

Shenzhen HongSound Electronic Technology CO.,LTD

Add: #167,BuSha Road , BuJi, LongGang district , ShenZhen ,China

Tel : 86-755-28411046 Email:ring@szhsound.com

Website :www.szhsound.com

DATE: 5/21/2021

SPEC. No.:

Total: 7 sheet

SPECIFICATION

SHEET FOR APPROVAL

(Revision:)

CUSTOMER:

PRODUCTS: Micro speaker

MODEL NUMBER: SZ15113.5-R8W1-S01

CUSTOMER NUMBER:

INTERNAL DESCRIPTION:

L

H

Ohm

FRAME:

ENVIRONMENT REQUEST:

☐NON-ROHS

☒ROHS

☐OTHERS

周炳和	刘坤	刘坤
ENGINEER	CHECKED	APPROVED

CUSTOMER APPROVED

SIGNATURE	IMPRINTMENT

SPECIFICATIONS

Model No.

SZ15113.5-R8W1-S01

Page

1/7

1.ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Specifications
1-1	Dimension	11×15×3.5t
1-2	Rated Input Power	1W (1cc box)
1-3	Max Input Power	1.2W (1cc box)
1-4	Rated Impedance	8±15% Ω /2.0KHz/2.83Vrms
1-5	Coil resistance	7.2±10% Ω
1-6	Resonance frequency(f0)	1000±20% Hz while testing in 1cc box at 2.83Vrms/10cm
1-7	Sound Pressure Level	99±3 dB SPL /2.83Vrms/10cm (at 0.8,1.0,1.5, 2KHz in 1cc box)
1-8	Frequency Range	f0HZ ~20KHz
1-9	Total Harmonic Distortion	10%MAX. at 2KHz, 2.83Vrms/10cm
1-10	Flux Density	0.4T
1-11	Polarity	When a positive DC Current is applied to the voice coil terminal marked +or red ,the diaphragm shall move forward
1-12	Operation Test	Must be normal at sine wave and program source 1W.
1-13	Buzz,Rattle,etc.	Must be free audible noise (buzzes and rattles)(200Hz ~ 2KHz frequency range ,input level up to 2.83Vrms, while testing in 1cc box.)
1-14	Weight	1.85g
1-15	Appearance	Should not exist any obstacle to be harmful to normal operation;damages,cracks,rusts and distortions,etc.
1-16	Storage temperature	-40℃~+85℃
1-17	Operation temperature	-20℃~+70℃
1-18	Waterproof grade	IPX7

SPECIFICATIONS

Model No.

SZ15113.5-R8W1-S01

Page

2/7

2.ENVIRONMENTAL TEST

	Item	Specifications
2-1	High temp. Test	Temperature: +85°C±3°C Duration: 96 hours
2-2	Low temp. Test	Temperature: -40°C±3°C Duration: 96 hours
2-3	Humidity test	Temperature: +40°C±3°C Relative Humidity: 90%~95%RH Duration: 96 hours (recovery 6 hours)
2-4	Thermal cycle test.	Low temperature: -40°C±3°C, temperature:+85°C±3°C, cycle: 1 hour/cycle each, and then keep 10 cycles in a room.
2-5	Vibration	10~55~10Hz sin-wave sweep 15min. 5G(constant) X, Y, Z 3 direction. 2 hours each, total 6 hours.
2-6	Drop test	Height: 1.5m Cycle: 6 cycles (be mounted in a 100g fixture, drop samples 1.5m 2 drops on side(2*6), 2 drops on each corner(2*4). Total 20 drops
2-7	Load test	Input power: 1W, White noise 96 hours in 1cc box.

PASS CRITERION :

After these tests , the change of S.P.L shall be within ±3 dB .

SPECIFICATIONS

Model No.

SZ15113.5-R8W1-S01

Page

3/7

3.MEASURING METHOD(SPEAKER MODE)

3-1 .Test Condition

STANDARD

Temperature : 15 ~ 35℃

Relative humidity : 25% ~ 75%,

Atmospheric pressure : 860mbar to 1060mbar.

JUDGEMENT

Temperature : 20±3℃

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

3-2 . Standard Test Fixture

1.Input Power : 2.83Vrms

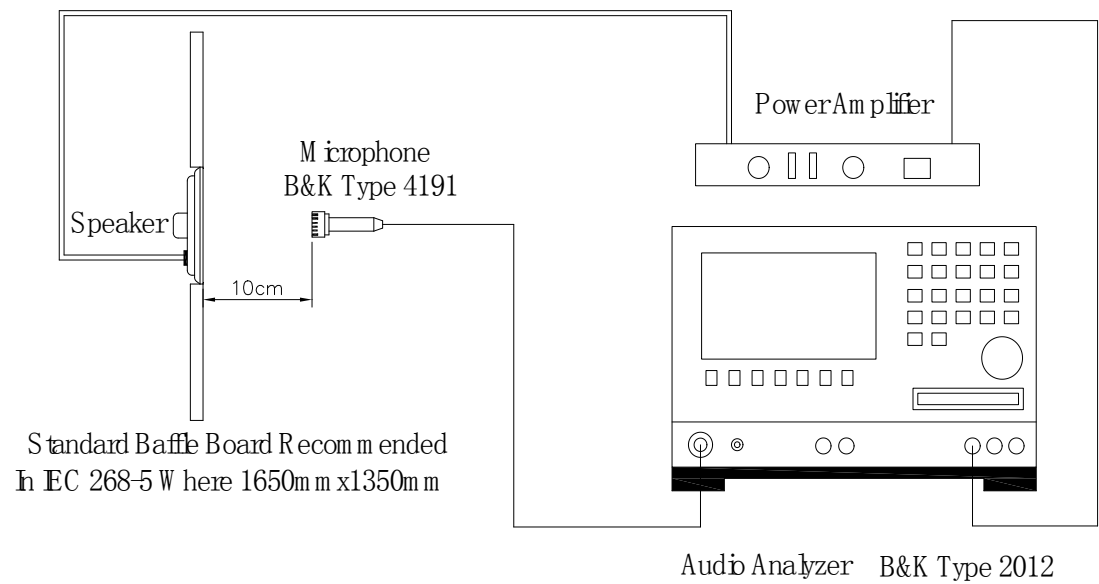
2.Zero Level : -dB

3.Mode : TSR

4.potentiometer Range : 50dB

5.Sweep Time : 0.5sec

Standard test condition of speaker



(fig.1)

SPECIFICATIONS

Model No.

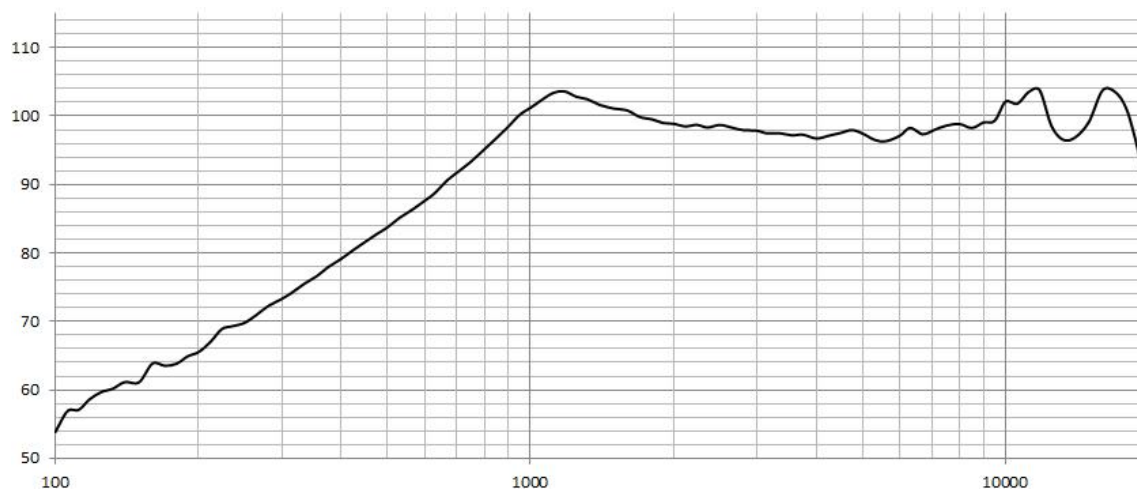
SZ15113.5-R8W1-S01

Page

4/7

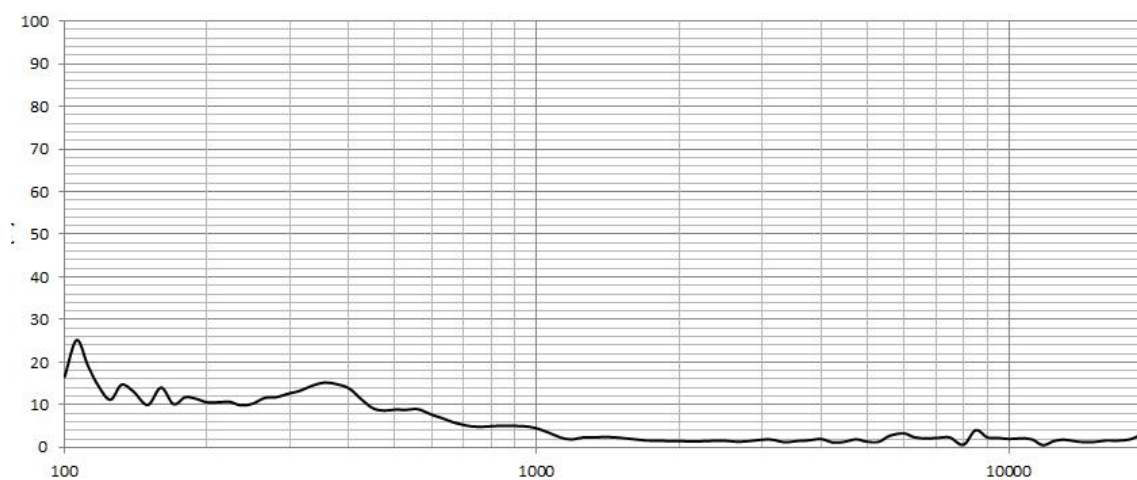
4-1.FREQUENCY RESPONSE CURVE(fig.2)

测试条件:2.83Vrms/10cm in 1cc BOX



4-2.SPEAKER DISTORTION CURVE(fig.3)

测试条件:2.83Vrms/10cm in 1cc BOX



SPECIFICATIONS

Model No.

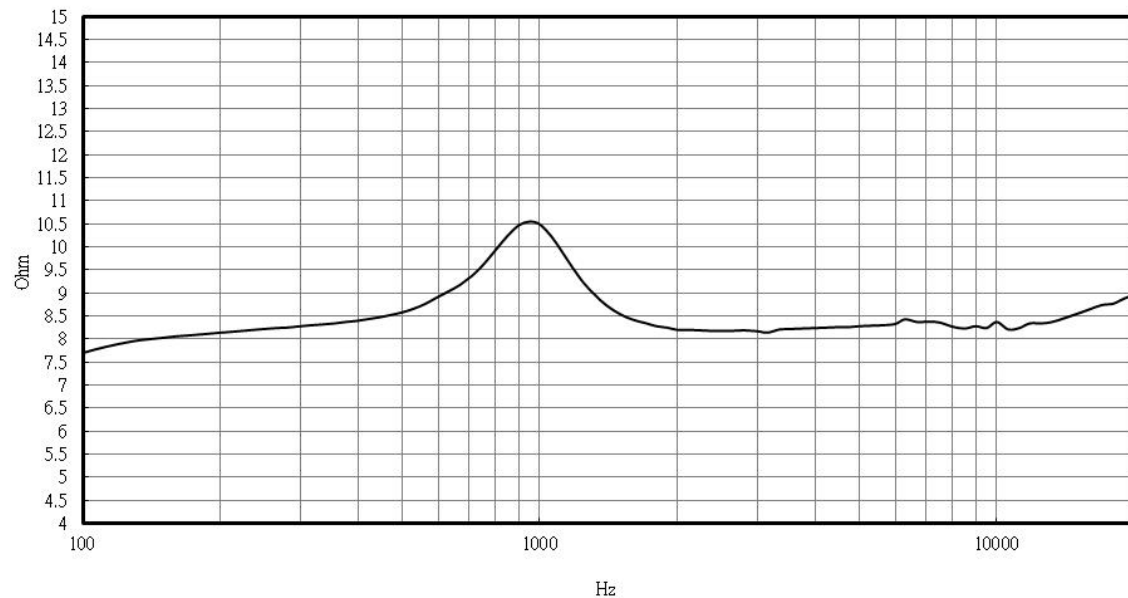
SZ15113.5-R8W1-S01

Page

5/7

5.IMPEDANCE RESPONSE CURVE(fig.4)

测试条件:2.83Vrms/10cm in 1cc BOX



SPECIFICATIONS

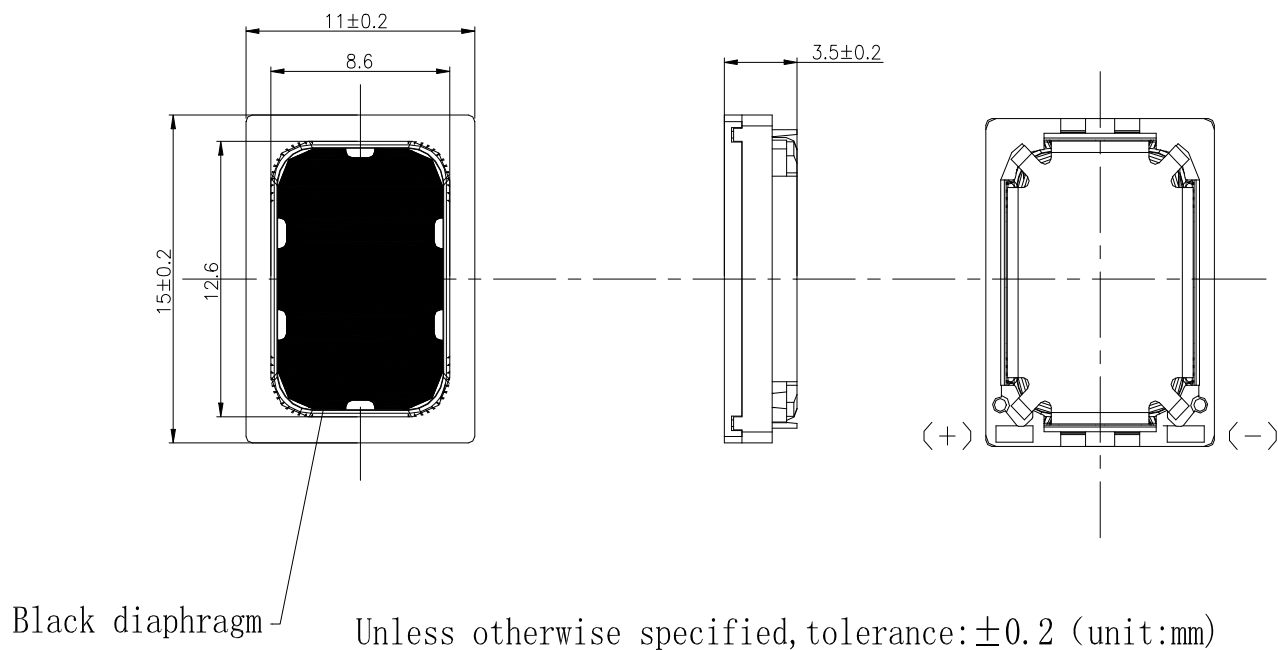
Model No.

SZ15113.5-R8W1-S01

Page

6/7

6.DIMENSIONS(fig.5)



7	Front Cover	1	PPA	GU-001
6	Magnet	1	NdFeB	GU-001
5	Plate	1	SPCC	GU-001
4	Voice coil	1	COPPER WIRE	GU-001
3	Diaphragm	1	PEEK	GU-001
2.	Yoke	1	SPCC	GU-001
1	Frame +solder pad	1	PPA+SUS	GU-001
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK

SPECIFICATIONS

Model No.

SZ15113.5-R8W1-S01

Page

7/7

7.PACKING(fig.6)

