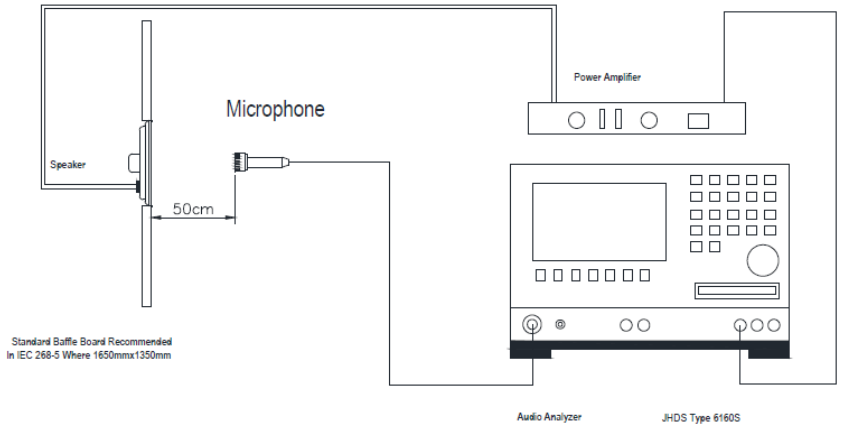
Data Sheet	ASE04008MS-LWC25-2

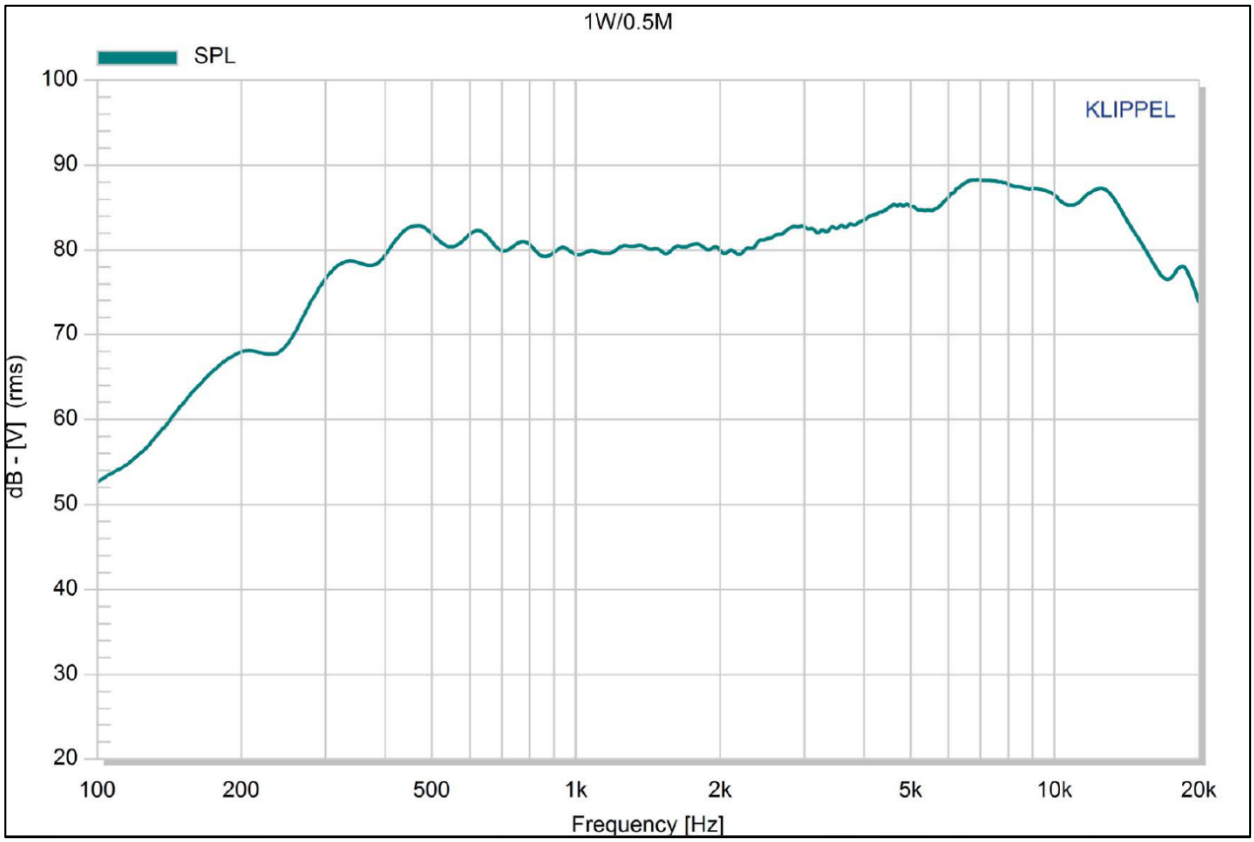
Specifications

Parameters	Values	Units
Rated Input Power	2	Watts
Max Input Power	2.5	Watts
Impedance	8 ± 15%	Ohms
Sensitivity (SPL @ 1W/50cm) (800, 1000, 1200, and 1500 Hz)	80 ± 3	dBA
Distortion (Max @ 1W, 1 kHz)	<5%	-
Resonant Frequency (in enclosure)	380 ± 20%	Hz
Frequency Range (-10 dB)	380 ~ 20,000	Hz
Housing Material	ABS	-
Magnet Material	NdFeB	-
Diaphragm Material	Paper and Cloth	-
Weight	20	Grams
Ingress Protection Rating	IP67	-
Environmental Compliance	RoHS/REACH	
Buzz, Rattle, etc.	Should not be audible with 3.46V sine wave from 300 Hz to 10 kHz	-
Polarity	When positive voltage is applied to the positive terminal, the diaphragm will move outward	-
Operating Temperature	-40 ~ +85	°C
Storage Temperature	-40 ~ +85	°C

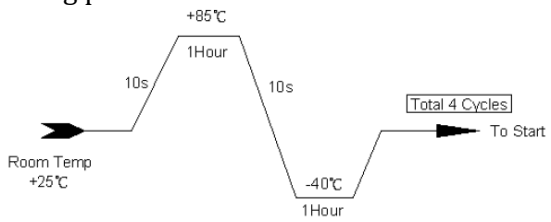
Measurement Method



Frequency Response (measured at 50cm with 1W input power, per speaker)

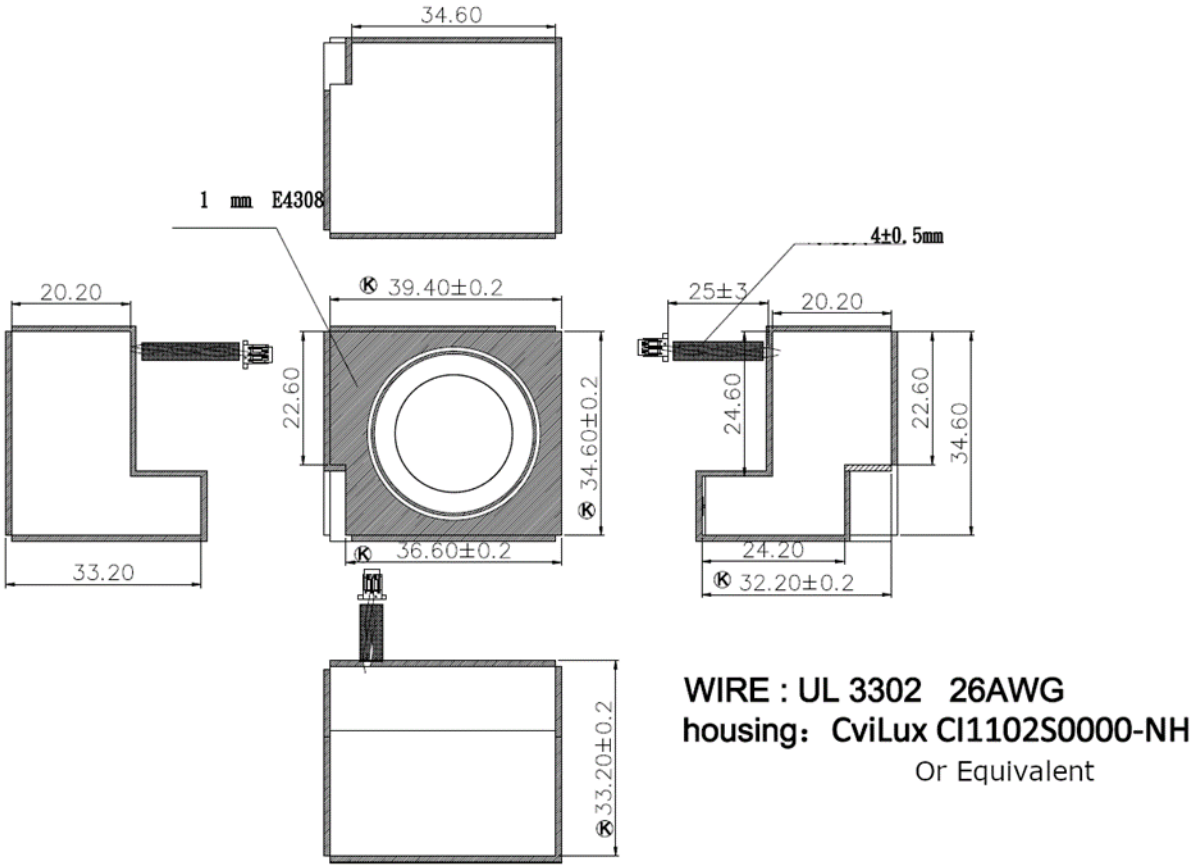


Reliability Testing

Type of Test	Test Specifications
High Temperature Test	96 hours at +85°C ± 3°C followed by six hours in normal room temperature
Low Temperature Test	96 hours at -40°C ± 3°C followed by six hours in normal room temperature
Humidity Test	96 hours at +40°C ± 3°C with relative humidity at 90% to 95% followed by 3 hours in normal room temperature
Temperature Cycle Testing	The part shall be subjected to 4 cycles using the following procedure: 
Vibration Test	10 to 55 to 10 Hz cycles, 15 minutes per cycle. 2 hours in each axis X, Y, and Z.
Drop Test	Drop from a height of 75cm on six sides.
Load Test	Pink noise is applied at the speakers rated power for 96 hours at room temperature

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

Dimensions



Specifications Revisions

Revision	Description	Date
A	Released from Engineering	6/2/2023
B	Updated Note 2	10/12/2023

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.