SPEAKER

Product No. 139525

BBS197-08H13.8-01

issue no. BS/TES01.1939



Features:

- No Welding
- Washable
- Loud sound output
- RoHS

Drawn by	Checked by	Approved by	
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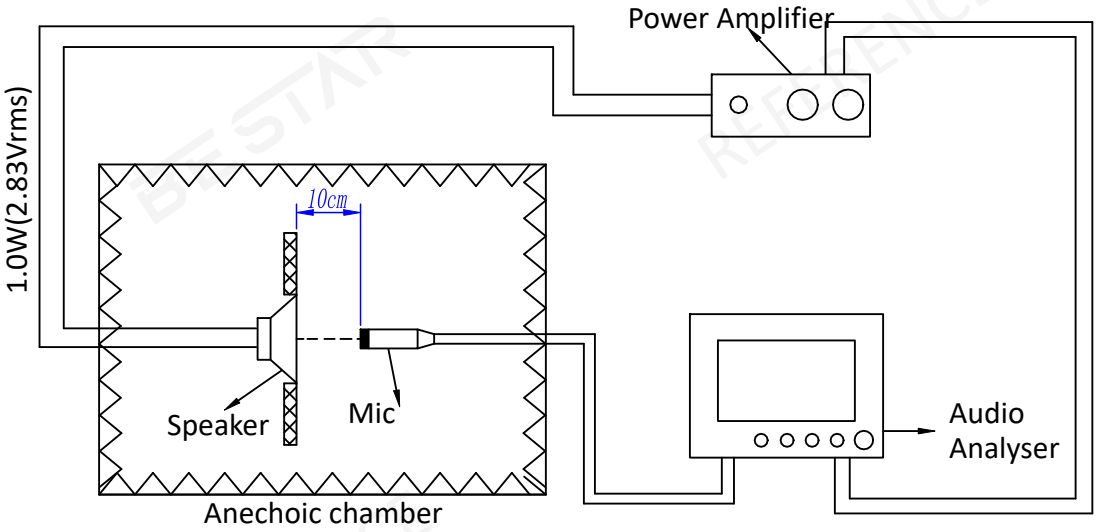
1.Characteristics

1.1Technical terms

1. Size	50*35*13.8mm
2. Impedance at 2KHz	8±15%Ω
3. Lowest Resonance frequency	850±20%Hz
4. Rated input power	1.0W
5. Maximum input power	1.5W
6. Buzz & Rattle(at sine wave 2.83V)	must be normal between 300~5000Hz
7. SPL	96 ±3dB (0.1m /2.83Vrms at 1KHz)
8. THD	≤20% (At 0.1m/2.83Vrms at 1KHz)
9. Weight	≈12.6g
10. Operating temperature	-30...+60℃
11. Storage temperature	-30...+60℃
12.Water proof grade	the speaker outlet reaches IP67

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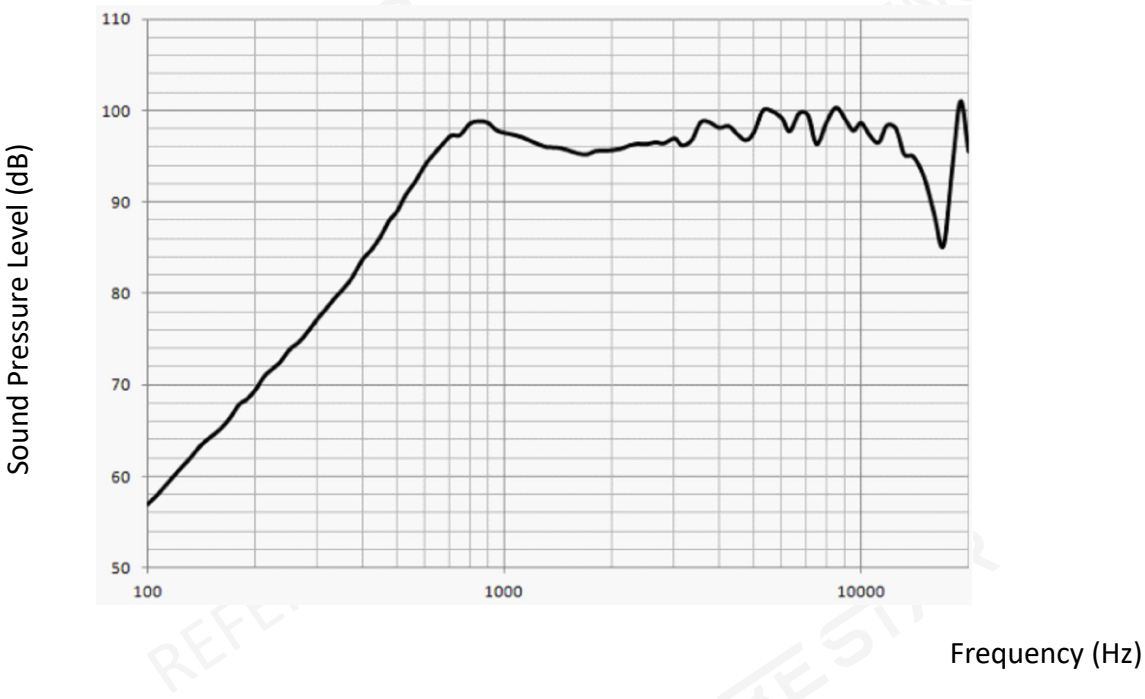
1.2 Test method:



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1.3 Frequency Response Curve (only for reference)

A: Frequency Response Magn 0 dB re 20.00 µPa/V 1/12Oct



1.3.1 Sensitivity

SPL is expressed in dB rel 20 µPa,computed according to IEC 268-5.
Measurement set up according chapter 1.2 and parameters according chapter 1.3.

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1.4 F0 Curve (only for reference)

A: Frequency Response Magn 0 dB re 20.00 µPa/V 1/12Oct



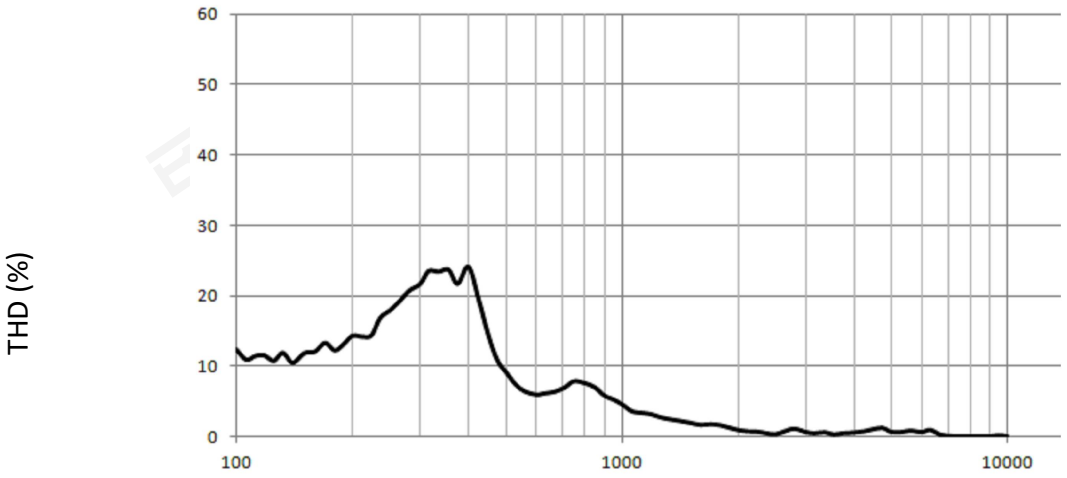
1.4.1 Resonance Frequency

Resonance frequency is measured according test set up in chapter 1.2 and parameters according chapter 1.4

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1.5 Total Harmonic Distortion (only for reference)

A: Frequency Response Magn 0 dB re 20.00 µPa/V 1/12Oct



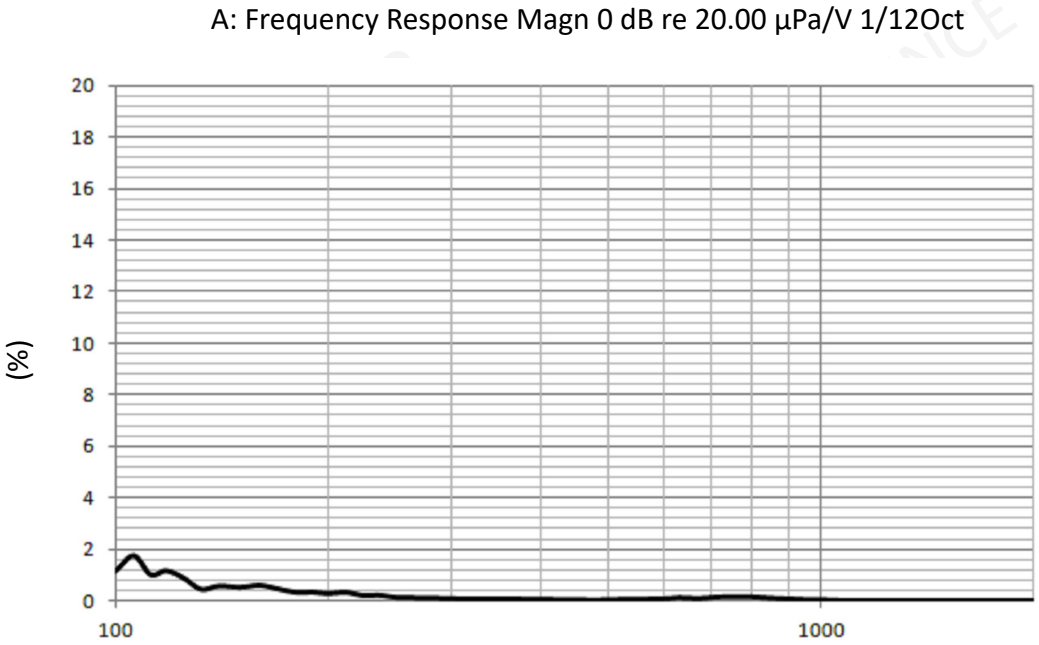
Frequency (Hz)	500	1000	10000
Upper Limit (%)	30	20	10

1.5.1 THD

THD is measured according test set up in chapter 1.2 and parameters according chapter 1.5

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1.6 R&B Curve (only for reference)

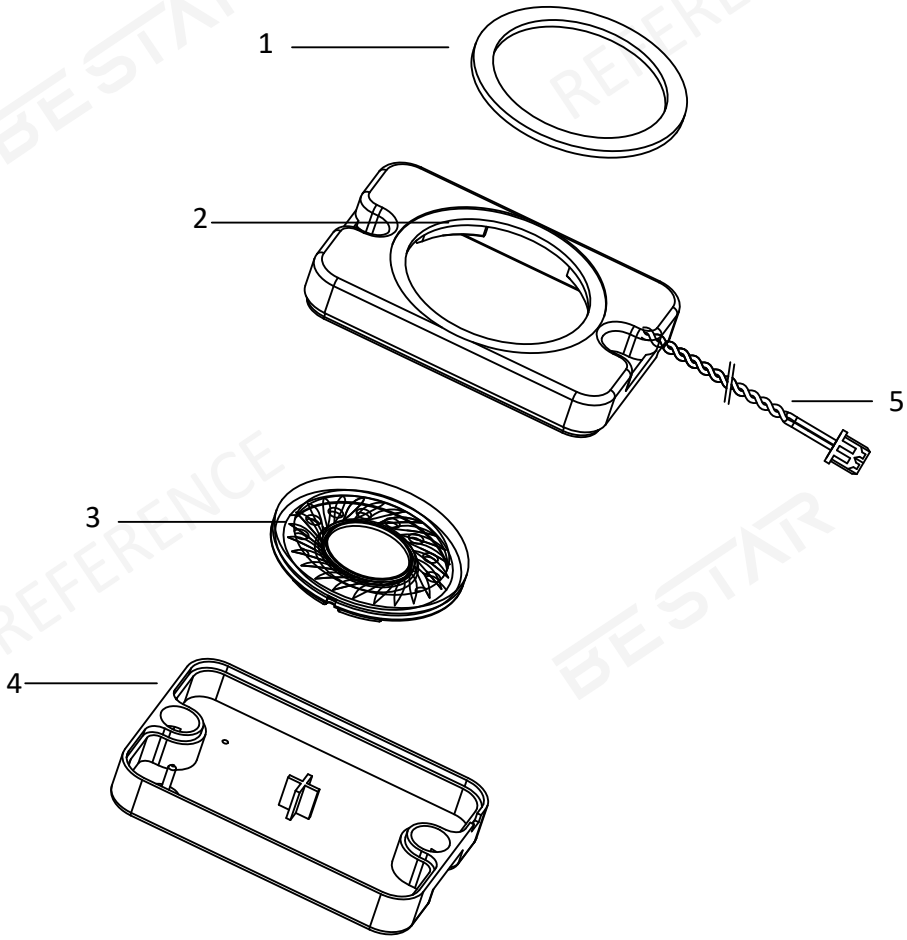


1.6.1 R&B

R&B is measured according test set up in chapter 1.2 and parameters according chapter 1.6

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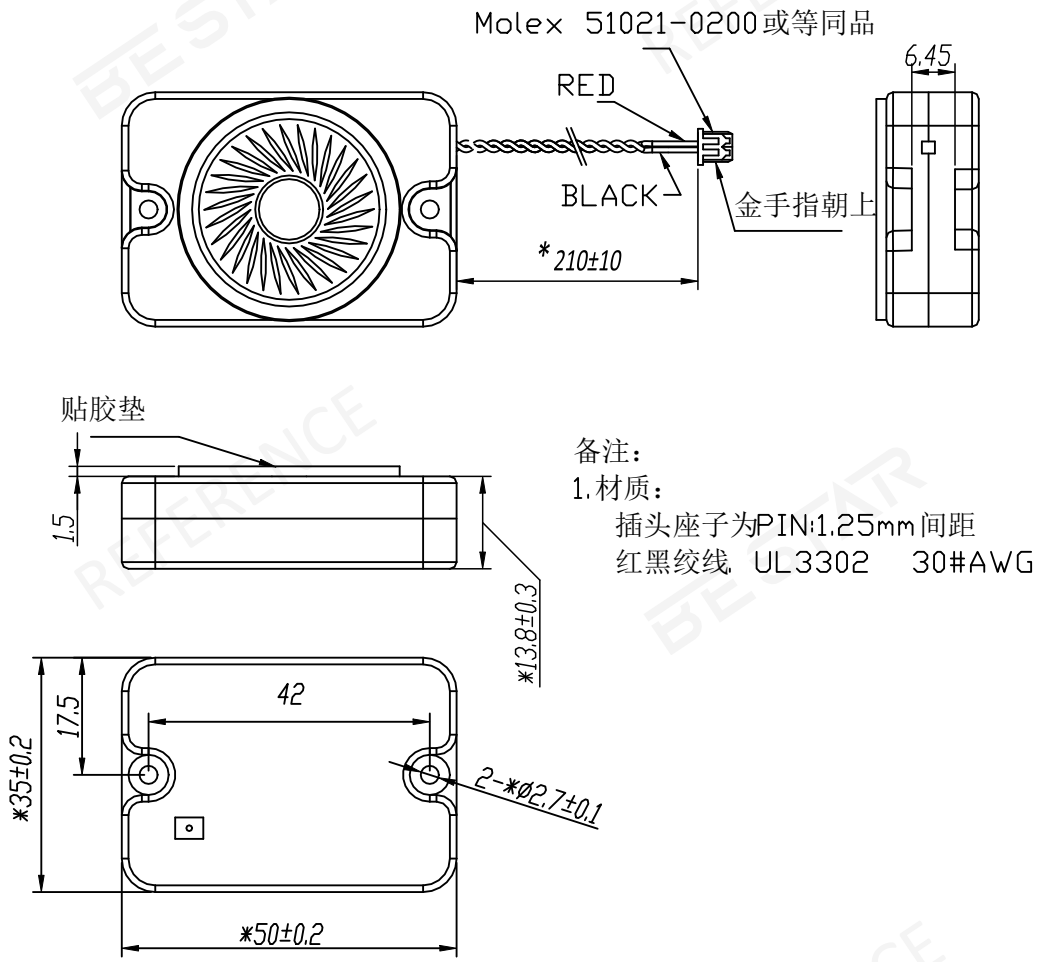
2.Part List



5. Wire+connecotio	Cu+insulation glue
Loundspeake	
4. box down	abs777d
3. SPEAKER	SPCC
2. Loundspeake box up	abs777d
1. Rubble	HH48-10-7973

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3. Dimension



Tolerance:±0.3mm

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4. Reliability test

4.1High temperature preservation test

Temperature	+60 ℃
Duration	96hrs

4.2 Low temperature preservation test

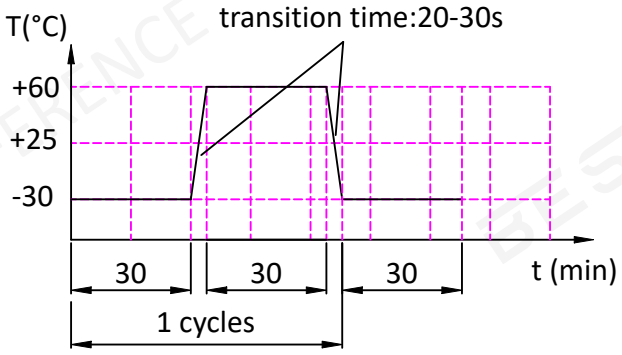
Temperature	-30 ℃
Duration	96hrs

4.3 Humidity Test

Temperature	+40±3 ℃
Relative Humidity	90%-95%RH
Duration	96hrs

4.4 Thernal Humidity Cycling

The part shall be subjected 5 cycles.



4.5 Drop test

1.0M free falling on Concrete floor, 5 times .

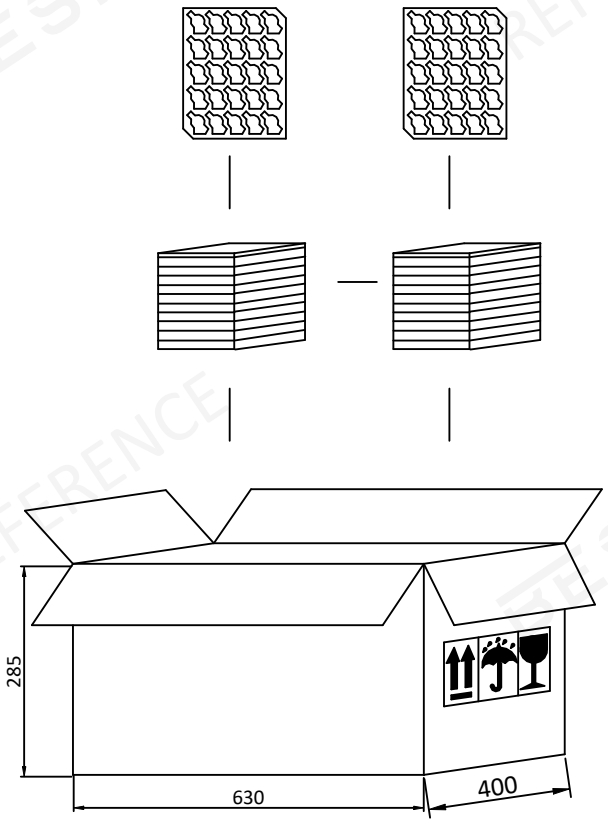
4.6 Operation Life Test

Must perform normal with program Pink-Noise source at Rated Power for 96 Hours,Frequency range 500-5KHz

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5. Packing

5.1 Packing drawing (unit:mm)



5.2 Packing quantity

1) 20pcs per magazine
2) 25pcs magazine per carton
3) 500pcs per carton,
4) carton size: 63X40X28.5cm

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6. History change record

Version	Change Items	Date	Drawn	Checked	Approved
A0	First Edition	2020.05.10	Judy.Yang	Emma.Ren	Jason.Zhang

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7.Important Notice

7.1 The products mustn't be washed

7.2 Storage Condition

The products should be stored in the room ,where the temperature/humidity is stable. And avoid suchplaces where there are large temperature changes. Please store the products at the following conditions:

Temperature: -30 to + 60 ℃ Humidity: 15 to 85% R.H.

7.3 Expire Date on Storage

Expire date (Shelf life) of the products is six months after deliveried under the conditions of a sealed and an unopened package. Please use the products within six months after deliveried.

If you store the products for a long time (more than six months), use carefully because the products may be degraded in the solderability and/or rusty.Please confirm solderability and characteristics for the products regularly.

7.4 Notice on Product Storage

(1) Please do not store the products in a chemical atmosphere (Acids, Alkali, Bases, Organic gas, Sulfides and so on), because the characteristics may be reduced at quality, and/or be degraded in the solderability due to the storage in a chemical atmosphere.

(2) Please use the products immediately after the package is opened, because the characteristics may be reduced at quality, and/or be degraded in the solderability due to storage under the poor condition.

7.5 Rated and Max input power

Rated input power

Rated input power is the maximum (limit) value which can be input to the component intentionally. If the actual input power to component keeps exceeding Rated Input power, it will damage the component acoustic performances and reliability. In the worst case, the component will get broken and no sound.

Max input power

Max input power is the maximum (limit) value for unexpected input power which is caused in the customer's circuit like surge voltage. If the actual input power to component keeps exceeding Maximum input power, it will break the component and cause no sound in a short time. Please note that component will have a risk to get broken if the unexpected input power continues.

The value of input power is set based on the sinusoidal power in the normal speaker use. If the special signal is input to component, the values of Rated and Max input power will be different. Please make a well-investigation at your laboratory in the case of the special signal input.

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