



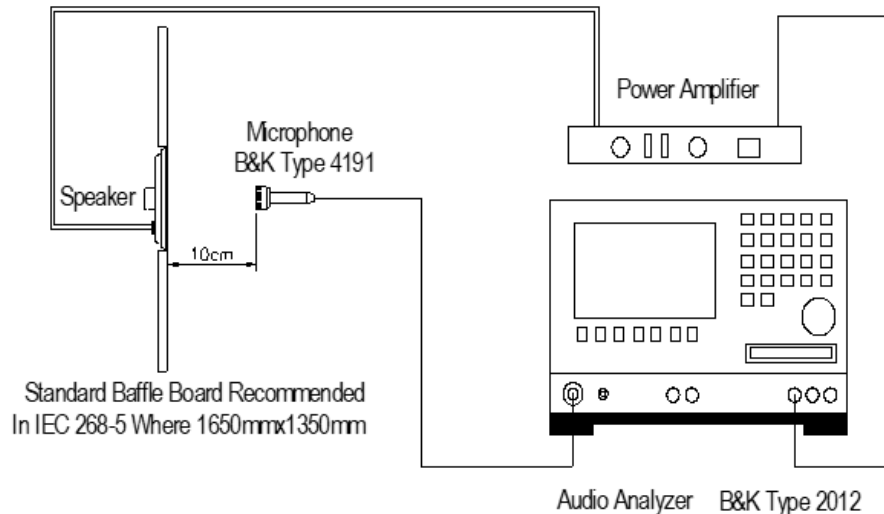
Data Sheet

PRELIMINARY AS02508CO-4-R

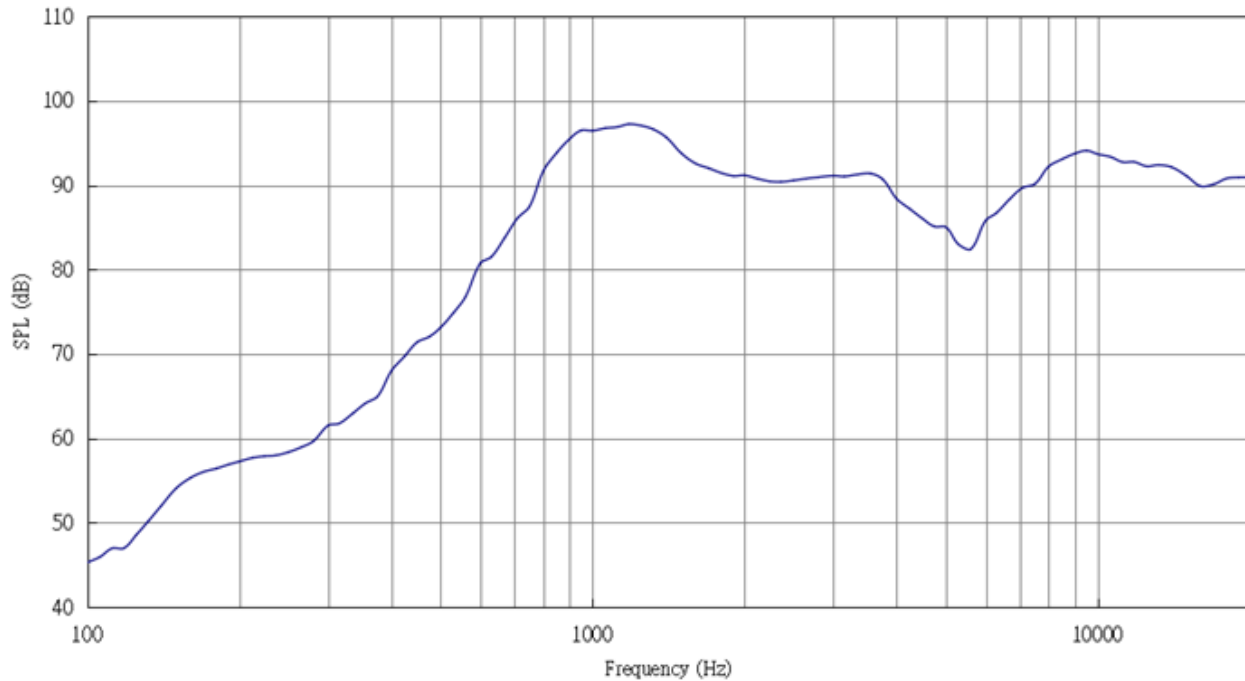
Specifications

Parameters	Values	Units
Rated Input Power	1.0	Watts
Max Input Power	1.5	Watts
Impedance	$8 \pm 20\%$	Ohms
Output SPL 1.0W/10cm (AVG 0.8, 1.0, 1.2, 1.5 kHz)	95 ± 3	dB
Resonant Frequency	$1100 \pm 20\%$	Hz
Frequency Range	$F_0 \sim 20,000$	Hz
THD (2kHz, 1.0W)	5% max	-
Frame Material	ABS	-
Magnet Material	NdFeB	-
Diaphragm Material	Cloth	-
Weight	2.5	Grams
Buzz, Rattle, etc.	Should not be audible at 2.83Vrms sine wave between (200 Hz ~ 5KHz)	-
Environmental Compliances	ROHS/REACH	-
Polarity	When a positive DC Current is applied to the voice coil terminal marked + or red, the diaphragm shall move forward	-
Storage Temperature	-40 ~ +80	°C
Operating Temperature	-40 ~ +80	°C

Measurement Method (Temperature: 23 ~ 25°C; Humidity: 55%; Power: 0.1W)



Typical Frequency Response (2.83Vrms, 10cm)

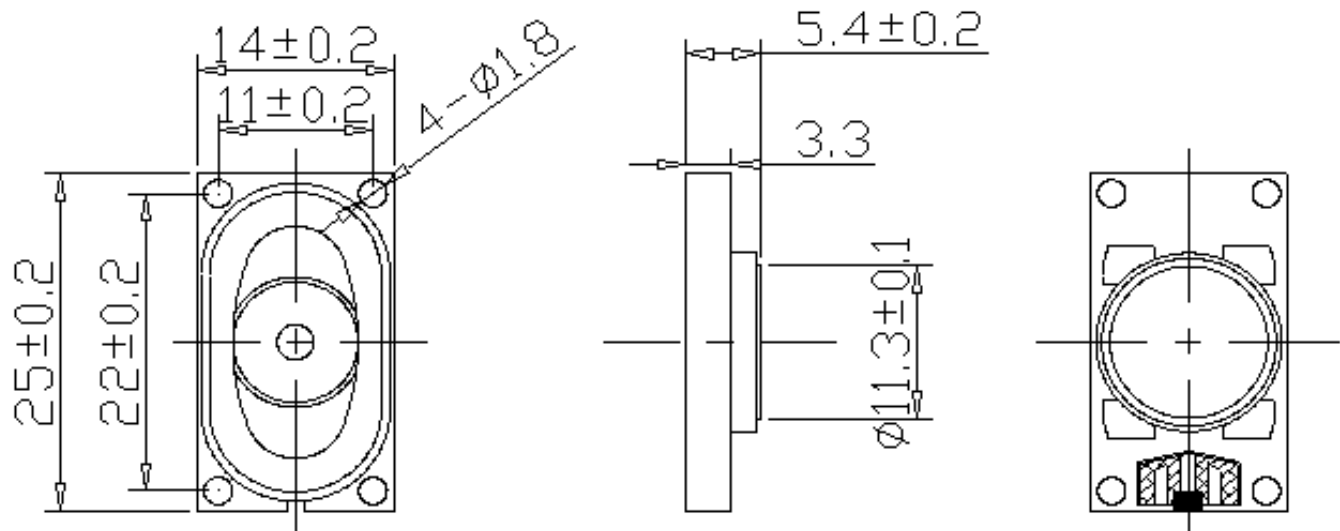


Reliability Testing

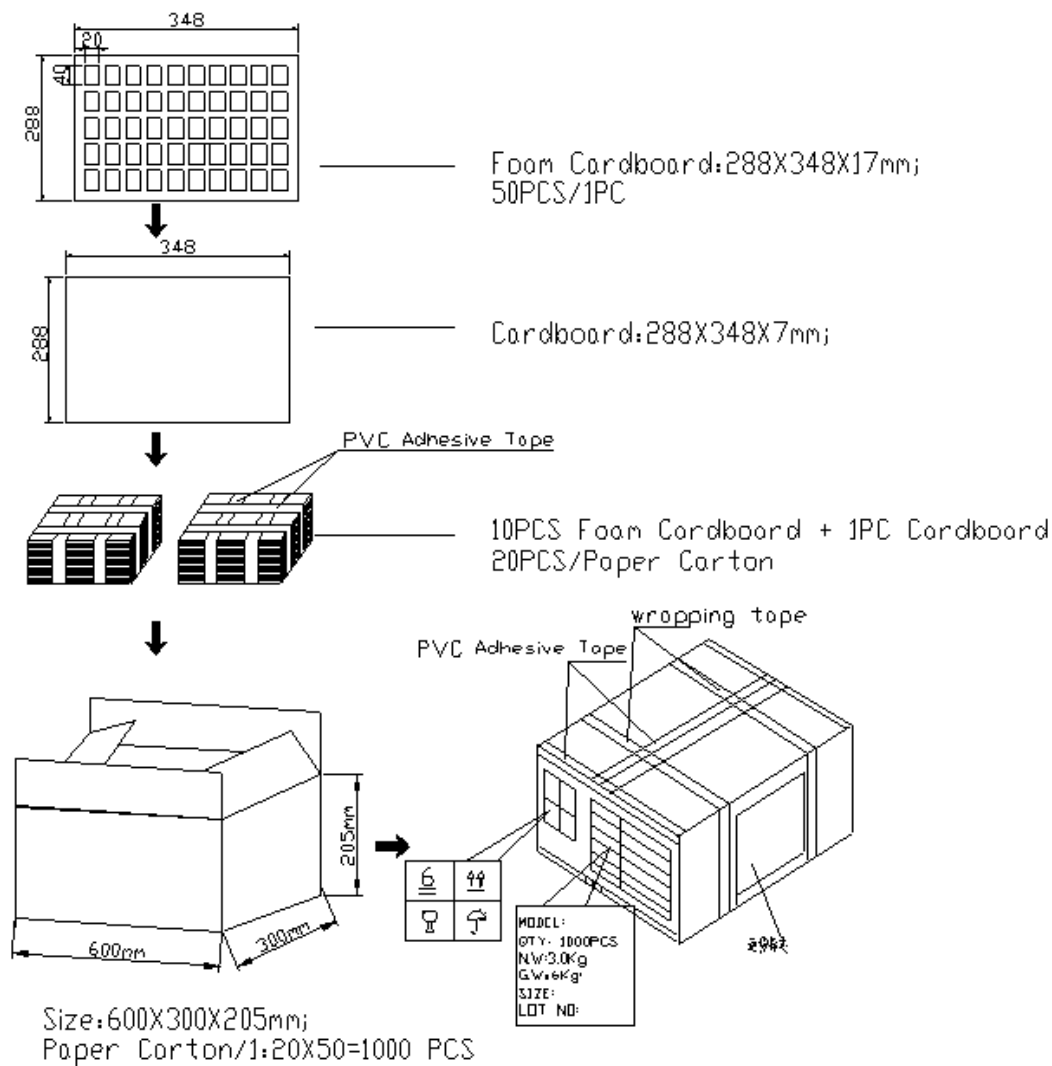
Type of Test	Test Specifications
High Temperature Test	96 hours at $80 \pm 3^{\circ}\text{C}$ and let rest at room temperature for 3 hours
Low Temperature Test	96 hours at $-40 \pm 3^{\circ}\text{C}$ and let rest at room temperature for 3 hours
Humidity Test	96 hours at $40 \pm 3^{\circ}\text{C}$ with relative humidity at 90 ~ 95% and let rest at room temperature for 3 hours
Temperature Cycle Testing	Low temperature: $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$, temperature: $+80^{\circ}\text{C} \pm 3^{\circ}\text{C}$, 1 cycle: total 5 cycles and then keep 6 hours in room temperature
Vibration Test	Frequency: 10~55~10Hz Oct/mm Amplitude: 1.5mm X, Y, Z 3 direction. 2 hours each, total 6 hours
Drop Test	Free drop one piece 100cm height to a 20mm thick board in x,y,z direction for one time each, total six times.
Load Test	Rated Power white noise is applied for 96 hours

After each test the change of SPL shall be within ± 3 dB.

Dimensions



Packaging



Specifications Revisions

Revision	Description	Date
A	Released from Engineering	11/18/2021

Note:

- Unless otherwise specified:
 - All dimensions are in millimeters.
 - Default tolerances are $\pm 0.5\text{mm}$ and angles are $\pm 3^\circ$.
- Specifications subject to change or withdrawal without notice.