Speaker

SS0108-23060-87B

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	1.0 W
Max Input Power	1.2 W
Rated Impedance	8Ω ± 15%
Sound Pressure Level	87dB(0.1W/0.1m) ± 3 dB at AVE 0.8K 1.0K 1.2K 1.5K Hz
Resonance Frequency (Fo)	650 ±20%Hz
Frequency Range.	F0 ~ 10kHz.
Distortion	Less than 5% at 1KHz input Rated Power
Magnet	Rare earth permanent (NdFeB) magnet 9.5*1.5
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.

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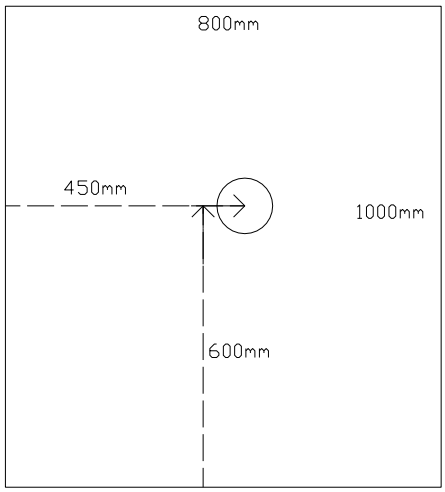
SS0108-23060-87B

Appearance	Should not exist any obstacle to be harmful to normal operation; damages, cracks, rusts and distortions, etc.
Temperature	Operating temperature: -20℃ to +60℃ Storage temperature: -30℃ to +70℃
Weight	3.7g

Measuring Conditions

Test and measurement will be carried out under normal condition of temperature within 5℃ to 35℃, relative humidity within 45% to 85% and air pressure of 860 mbar to 1060 mbar. Should uncertainly arise in data obtained from the above atmosphere, control of temperature at 20℃±2℃ and relative humidity within 60%and 70%, with air pressure remaining unchanged, to be enforced.

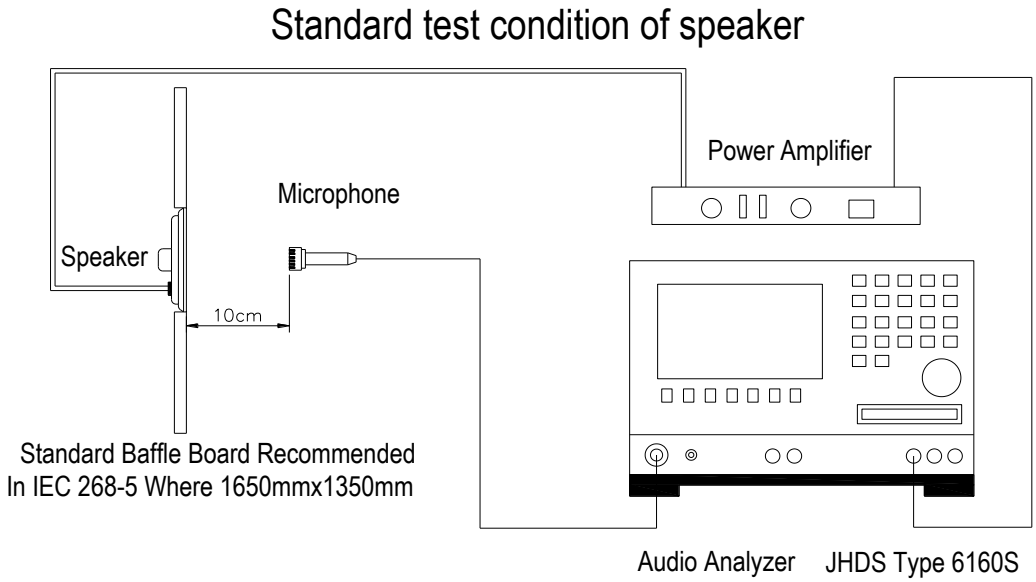
Measuring Method



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Block Diagram For Measurement Method.

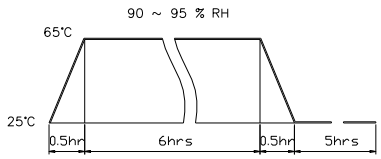


Frequency Response Curve

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



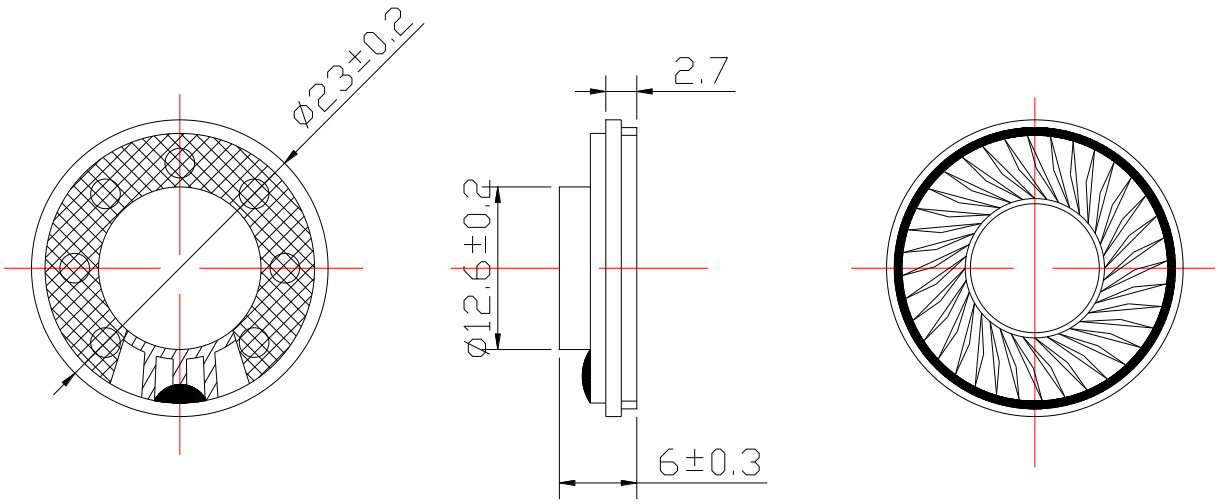
Environment Test

Parameter	Description
High temp. Test	Keep 96 hours at +70°C±3°C and leave 6 hours in normal temperature and then check
Low temp. Test	Keep 96 hours at -30°C±3°C and leave 6 hours in normal temperature and then check
Humidity test	Keep 96 hours at + 40°C±3°C relative humidity 92-95% and leave 3 hours in normal temperature and then checked.
Temp./Humidity cycle	The part shall be subjected 5 cycles. One cycle shall be 6 hours and consist of; 
Vibration	10~55~10Hz sin-wave sweep 15min. 5G(constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.
drop test	Drop the speakers contained in normal box onto the board 40mm thick 10 times from the height of 75cm.
Load test	Rate Power white noise is applied for 96hours at room temp.
Terminal Strength test	The pull force shall be applied to double lead wire ： Horizontal 3.0N(0.306kg) for 30 seconds. Vertical 2.0N(0.204kg) for 30 seconds.
General remark: After these test , the change of S.P.L shall be within ±3 dB	

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Dimensions



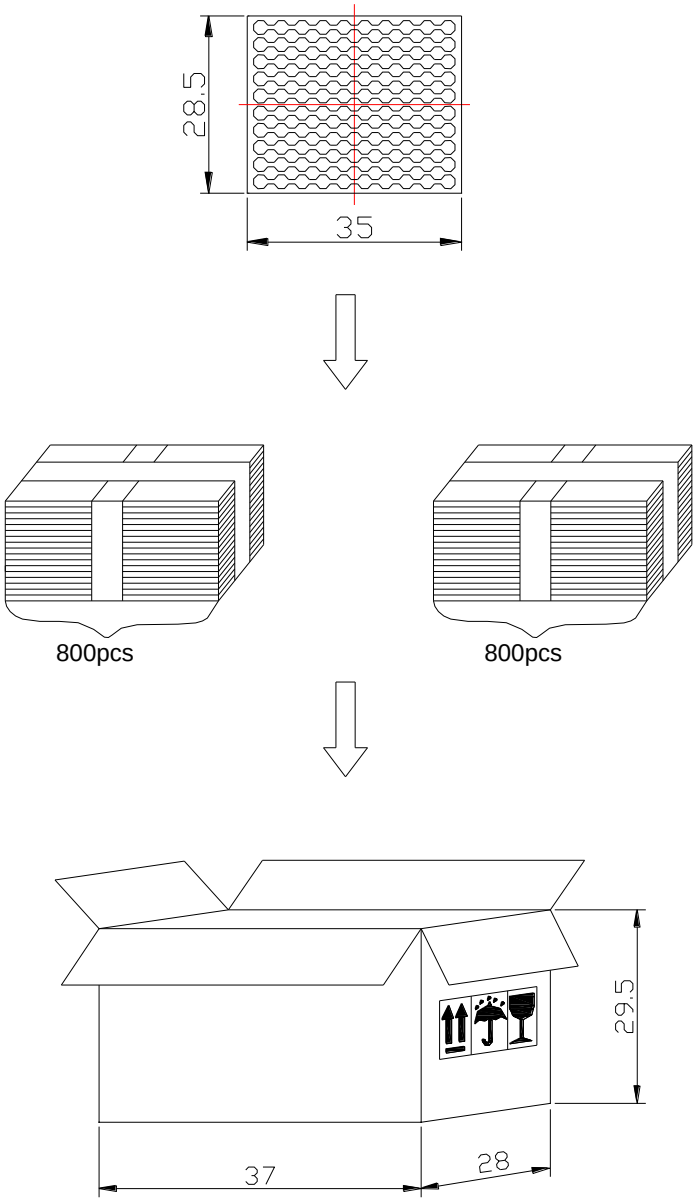
Unit:mm Tol:±0.5

PART NO.	PART NAME	Q'TY	MATERIAL
1	Gasket	1	Paper
2	Diaphragm	1	PET
3	VOICE COIL	1	Cu
4	Plate	1	SPCC
5	Magnet	1	NdFeB
6	PCB Terminal	1	FR4
7	Frame	1	Spcc

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Packing



Remark:
100 pcs per tray
8 trays for unit, 2 units per carton
Total:1600 pcs per box
Size:37*28*29.5cm

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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	29-08-2024	First issue of document