PUIaudio

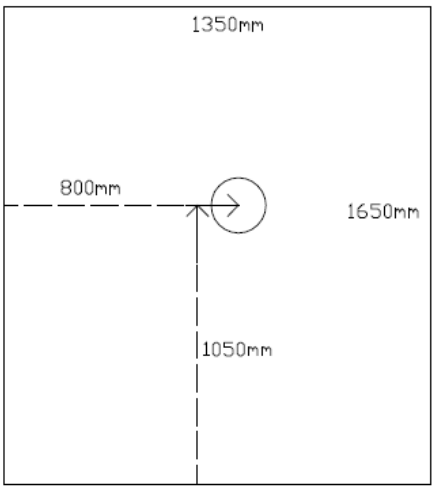
Data Sheet	AS02508MS

Specifications

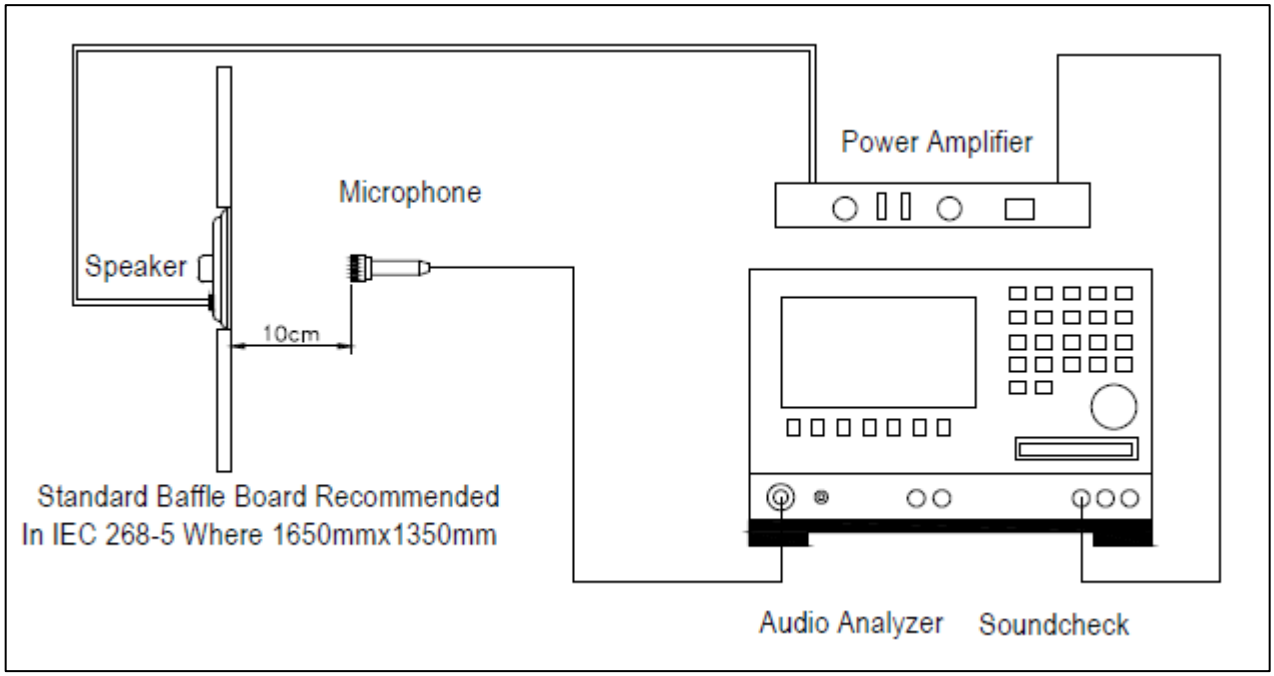
Parameters	Values	Units
Rated Input Power *(1cc enclosure)*	1	Watts
Max Input Power *(1cc enclosure)*	1.2	Watts
Impedance *(@ 1.5 kHz, 1V)*	8 ± 15%	Ohms
Output SPL *(2kHz @ 0.1W/0.1M) (1cc enclosure)*	90 ± 3	dB
Output SPL *(Free Air Average) (0.6, 0.8, 1.0, 1.5 kHz @ 0.1W/0.1M)*	84 ± 3	dB *(Reference Level 0dB SPL = 20µPa)*
Resonant Frequency *(Free Air)*	550 ± 20%	Hz
Frequency Range	550 ~ 5000	Hz
THD *(1kHz @ 1W) (1cc enclosure)*	< 10%	-
Frame Material	PPA	-
Magnet Material	NdFeB	-
Diaphragm Material	Peek	-
Weight	1.5	Grams
Acceptable Soldering Methods	Hand Solder	-
Buzz, Rattle, etc. *(Free Air)*	Should not be audible when driven with sine wave	Fo~20k @ 0.89 V
Environmental Compliances	ROHS/REACH	-
Polarity	Cone moves forward when positive DC current is applied to (+) terminal	-
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-20 ~ +60	°C

All specifications measured at 5 ~ 35°C, 45~85% RH, under 86~106 kPa of pressure, unless otherwise noted.

Measurement Method

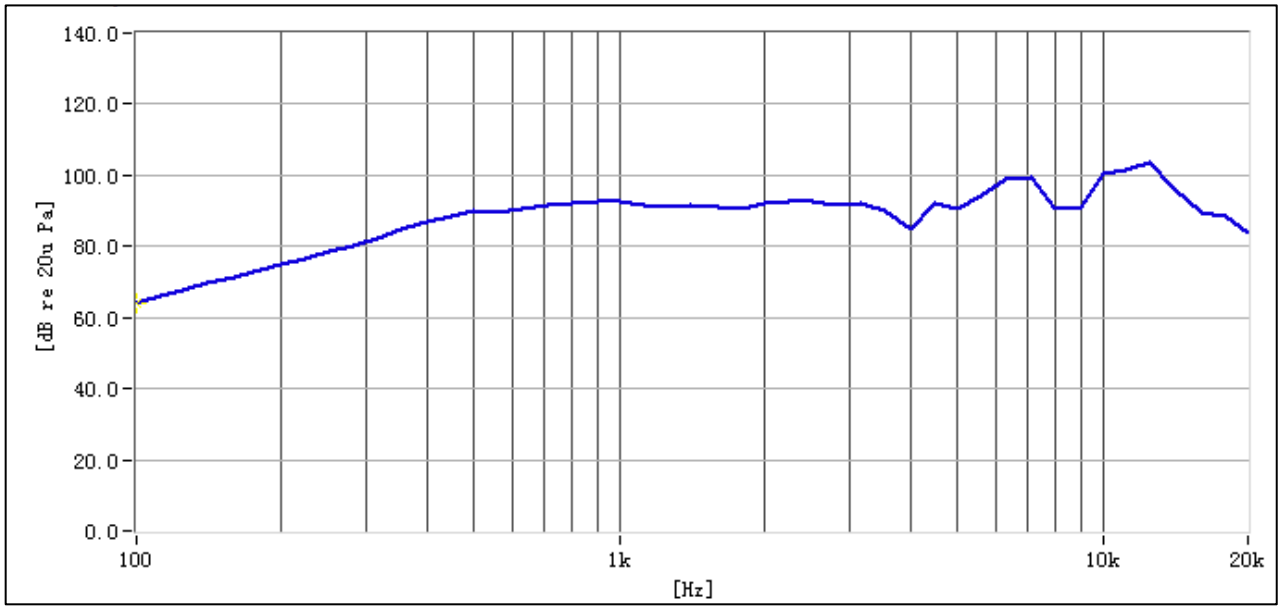


Block Diagram for Measurement Method

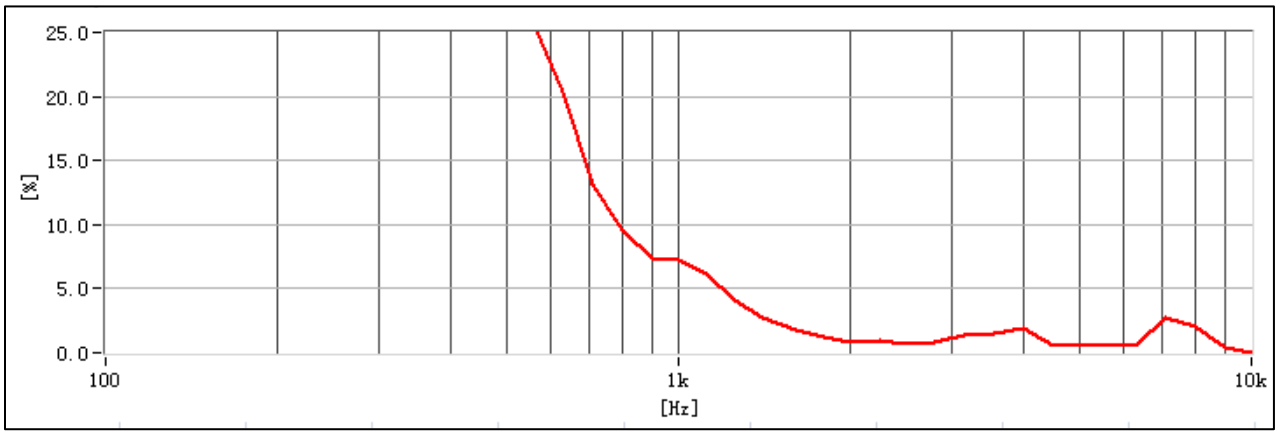


Speaker Test Setup

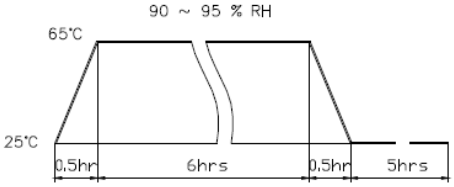
Typical Frequency Response *(0.1W / 0.1M / 1cc enclosure)*



Total Harmonic Distortion Curve *(0.1W / 0.1M / 1cc enclosure)*

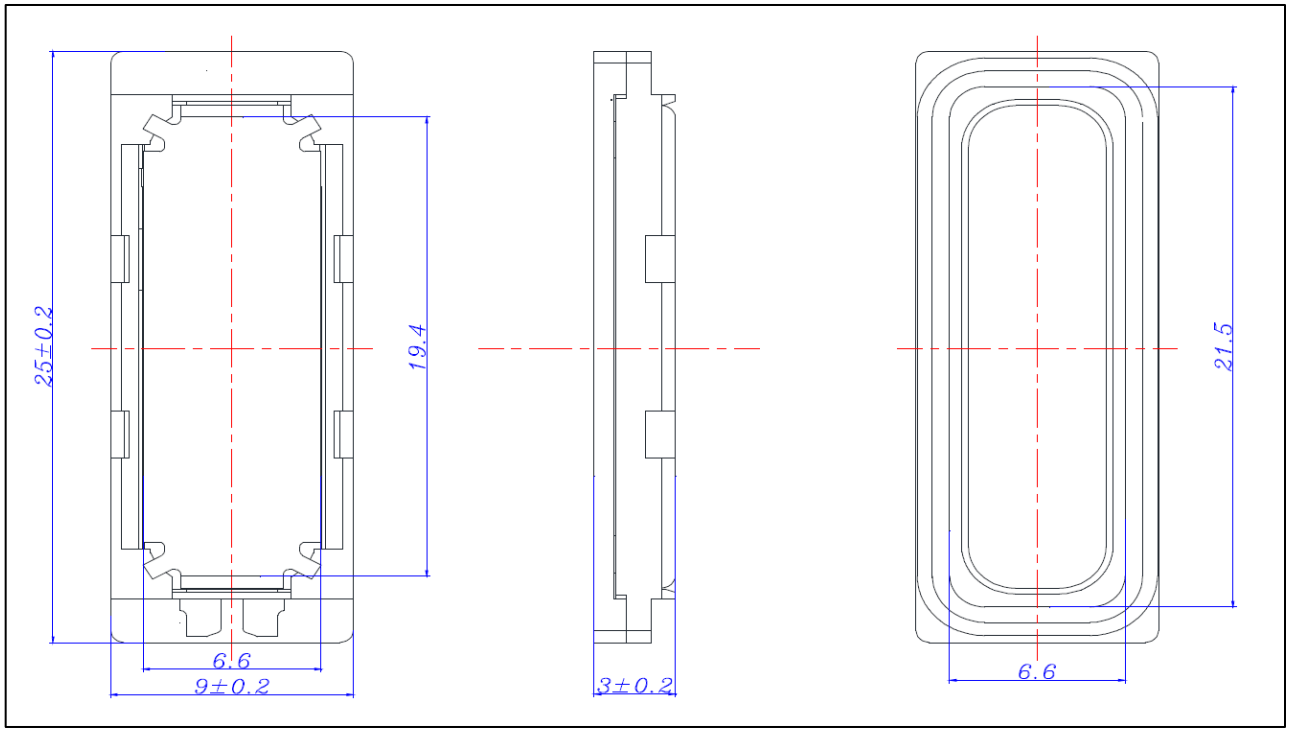


Reliability Testing

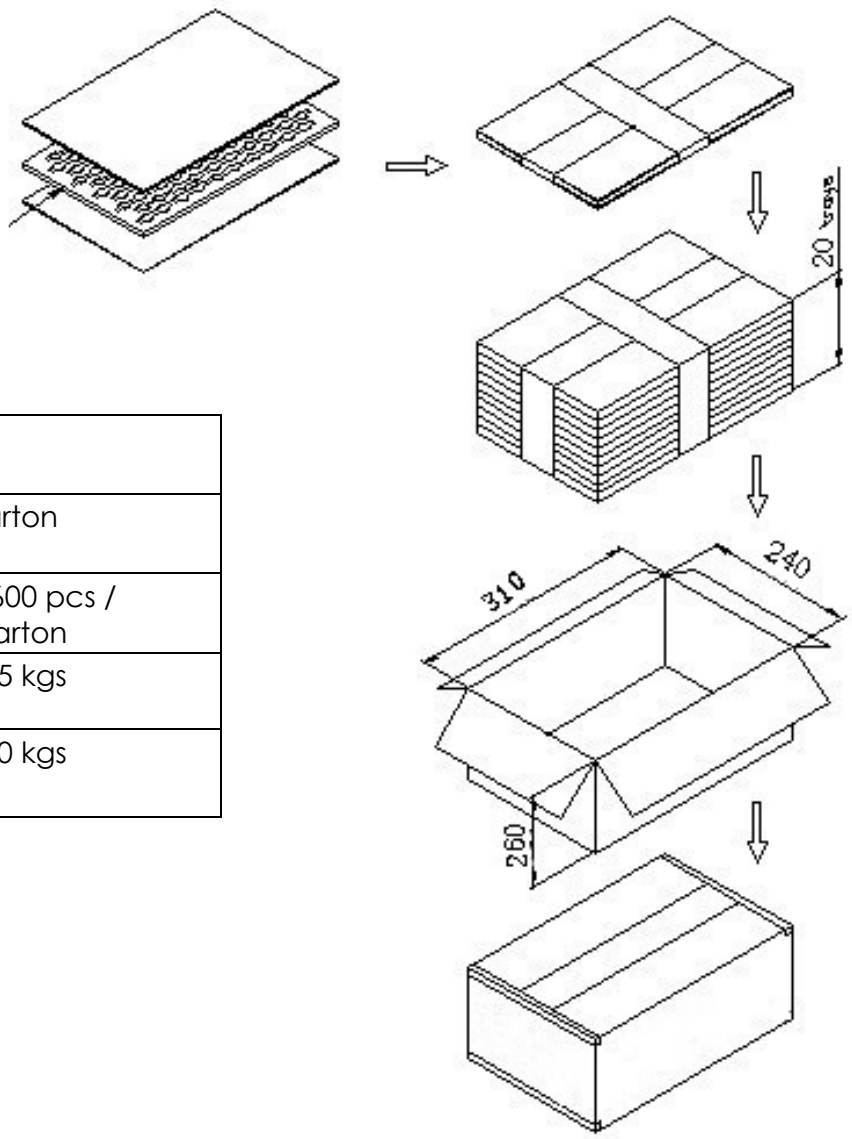
Type of Test	Test Specifications
High Temperature Test	96 hours at +60±3°C
Low Temperature Test	96 hours at -20±3°C
Humidity Test	96 hours at +20±3°C, 92-95% RH
Temperature Cycle Test	Part tested for 5 cycles, 6 hours per cycle according to the profile shown: 
Vibration Test	Frequency: 10~55~10Hz Oct/min Amplitude: 1.5mm Duration: 2 hours per 3 perpendicular directions (XYZ)
Operation Life Test	Pink noise applied at rated power for 96 hours
Drop Test	Dropped in a typical enclosure onto 40mm thick board from 75cm, 10x
Termination Strength Test	3.0N applied to each terminal in horizontal direction for 30 seconds; 2.0N applied to each terminal in vertical direction for 30 seconds

Parts should confirm to original performance within +/- 3dB following testing at rated power and a 6 hour rest period

Dimensions (Tolerance: ±0.15mm, unless otherwise stated)



Packaging



80 pcs/ tray	
20 trays / carton	
Total:	1600 pcs / carton
Gross Weight	4.5 kgs
Net Weight	3.0 kgs

Specifications Revisions

Revision	Description	Date
A	Released from Engineering	8/30/2023

Note:

1. Unless otherwise specified:
   A. All dimensions are in millimeters.
   B. Default tolerances are ±0.5mm and angles are ±3°.
2. Specifications subject to change or withdrawal without notice.