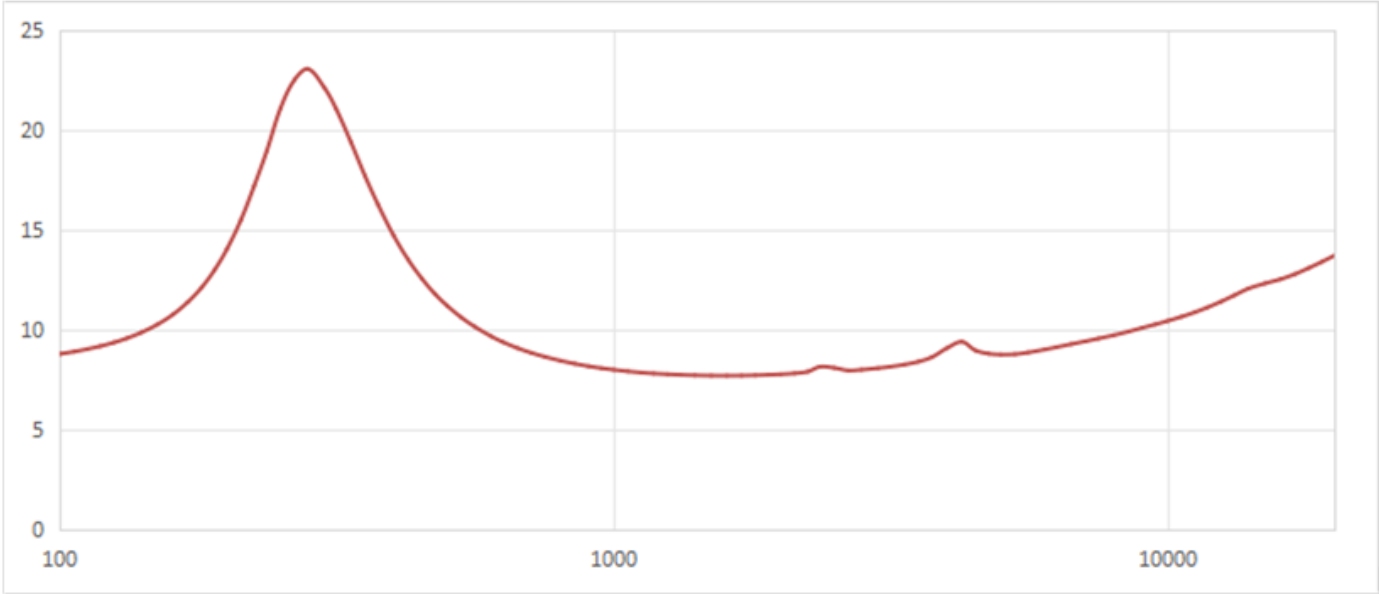
Measurement Method (L=10cm)



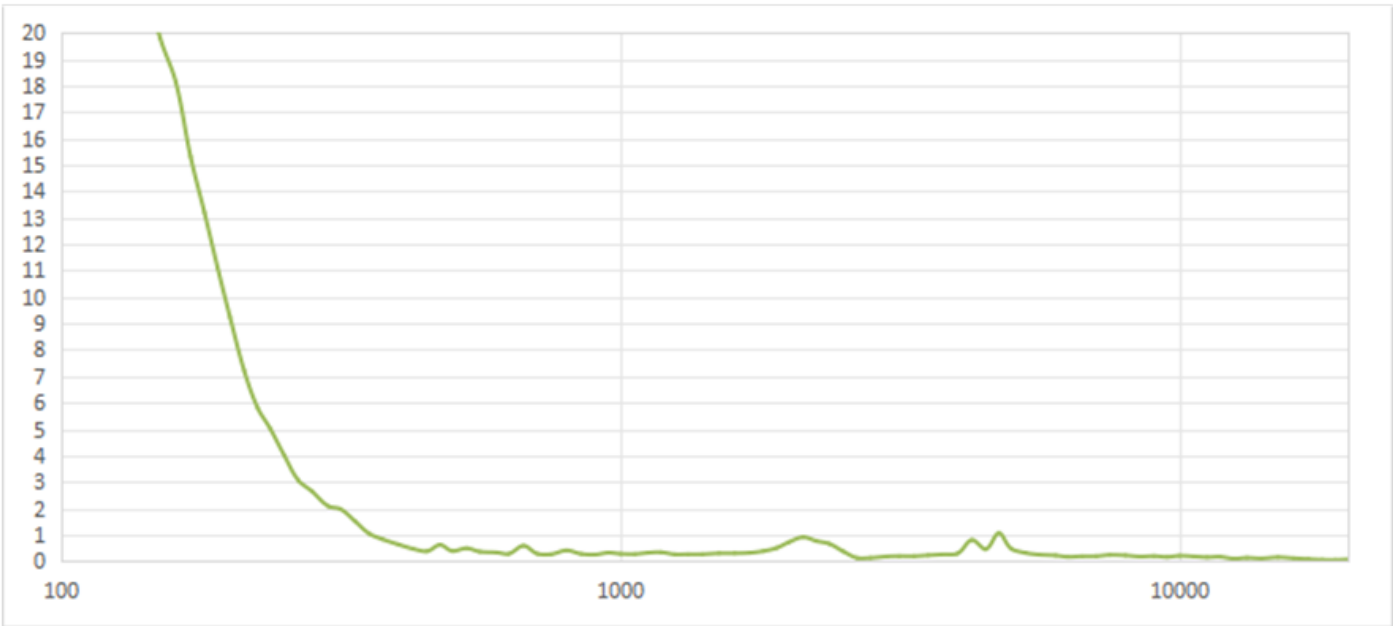
Typical Frequency Response (5W/0.1m)



Typical Impedance Response (1v)



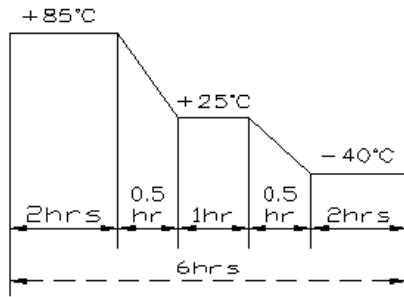
THD Curve (5W, 0.1m)



Typical Thiele-Small Parameters (based on Golden Sample, up to 20% variance is normal)

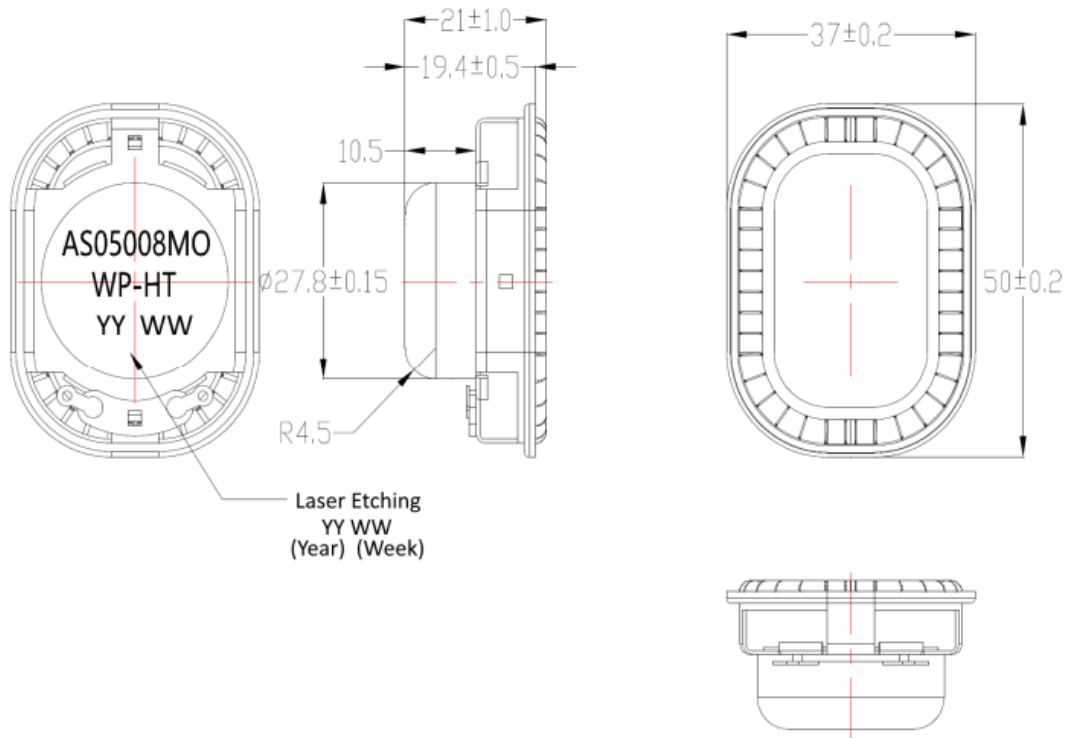
Specification	Value	Description
Re	6.51 Ω	DC resistance
Le	0.062 mH	Inductance @ 10 kHz
Fs	316.5 Hz	Resonant Frequency
Mms	0.998 g	Moving Mass
Bl	3.836	Magnet Force Factor
Qms	2.565	Mechanical Q-factor
Qes	0.879	Electrical Q-factor
Qts	0.654	Total Q-factor
Vas	0.0425	Equivalent Air Volume of Suspension

Reliability Testing

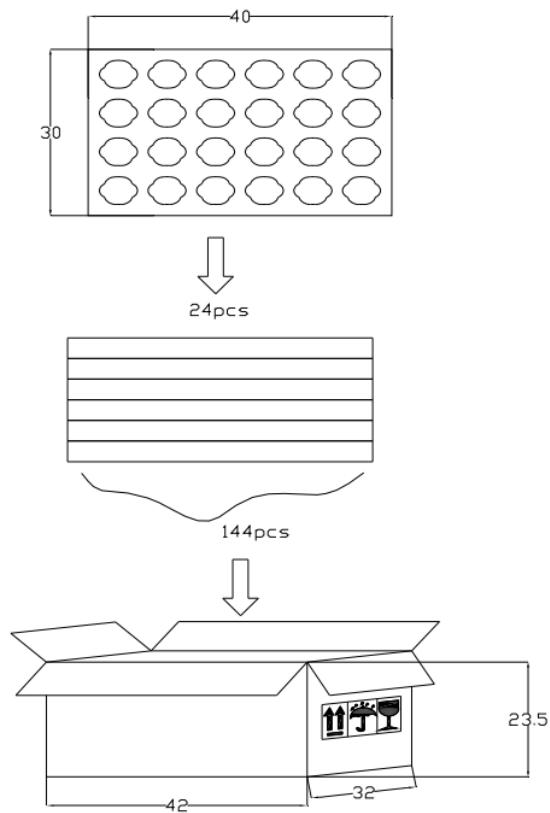
Type of Test	Test Specifications
High Temperature Test	96 hours at 85 $\pm$ 2 $^{\circ}$ C
Low Temperature Test	96 hours at -40 $\pm$ 2 $^{\circ}$ C
Humidity Test	48 hours at 40 $\pm$ 2 $^{\circ}$ C with relative humidity at 90~95%
Temperature Cycle Testing	Subject to 4 cycles, each cycle consists of 6 hours.  The diagram illustrates a temperature cycle profile. It starts at +85°C for 2 hours, then ramps down over 0.5 hours to +25°C, where it remains for 1 hour. It then ramps down over 0.5 hours to -40°C, where it remains for 2 hours. The total duration of one cycle is 6 hours, indicated by a dashed line at the bottom.
Vibration Test	Speaker shall be measured after applying vibration of amplitude of 1.5mm with 30 $\pm$ 15Hz for 3 hours.
Drop Test	Drop the speakers onto concrete floor 10 times from the height of 75cm
Load Test	5W White noise is applied for 96 hours

After each test, let rest for 6 hours, then the part shall be within $\pm$ 3 dB.

Dimensions



Packaging



24 pcs per tray
1 tray for unit
6 units per carton
Total: 144pcs per box

Specifications Revisions			
Revision	Description	Date	Approved
A	Released from Engineering	7/7/2025	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.