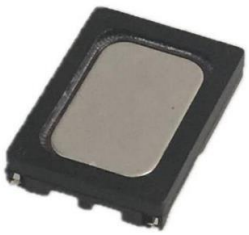
Speaker

SS2004-251445-102P

Description



This speaker is designed to convert electrical signals into sound waves. It is commonly used in electronic devices such as smartphones, laptops, and portable speakers to produce audio output. The speaker consists of a diaphragm that vibrates in response to the electrical signals, creating sound waves that are amplified by the speaker's enclosure.

Applications

- Electronic devices
- Industrial and commercial equipment
- Home appliances
- Toys and games
- Sound effects
- Audio Alerts
- Warning Signals

Electrical And Acoustical Specification

Parameter	Description
Rated Input Power	2.0 W
Max Input Power	2.2 W
Rated Impedance	4Ω ± 15%
Sound Pressure Level	102 dB ± 3 dB (2W/0.1m) @ 1KHz in 2 cc closed box with baffle
Resonance Frequency (Fo)	850 ±20%Hz
Frequency Range.	F0 ~ 20kHz.
Distortion	Less than 5% at 1KHz input Rated Power
Magnet	Rare earth permanent (NdFeB) magnet 8x1.2
Buzz, Rattle, etc.	Should not be audible at 2.83V sine Wave between F0 to 20 KHz

Polarity	When positive voltage is applied to the terminal marked (+), diaphragm should move to the front.
Appearance	Should not exist any obstacle to be harmful to normal operation; damages, cracks, rusts and distortions, etc.
Temperature	Operating temperature: -20℃ to +70℃ Storage temperature: -30℃ to +85℃
Waterproof Rating	IP67

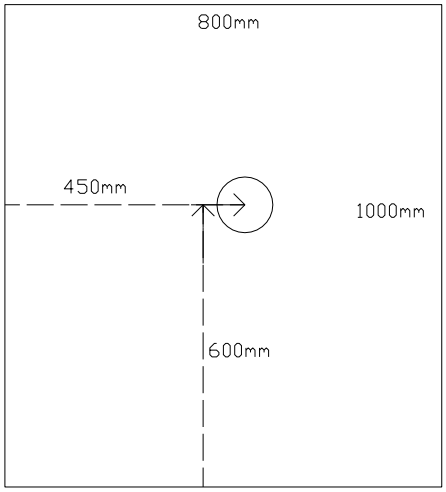
Measuring Conditions

Test and measurement will be carried out under normal condition of temperature within 15℃ to 35℃, relative humidity within 25% to 75% and air pressure of 860 mbar to 1060 mbar according to standard GB/T9397-200X and IEC60268-1

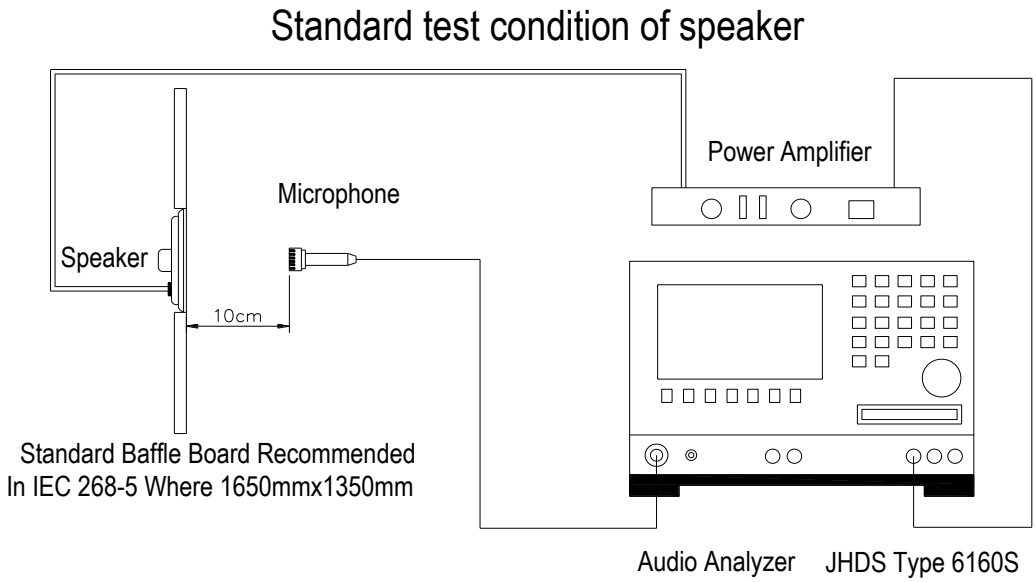
Speaker

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Measuring Method



Block Diagram For Measurement Method.

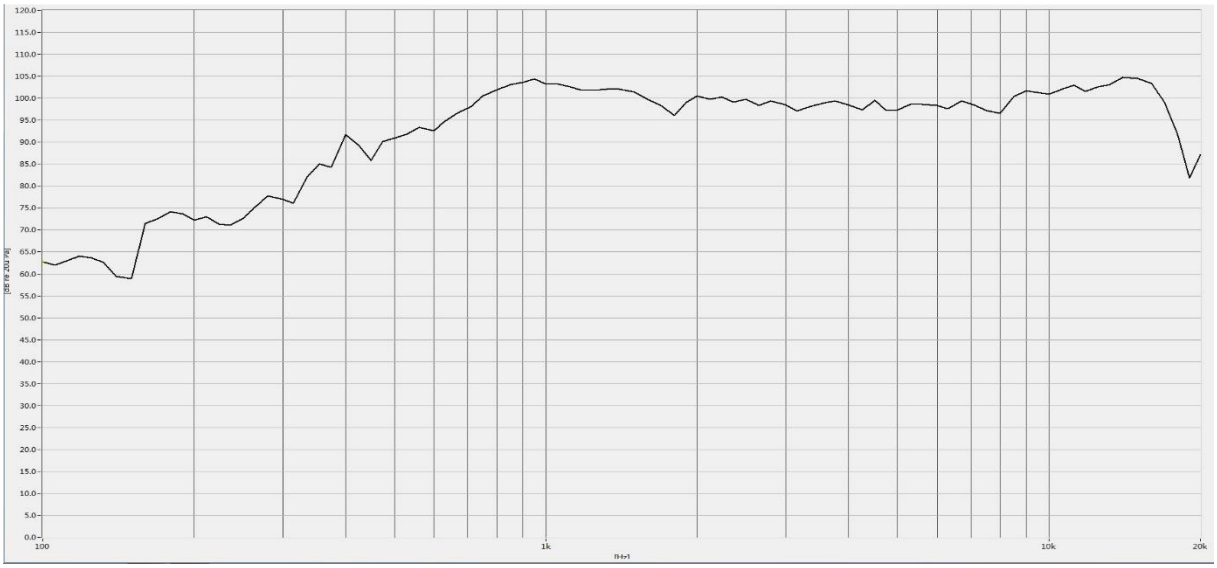


Speaker

SS2004-251445-102P

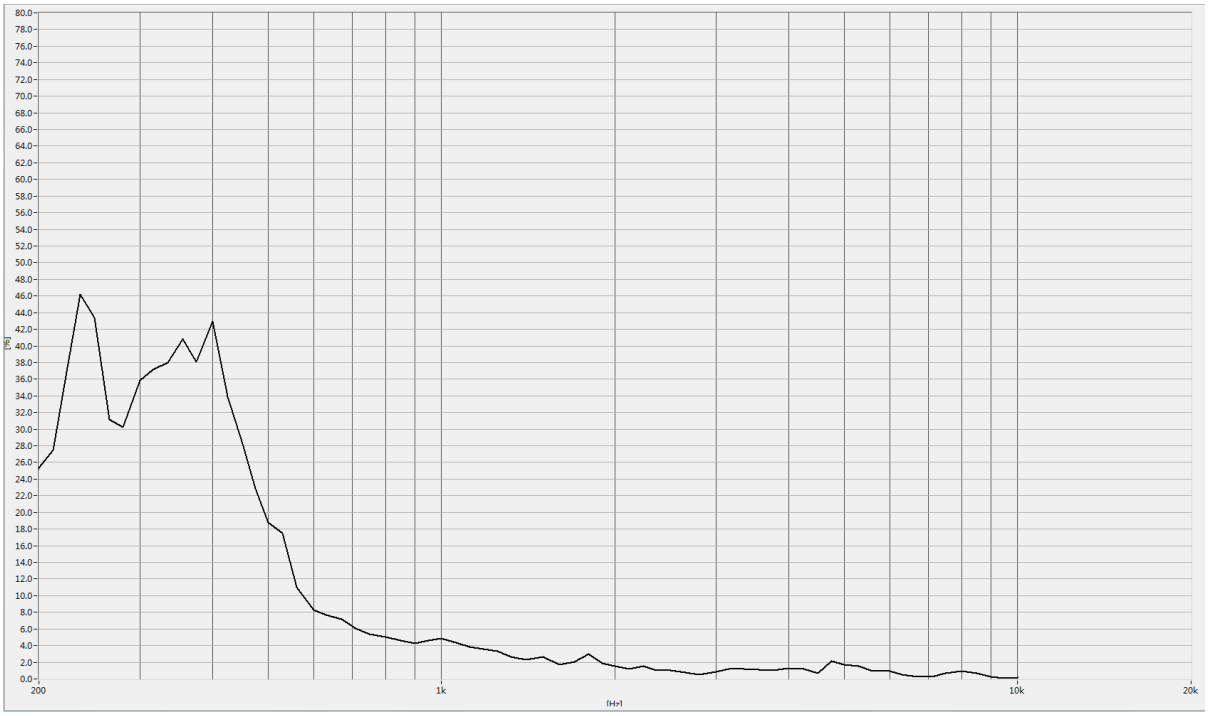
Frequency Response Curve

Test condition: 2.0W/0.1M, in 2cc closed box with Baffle

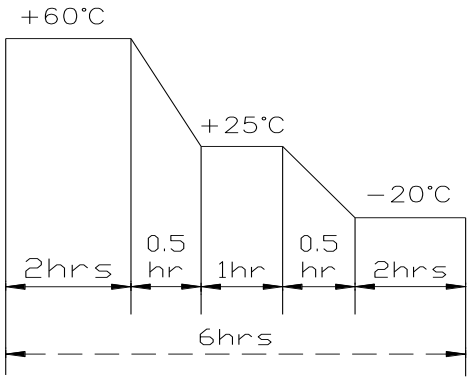


Total Harmonic Distortion Curve

Test condition: 2.0W/0.1M, in 2cc closed box with Baffle



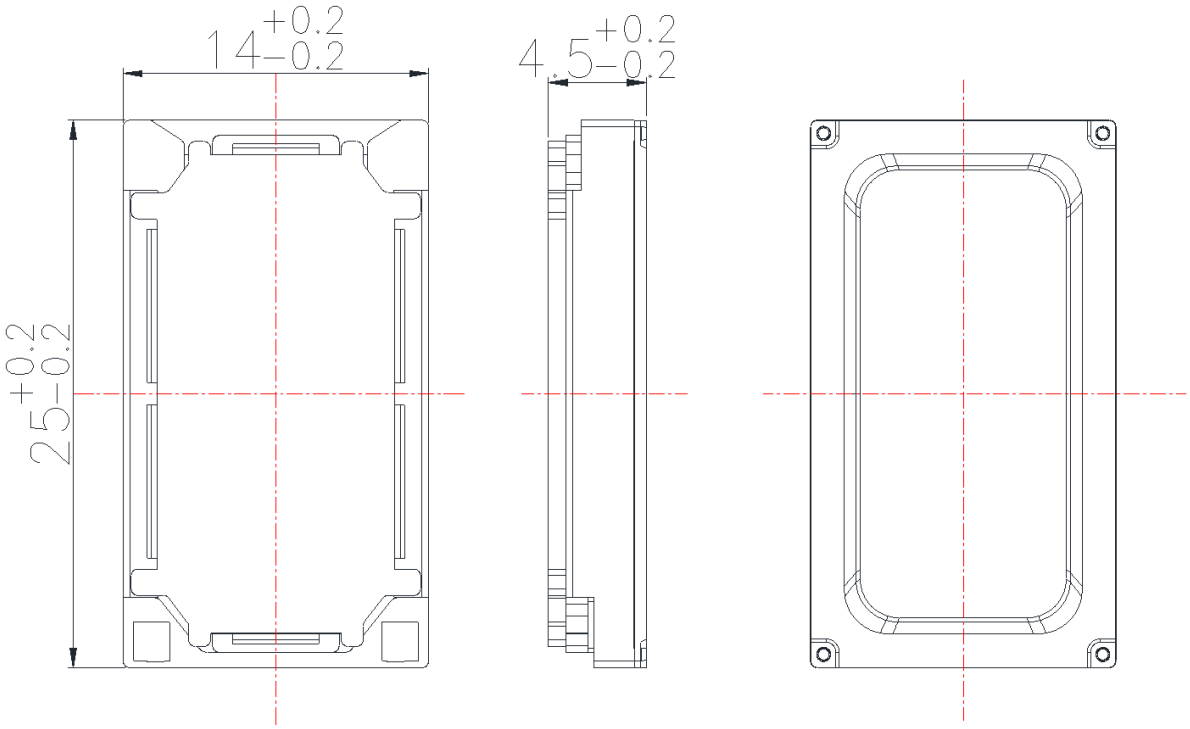
Environment Test

Parameter	Description
High temp. Test	Keep 96 hours at +60℃±2℃ (GB/T 9397-200x)
Low temp. Test	Keep 96 hours at -25℃±2℃ (GB/T 9397-200x)
Humidity test	Keep 48 hours at + 40℃±2℃ relative humidity 90-95%
Temp./Humidity cycle	The part shall be subjected 4cycles. One cycle shall be 6 hours and consist of (GB5170.18-87) 
Vibration	Frequency 30 ± 15 Hz, Amplitude 1.5 mm for 3 Hours. (GB11606.8-89)
drop test	75 CM free falling on Concrete floor, 10 times. (GB2423. 8-81)
Load test	Must perform normal with program White-Noise source at Rated Power for 96 Hours(GB/T 9397—200X)
Terminal Strength test	Apply 3.0N(0.306kg) to each terminal in horizontal direction for 30 seconds; Apply 2.0N(0.204kg) to each terminal in vertical direction for 30 seconds;
General remark: After these test the change in S.P.L. shall be withing ±3 dB	

Speaker

SS2004-251445-102P

Dimensions



Unit:mm Tol:±0.5

PART NO.	PART NAME	Q'TY	MATERIAL
1	Diaphragm	1	PEEK
2	Voice Coil	1	Copper Wire
3	Front Plate	1	SPCC
4	Magnet	1	NdFeB
5	Frame	1	PPA
6	Spring Terminal	2	SUS
7	U Yoke	1	SPCC
8	Pole Piece	1	SPCC

Ordering information

Ordering can be done via www.summit-electronics.com or via info@summit-electronics.com. Please contact us for more information. Customisation of the product is available on request.

Technical support

For all product questions please contact us via info@summit-electronics.com

Document revision

Rev	Date	Changes
V01.00	06-04-2024	First issue of document