

Speaker

SS0208-16053-103B10

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	2.5 W
Rated Impedance	$8\Omega \pm 15\%$
Sound Pressure Level (S.P.L)	103dB(1W/0.1m) ± 3 dB at AVE 0.8K 1.0K 1.2K 1.5K Hz
Resonance Frequency (Fo)	600 $\pm$ 20%Hz
Frequency Range.	F0 ~ 6kHz.
Distortion	Less than 5% at 1KHz input Rated Power
Magnet	Rare earth permanent (NdFeB) magnet Φ 12.5 *1.5mm
Polarity	When positive voltage is applied to the terminal marked (+), diaphragm should move to the front.
Buzz, Rattle, etc.	Should not be audible at 4.0V sine Wave between Fo to 20KHz

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Appearance

Should not exist any obstacle to be harmful to normal operation; damages, cracks, rusts and distortions, etc.

Weight

9g

Temperature

Operating temperature: -25~+60°C

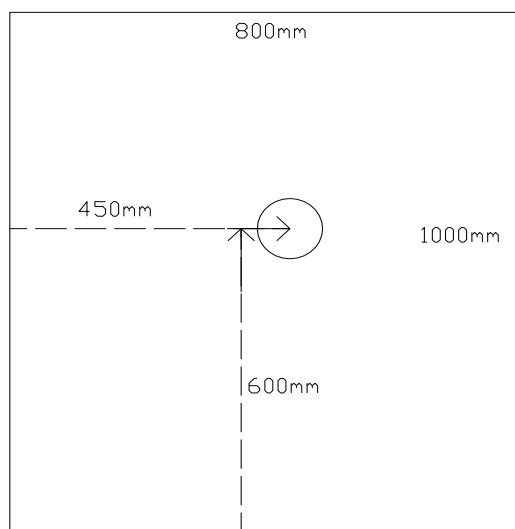
Storage temperature: -25~+60°C

Measuring Conditions

Above Measuring condition under temperature :

15~35°C R.H. 25 ~75%.86 kPa to 106 kPa (860 mbar to 1 060 mbar According to standard GB/T 9397—200X and IEC 60268-1

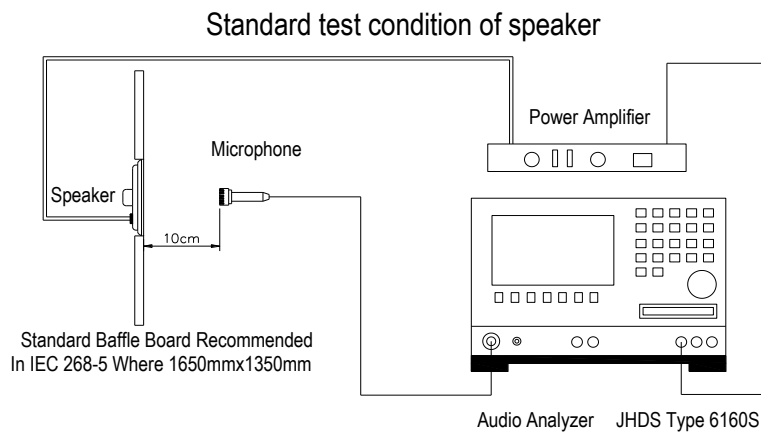
Measuring Method



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Block Diagram For Measurement Method.

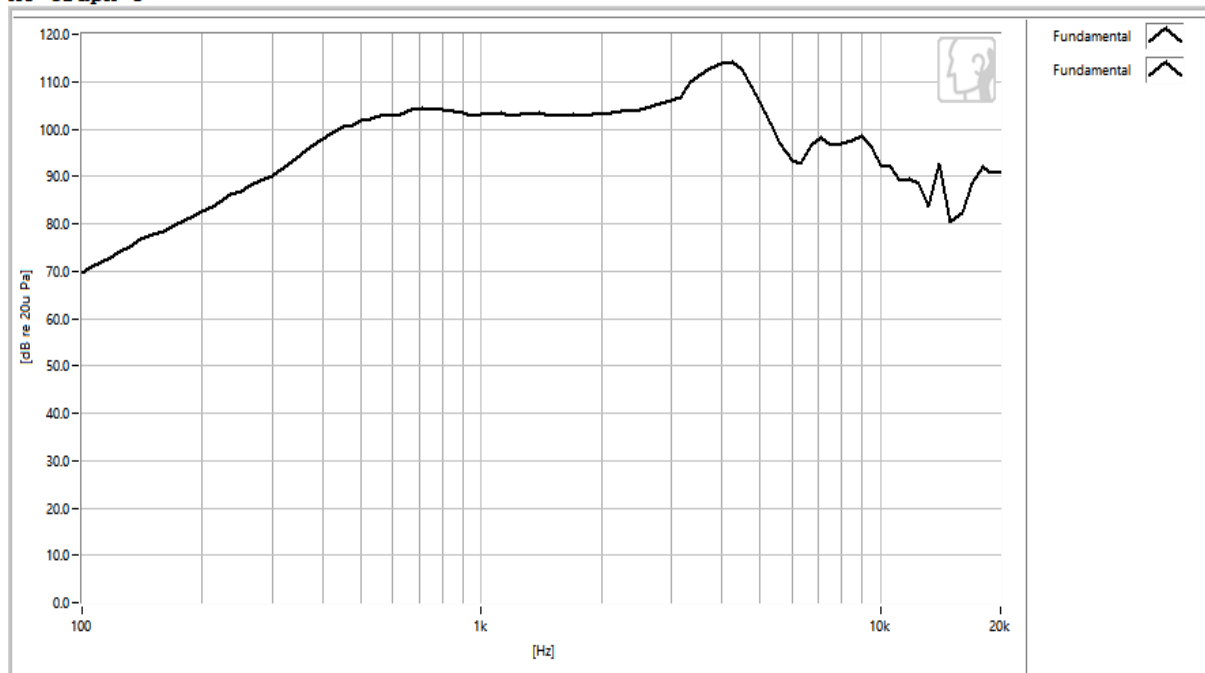


Frequency Response Curve

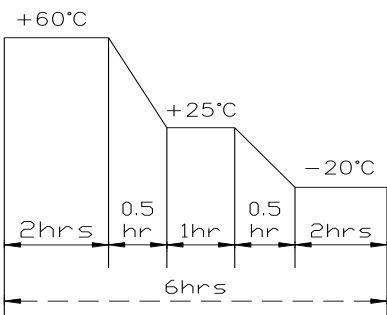
The swept sine-wave frequency response of a Loud speaker should ideally not deviate more than indicated below.

Test condition: 1w/0.1M

XY Graph 5



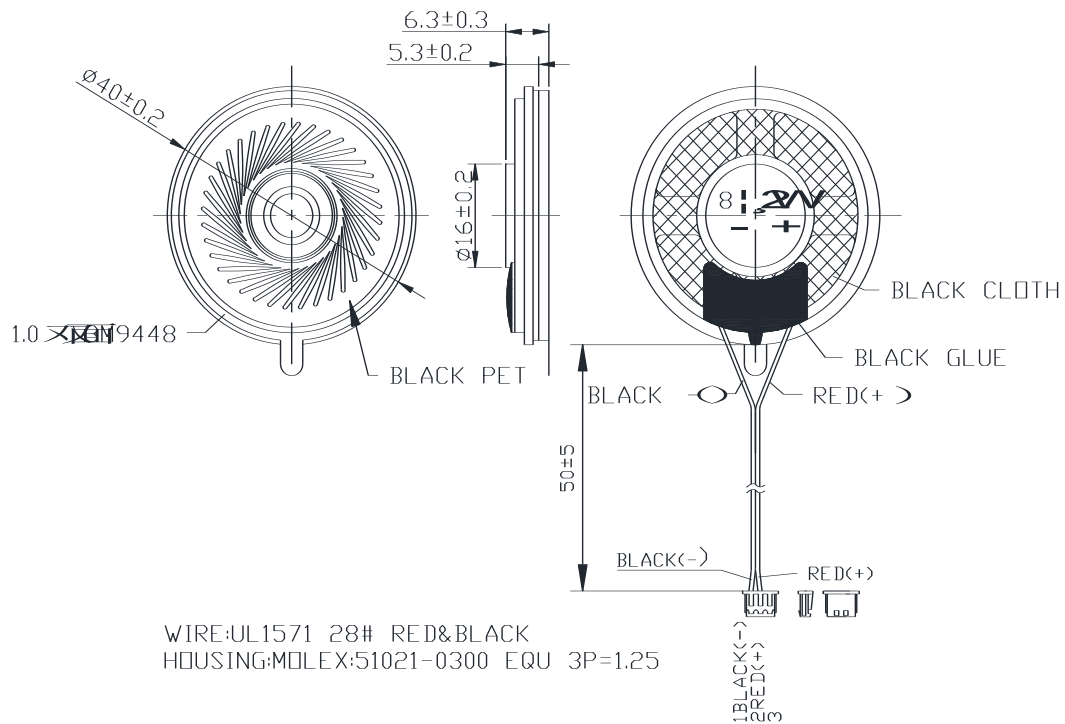
Environment Test

Parameter	Description
High temp. Test	+60 ± 2 °C Humidity Random for 96 Hours. (GB/T 9397—200X)
Low temp. Test	–25 ± 2 °C Humidity Random for 96 Hours. (GB/T 9397—200X)
Humidity test	+40°C±2°C Relative Humidity(RH)90~95% 48 Hours
Temp./Humidity cycle	The part shall be subjected 4cycles. One cycle shall be 6 hours and consist of (GB5170.18-87)  The diagram illustrates a temperature cycle over a 6-hour period. It starts at +60°C for 2 hours, then ramps down to +25°C over 0.5 hours. It remains at +25°C for 1 hour, then ramps down to -20°C over 0.5 hours, and finally remains at -20°C for 2 hours. A dashed line at the bottom indicates the total duration of 6 hours for one cycle.
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;
Criterion : After these test , the change of S.P.L shall be within ±3 dB	

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Dimensions



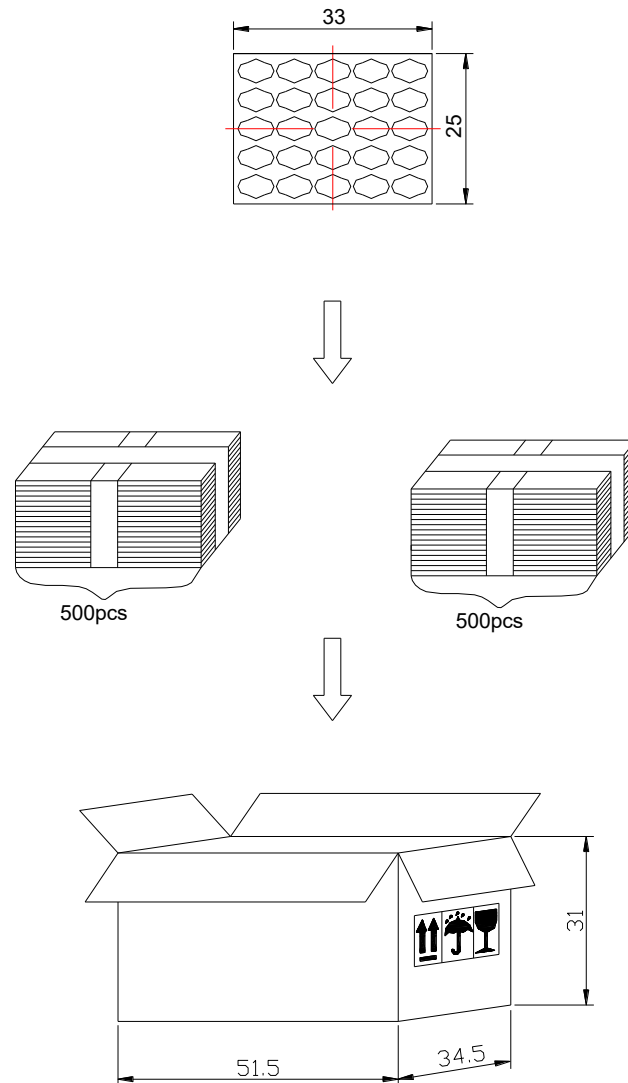
Unit:mm Tol:±0.5

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	PCB Terminal	1	FR-4	
2	Magnet	1	NdFeB	
3	Plate	1	SPCC	
4	VOICE COIL	1	Paper Cu	
5	Diaphragm	1	Pet	
6	Gasket	1	Plastics	Thickness 1 mm
7	Cable length	1	50 mm	
8	Connector	1	Molex equivalent	51021-0300
9	Frame	1	Spcc	
The material must be meet to GU-001				

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Packing



Remark:

25 pcs per tray

20 trays for unit, 2 units per carton

Total: 1000 pcs per box

Size: 51.5*34.5*31cm

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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	27-05-2026	First issue of document