



Data Sheet

AS05008MR-15

Features:

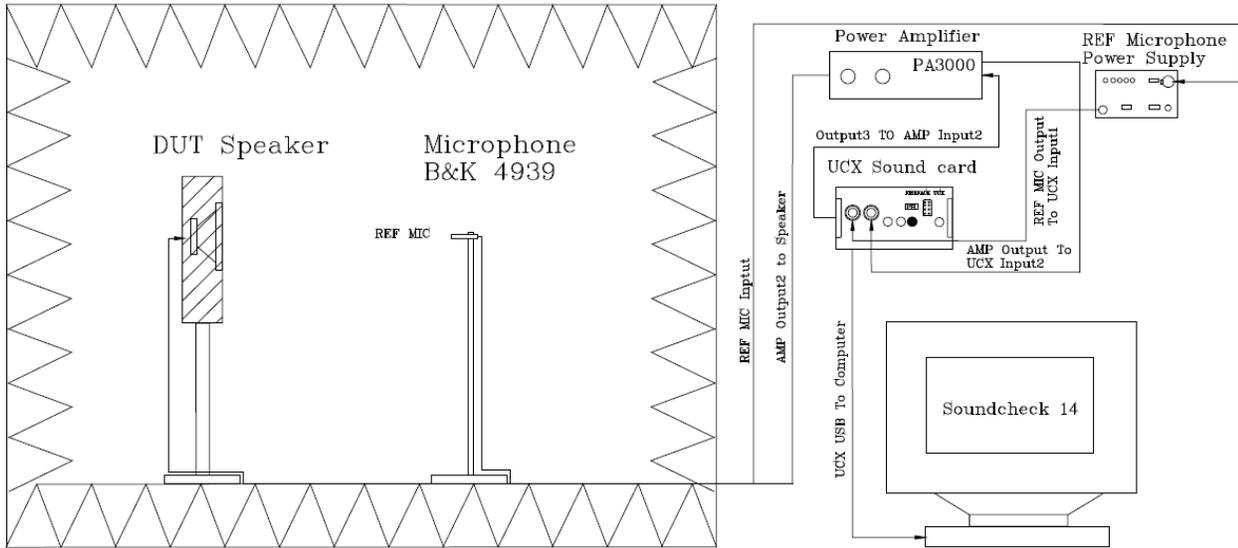
- High power for this frame size
- IP65 Rating
- High Temperature grading

Specifications

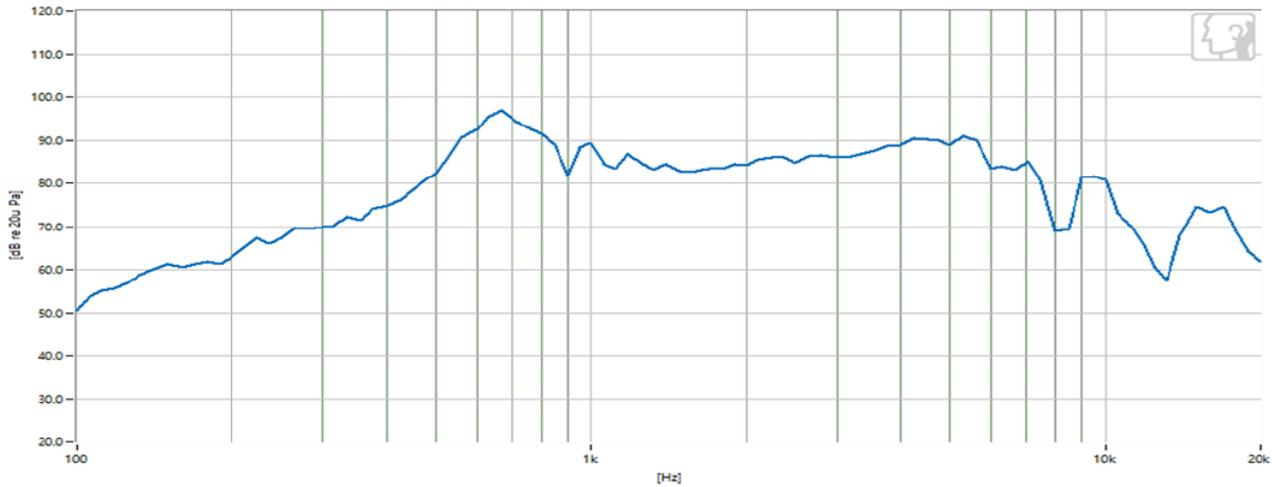
Parameters	Values	Units
Rated Input Power	2.5	Watts
Max Input Power	3.0	Watts
Impedance	8 ± 15%	Ohms
Output SPL (At (1.0K, 1.2K, 1.5K, 2.0K); 1W/1M)	85 ± 3	dB
Resonant Frequency	650 ± 20%	Hz
Frequency Range	650 ~ 10,000	Hz
THD	<10%	At 1.0KHz /1W/10cm
Magnet Material	Ferrite	-
Diaphragm Material	PEN	-
Ingress Protection	IP65	-
Weight		Grams
Buzz, Rattle, etc.	Not be audible at 4.47V sine wave between FO~5K	-
Environmental Compliances	ROHS/REACH	-
Polarity	Diaphragm shall move Forward when a positive DC current is applied to the "+" terminal	-
Storage Temperature	-40 ~ 85	°C
Operating Temperature	-40 ~ 80	°C

Measurement Method

Speaker Testing framework diagram



Typical Frequency Response

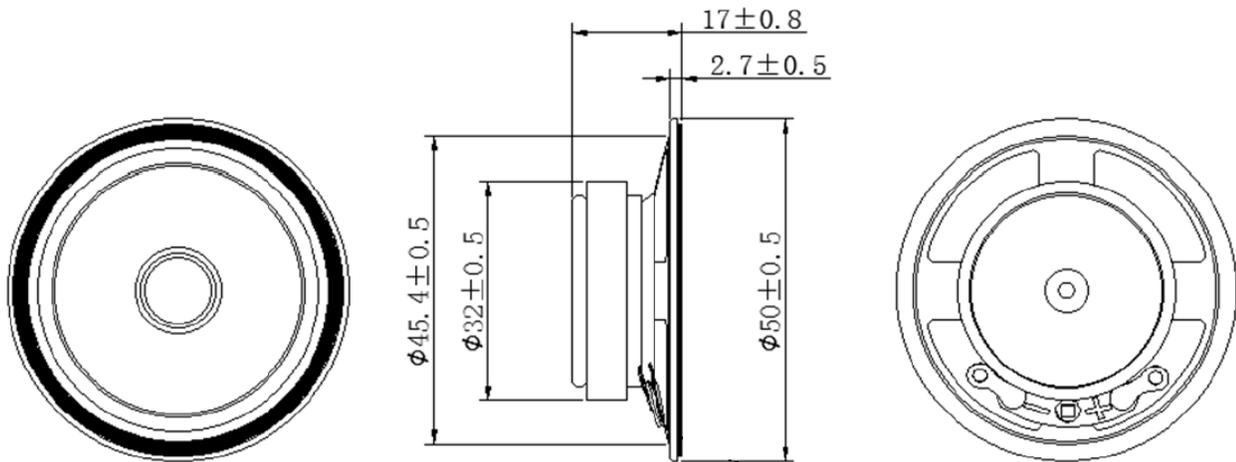


Reliability Testing

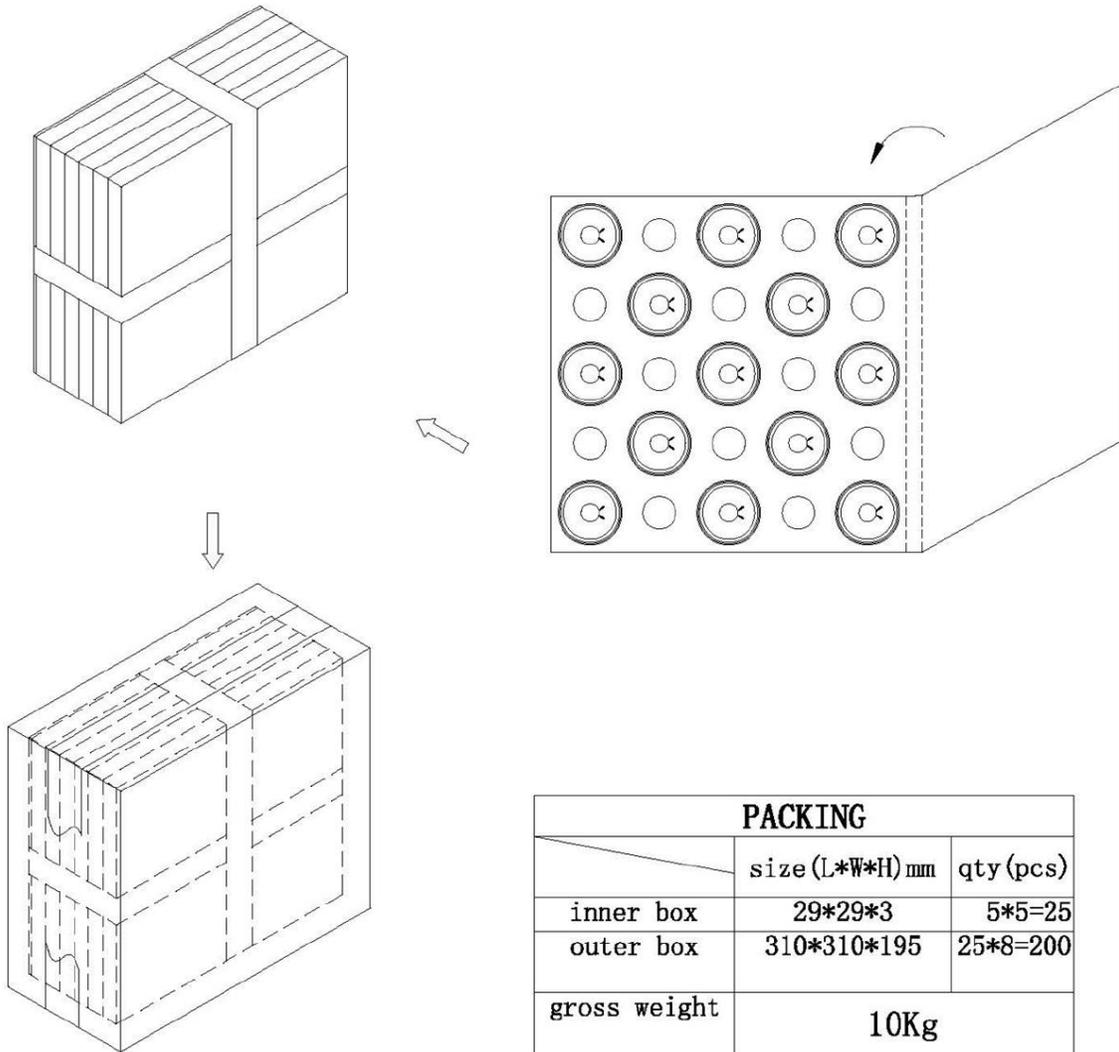
Type of Test	Test Specifications
High Temperature Test	96 hours at 85°C
Low Temperature Test	96 hours at -30°C
Humidity Test	96 hours at 30°C with relative humidity at 90~95%
Temperature Cycle Testing	<p>Subject to 5 cycles with each cycle consisting of:</p> <p>The diagram illustrates a temperature cycle testing profile. It starts at +85°C for a 2-hour dwell. The temperature then ramps down to +25°C over a 0.5-hour period. It dwells at +25°C for 1 hour. The temperature then ramps down to -40°C over another 0.5-hour period. Finally, it dwells at -40°C for 2 hours. The total duration of one cycle is 6 hours, indicated by a dashed line at the bottom.</p>
Vibration Test	Speaker shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours.
Drop Test	Drop the speakers contained in normal box onto the board 40mm thick 10 times from the height of 75cm
Load Test	2.5W White noise is applied for 96 hours, at room temp

After each test let rest for 6 hour at 25°C, then the part shall be within ±3 dB.

Dimensions



Packaging



Specifications Revisions

Revision	Description	Date
A	Released from Engineering	1/10/2023

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.