

Product Highlight

ASE02008MS-LW100-R



- This new product is an extension of our enclosed speaker line to include Smart Speakers and add on to the recent success of the 25mm enclosures to add even smaller products with the same performance.



Specifications

PARAMETERS	VALUES	UNITS
Rated Power Handling	1	Watts
Max Power Handling	1.3	Watts
Impedance @ 2 kHz	8 ± 15%	Ohms
Sensitivity (SPL @ 2.83V/10cm) Avg. 0.8, 1, 1.5, 2 kHz in 1cc enclosure	97 ± 3	dB
Resonant Frequency (In 1cc enclosure)	950±20%	Hz
Frequency Range (-10 dB)	500 ~ 20,000	Hz
Xmax (where BL product drops by 20%)	0.3	mm

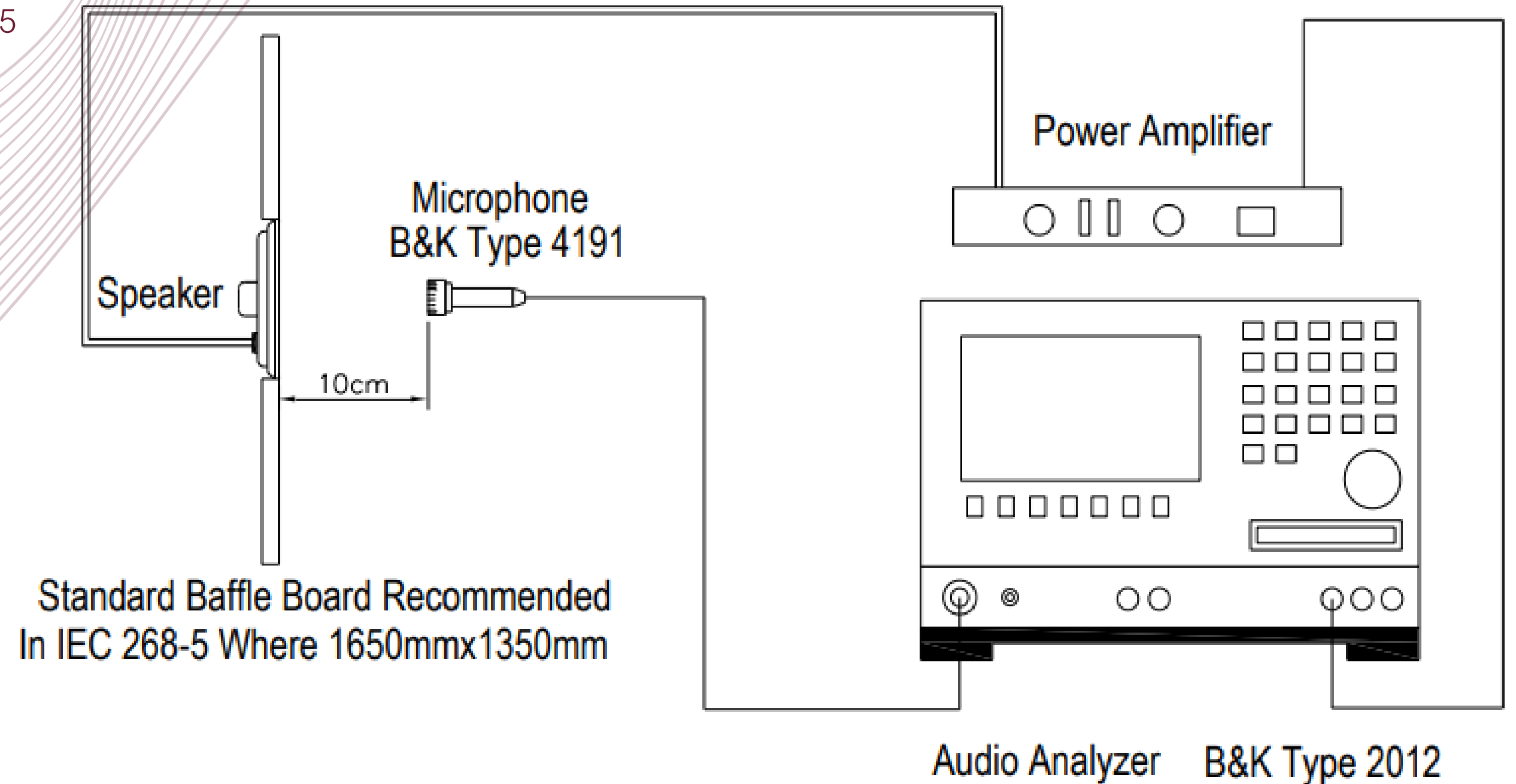
Specifications

PARAMETERS	VALUES	UNITS
Tmax (max voice coil temperature)	90	°C
Housing Material	ABS	-
Polarity	With positive voltage applied to the positive terminal, the diaphragm will move outward	-
Magnet Material	NdFeB	-
Storage Temperature	-40 ~ +85	°C
Operating Temperature	-20 ~ +70	°C
Weight	15	Grams

Measurement Method

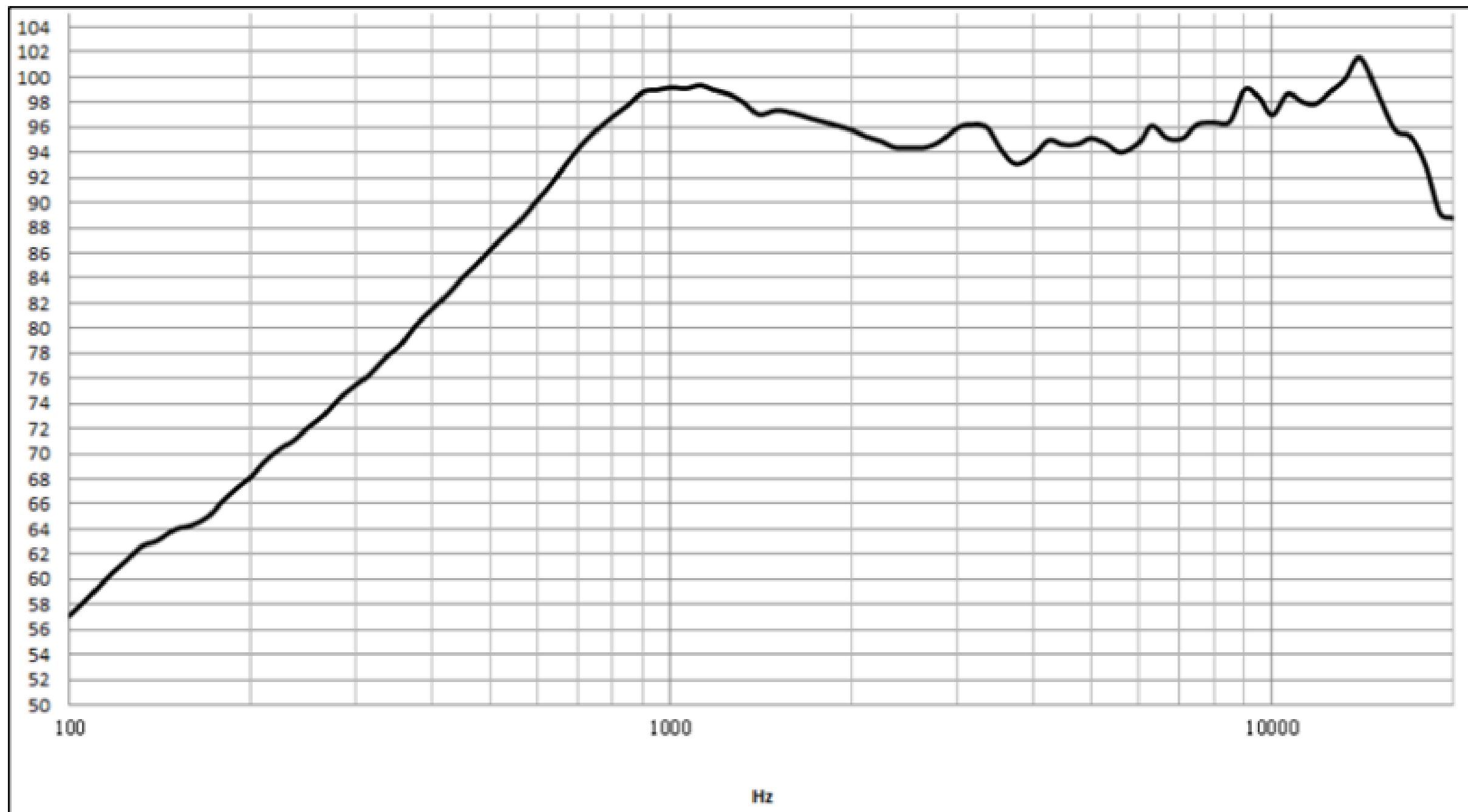
Standard Test Condition of Speaker

(measured with 2.83V, Temperature: 15 ~ 35°C, Relative Humidity: 25%~70%)



Frequency Response

(3V (measured with 2.83V @ 10cm in 1cc enclosure) input measured at 10cm)



Reliability Testing

After each test, the speaker's SPL shall be ± 3 dB of the original SPL

TYPE OF TEST	TEST SPECIFICATIONS
High Temperature Test	96 hours at $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$ followed by three hours in normal room temperature
Low Temperature Test	96 hours at $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ followed by three hours in normal room temperature
Humidity Test	96 hours at $+40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ with relative humidity at 90%~95% followed by 6 hours in normal room temperature
Drop Test	Mount speaker to 100g fixture, drop fixture 1.5 meters, twice per side and twice for each corner
Load Test	White noise is applied at the speakers rated power for 96 hours at room temperature with speaker in 1cc enclosure

Reliability Testing

After each test, the speaker's SPL shall be ± 3 dB of the original SPL

TYPE OF TEST	TEST SPECIFICATIONS
Vibration Test	10 to 55 to 10 Hz sine sweep, per minute @ 1.5mm amplitude 2 hours in each axis X, Y, and Z.
Temperature Cycle Testing	The part shall be subjected to 12 cycles using the following procedure: Low temperature: $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ High temperature: $+80^{\circ}\text{C} \pm 3^{\circ}\text{C}$ Cycle: 2 hours at High, 5 minutes High to Low, 2 hours at Low, 5 minutes Low to High