BESTAR	APPROVAL SHEET FOR SMARTPHONE BOX			
	TOTAL PAGE	12	www.bestargroups.com	RoHS

Customer		Model Name	BBS159-08H16-03
Customer P/N		Product No.	130385
Date	2021/02/19	Issue No.	BS/TES01.1996A0
Page	01 of 12	Issue Date	2021/02/19

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2.Description
3.Characteristics
4.Test Setup
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8.History Change Record

Drawn by	Checked by	Approved by	Customer approved
杨紫群	刘英	张勇磊	

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1.Test Climatic Condition

1.1 Ambient Temperature :15°C~35°C,Preferably at 20°C
1.2 Relative Humidity:25% to 75%
1.3 Air Pressure:86kPa~106kPa

No.	Item	Specification
1.	Dimension	24 x45x14.16(mm)
2.	AC Impedance	8 Ω ±15%(at 2KHz/1Vrms)
3.	Rated Input Power	1.5W
4.	Maximum Input Power	1.8W
5.	Resonance Frequency	850Hz ±20%
6.	Frequency Response	F0~20KHz
7.	S.P.L	98±3dB/0.1m/1.5W at 2KHz
8.	THD	≤ 10% (at 1.0KHz/1.5W)
9.	Buzzes & Rattles	Must be normal at sine wave 3.45Vrms
		from 200~3400Hz
10.	Polarity	Positive voltage to (+),Diaphragm moves forward
11.	Operating Temperature	-30~+ 70°C
12.	Storage Temperature	-30~+ 70°C
13.	Weight	~9g±0.3g
14.	Waterproof test	IP67

2.Description

2.1 Acoustic component Performance Specification
2.2 The present document specifies performance requirements for the acoustic characteristics of SPK

3.Characteristics

3.1 Electrical and Mechanical Characteristics

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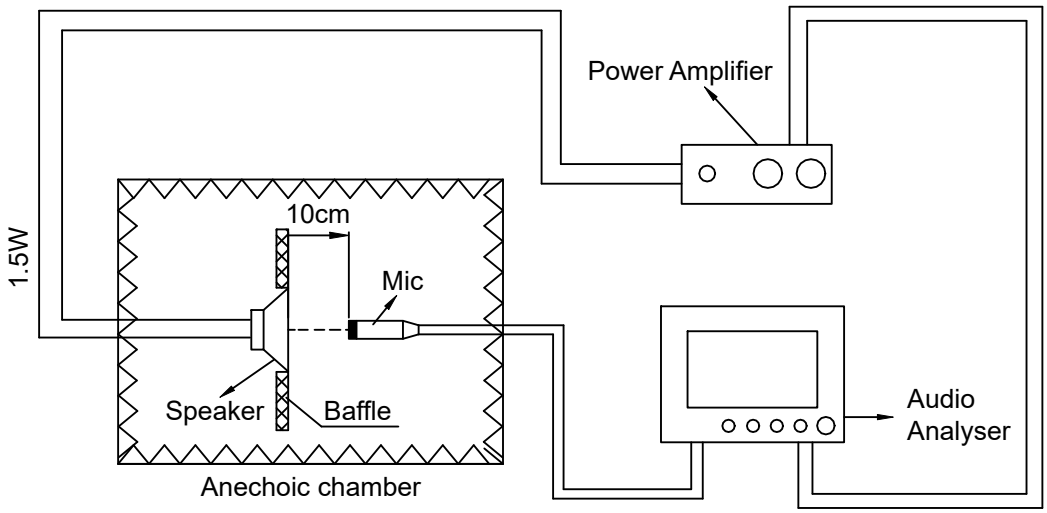
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4. Test Setup

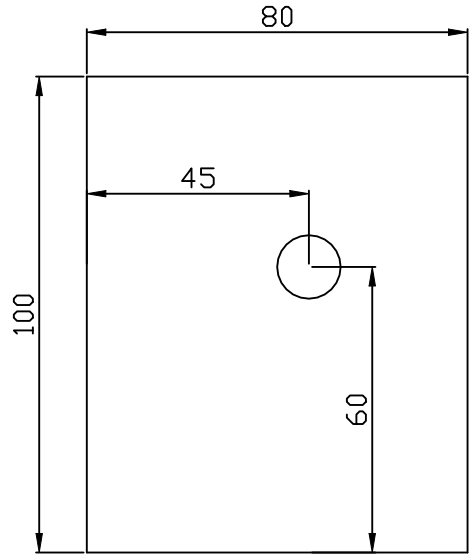
4.1 Speaker Measurement Circuit



4.2 Baffle Drawing

unit:cm

tolerance:±2



4.3 Test Method

The speaker shall be mounted in a baffle of the dimensions 80X100cm show figure 4.2,

The measuring free-field microphone shall be placed 10cm from DUT,on axis.

The test voltage is 1.5W and swept sine-wave range is 300Hz~20KHz with a R80 of test sequence

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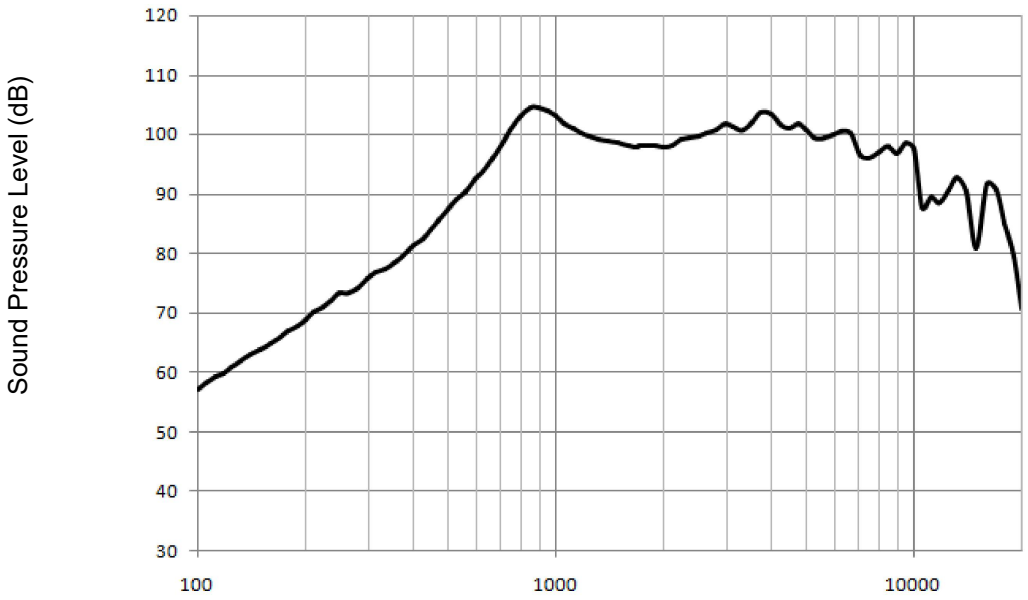
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4.4 Frequency Response Curve (only for reference)

A: Frequency Response Magn 0 dB re 20.00 μ Pa/V 1/12Oct
Monomer test



4.4.1 Sensitivity

SPL is expressed in dB rel 20 μPa,computed according to IEC 268-5.
Measurement set up according chapter 4.1 and parameters according chapter 4.4.

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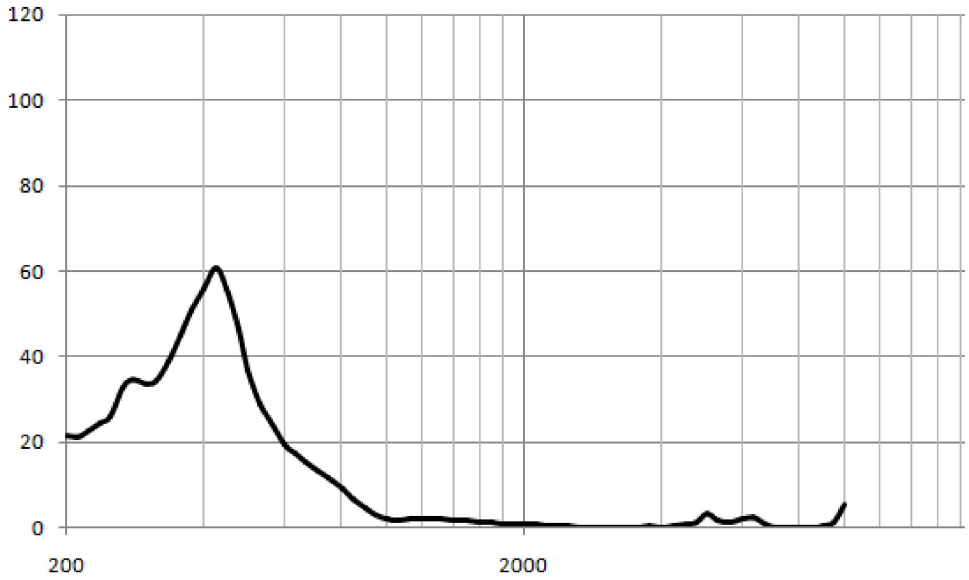
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4.5 Total Harmonic Distortion (only for reference)

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



4.5.1 THD

THD is measured according test set up in chapter 4.1 and parameters according chapter 4.5

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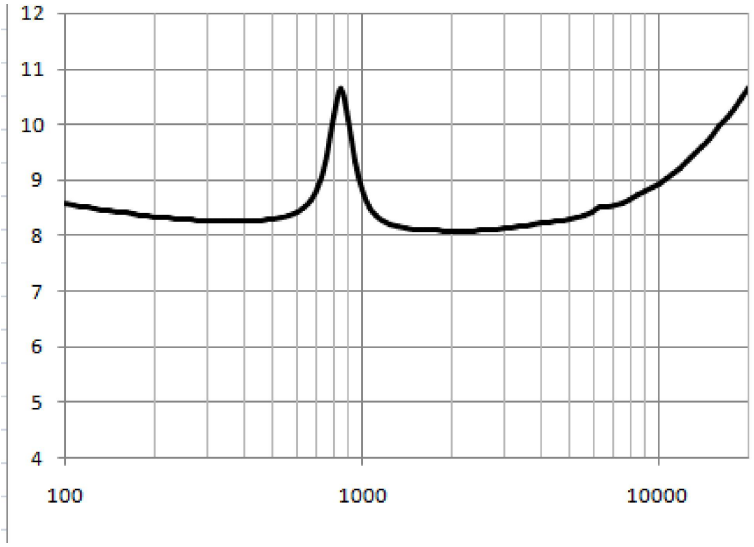
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4.6 F0 Curve (only for reference)

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

Resonance frequency is measured according test set up in chapter 4.1 and parameters according chapter 4.6

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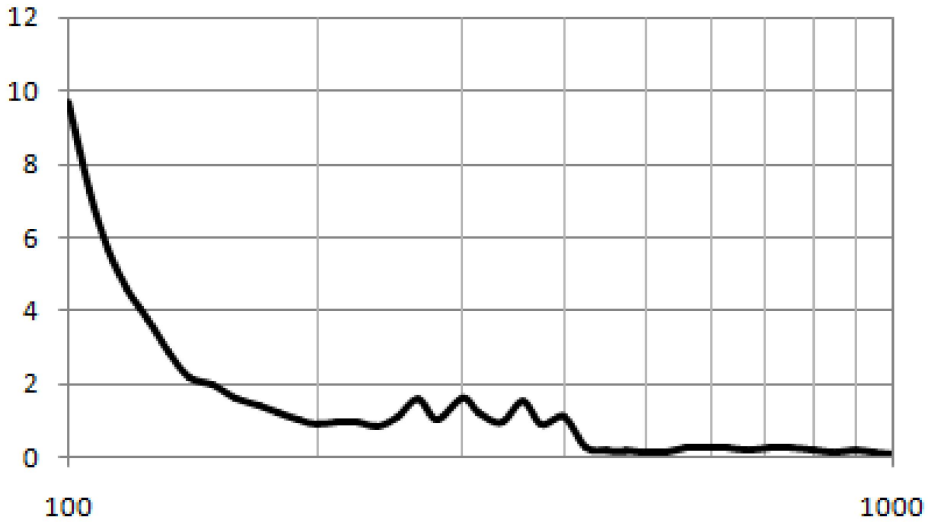
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4.7 R&B Curve (only for reference)

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



4.7.1 R&B

R&B is measured according test set up in chapter 4.1 and parameters according chapter 4.7

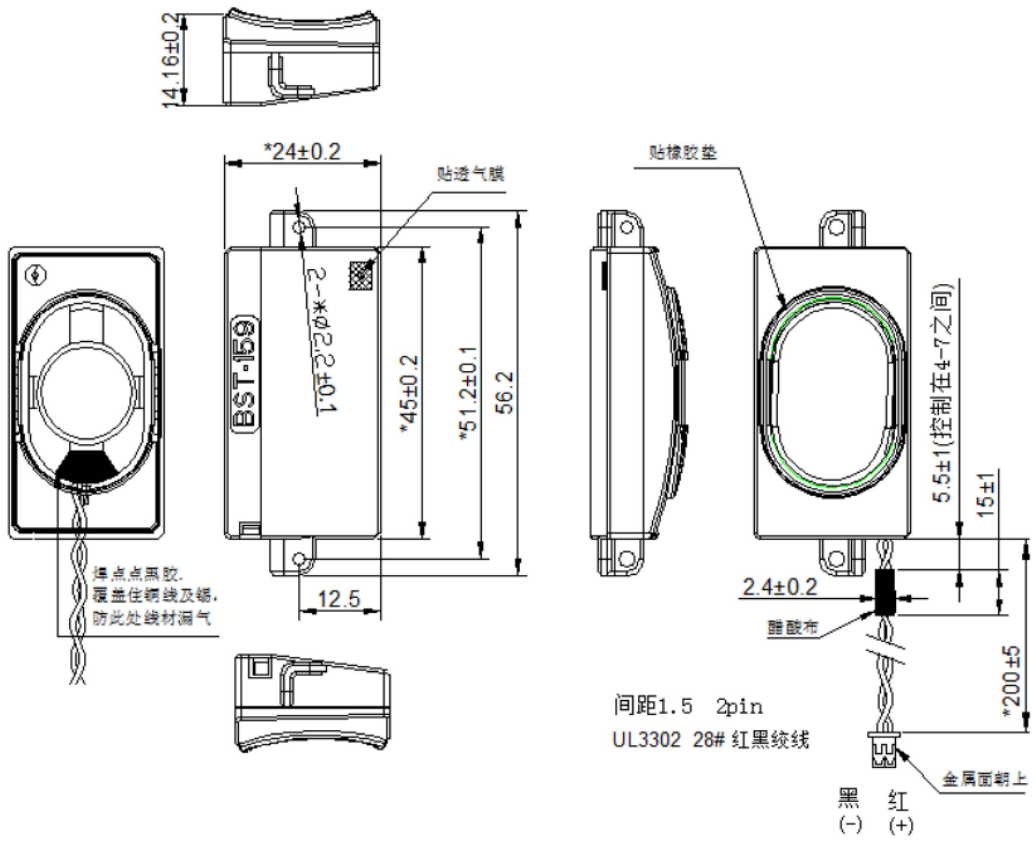
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5. Drawing 1



unit:mm
tolerance:±0.2
标有*号为重点尺寸

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6. Reliability Test

6.1 Load Test

Power (Nom)	1.5W (White noise)
Duration	96hrs

6.2 High Temperature Test

Temperature	+70±3°C
Duration	96hrs

6.3 Low Temperature Test

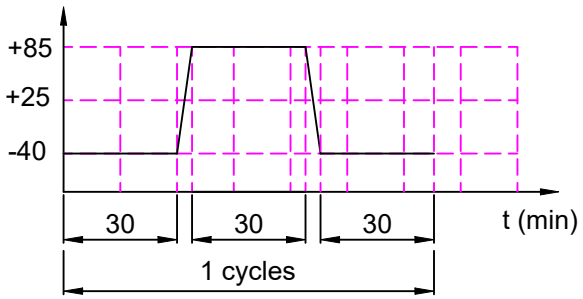
Temperature	-20±3°C
Duration	96hrs

6.4 Damp Heat

Temperature	40±3°C
Relative Humidity	90%-95%RH
Duration	96hrs

6.5 Temperature Cycle Test

Cycles	10



6.6 Drop Test

Height	1.0m
Drop face	thick ness wooden board (20mm)
Times	10 (three times in each direction)

7.1 waterproof test IP67

Notice:

1.Immediately after reliability test,the samples shall be stored under climatic conditions such as normally exist in ordinary rooms or laboratories.Unless otherwise noted,the recovery period shall be 4hrs at least before performance testing.

2. After reliability test ,all samples must be meet the requirements specified

3.Sensitivity difference at 2~5KHz shall be within ±3dB from initial value after test.

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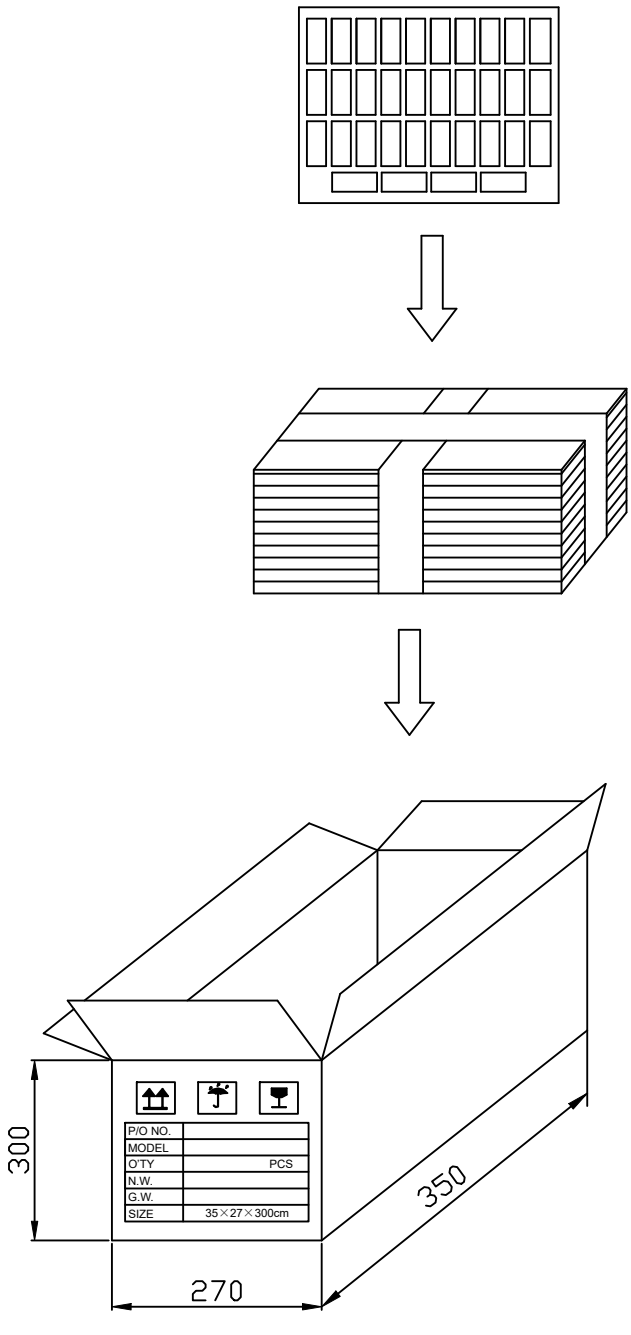
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7. Packing



Remark:
34 pcs per carton
12 carton per box
Total 408pcs per box
Size: 35×27×30(cm)

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8. History Change Record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
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