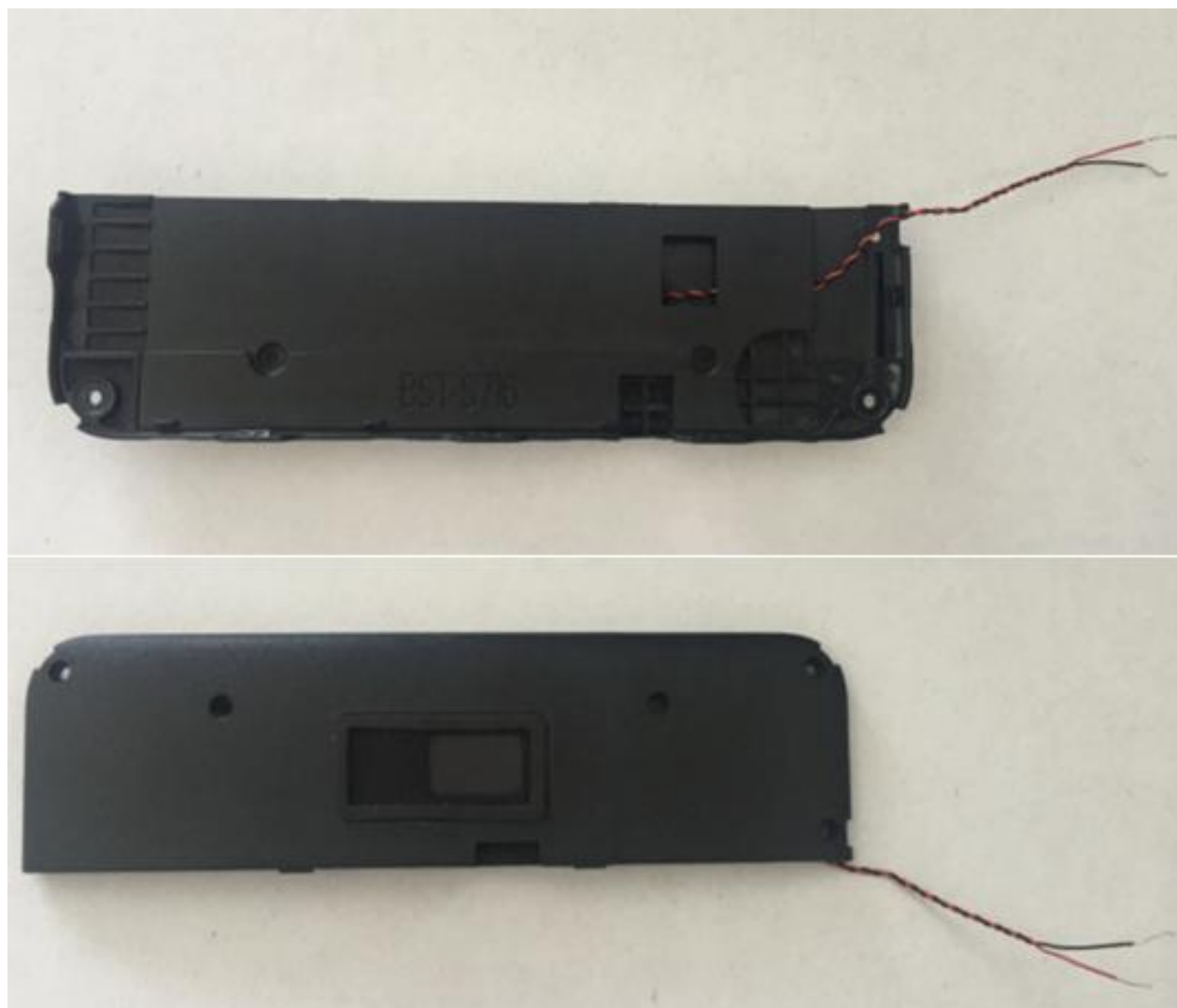


SPECIFICATION

BBS716-L4.9





APPROVAL SHEET FOR SMARTPHONE SPEAKER

TOTAL PAGE

13

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RoHS

Customer		Model Name	BBS716-L4.9
Customer P/N		Product No.	130131
Date	04 Aug 2017	Issue No.	BS/TES01.1689A
Page	02 of 13	Issue Date	2017/08/04

Table of Contents:

- 1.Test Climatic Condition
- 2.Description
- 3.Characteristics
- 4.Test Setup
- 5.Drawing
- 6.Reliability Test
- 7.Packing
- 8.History Change Record

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

BESTAR HOLDING CO.,LTD

No.199 HuangHe West Road.New district,ChangZhou,JiangSu Province,P.R.China

Tel: +86 519 88222567**Fax:** +86 519 88222551**E-mail:** wu@be-star.com**<http://www.bestargroups.com>**

BBS716-L4.9

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	105 x 29.9 x 4.9 (mm)
2.	AC Impedance	6 Ω ±15% (at 2KHz/1Vrms)
3.	Rated Input Power	0.9W/2.37V (in 1cc box)
4.	Maximum Input Power	1.3W/2.83V (in 1cc box)
5.	Resonance Frequency	500Hz ±20% (in free air)
6.	Resonance Frequency	780Hz ±20% (in 1.0cc box)
7.	Frequency Response	F0~20KHz
8.	S.P.L	92±3dB/0.1m/0.9W at 2KHz
9.	THD	≤15% (at 1KHz/0.9W)
10.	Buzzes & Rattles	Must be normal at sine wave 2.37Vrms (in box)
		from 200~3400Hz
11.	Polarity	Positive voltage to (+), Diaphragm moves forward
12.	Operating Temperature	-20~+ 70°C
13.	Storage Temperature	-20~+ 70°C
14.	Weight	~1.7g±0.3g

2. Description

2.1 Acoustic component Performance Specification

2.2 The present document specifies performance requirements for the acoustic characteristics of speaker

3. Characteristics

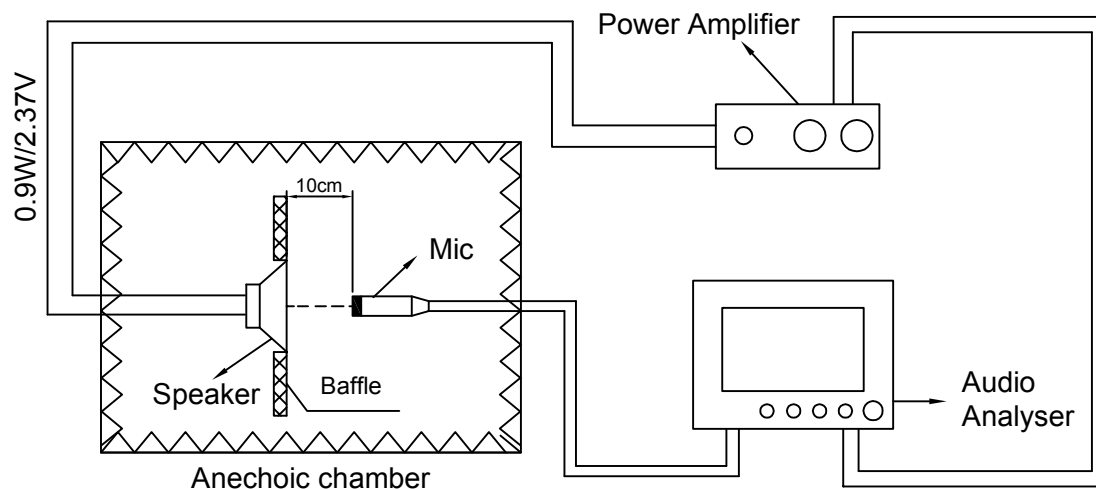
3.1 Electrical and Mechanical Characteristics

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4. Test Setup

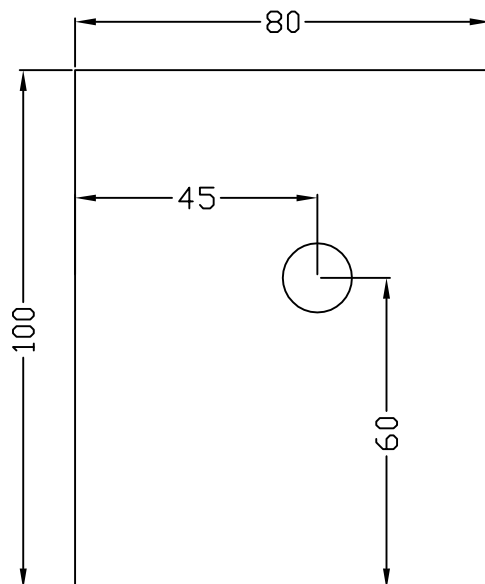
4.1 Speaker Measurement Circuit



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,

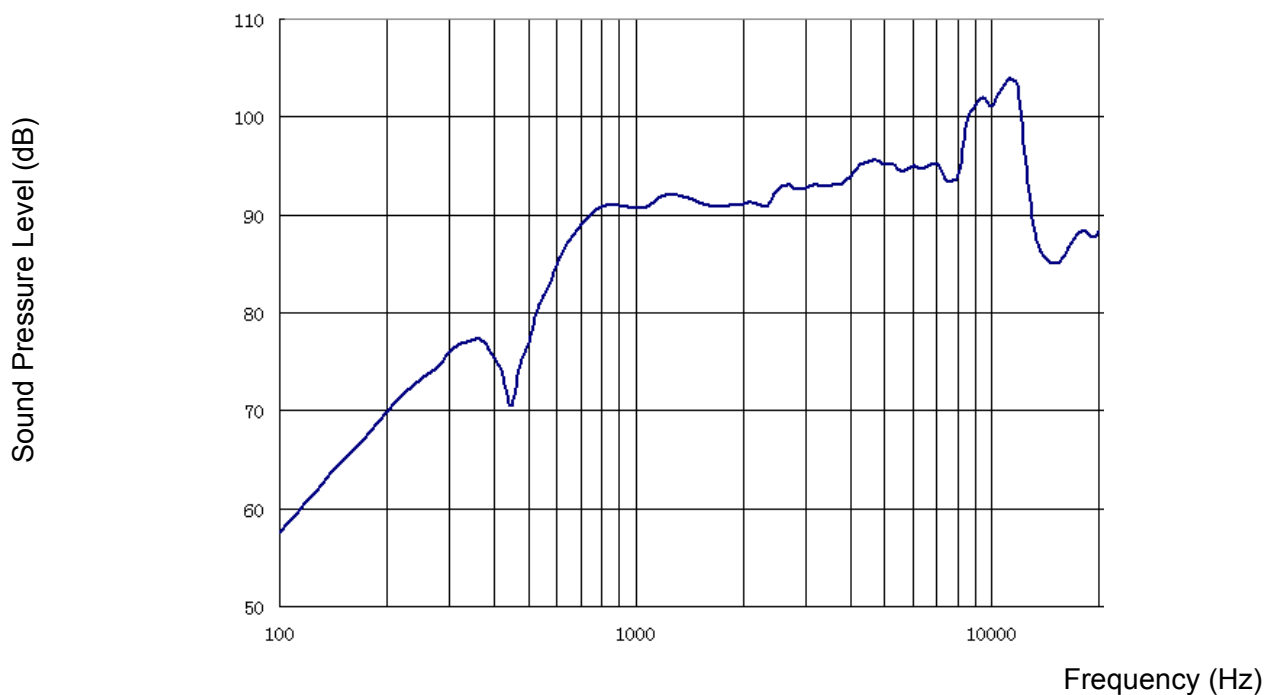
The measuring free-field microphone shall be placed 10cm from DUT, on axis.

The test voltage is 0.9W and swept sine-wave range is 100Hz~20KHz with a R80 of test sequence

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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

4.4.1 Sensitivity

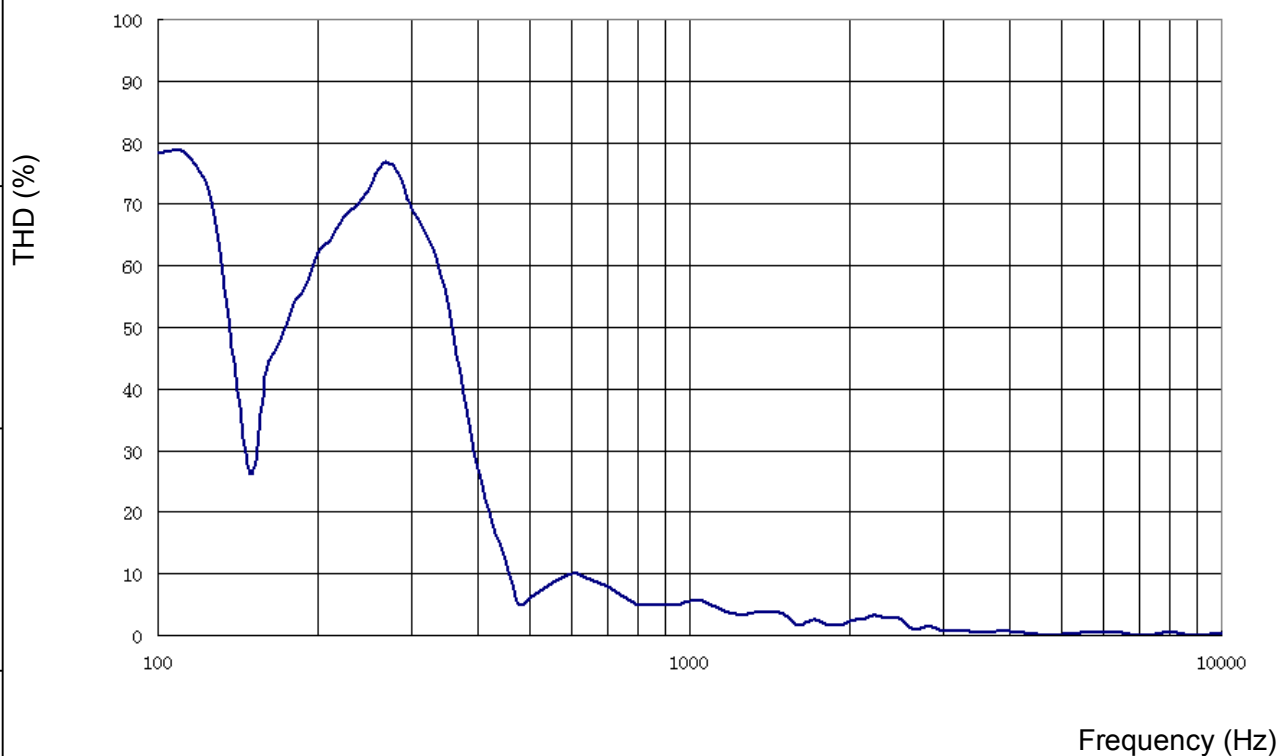
SPL is expressed in dB rel 20 μ Pa, computed according to IEC 268-5.
Measurement set up according chapter 4.1 and parameters according chapter 4.4.

This test is performed on the production line by 100%.

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4.5 Total Harmonic Distortion (only for reference)

A: Frequency Response Magn 0 dB re 20.00 $\mu\text{Pa/V}$ 1/12Oct

4.5.1 THD

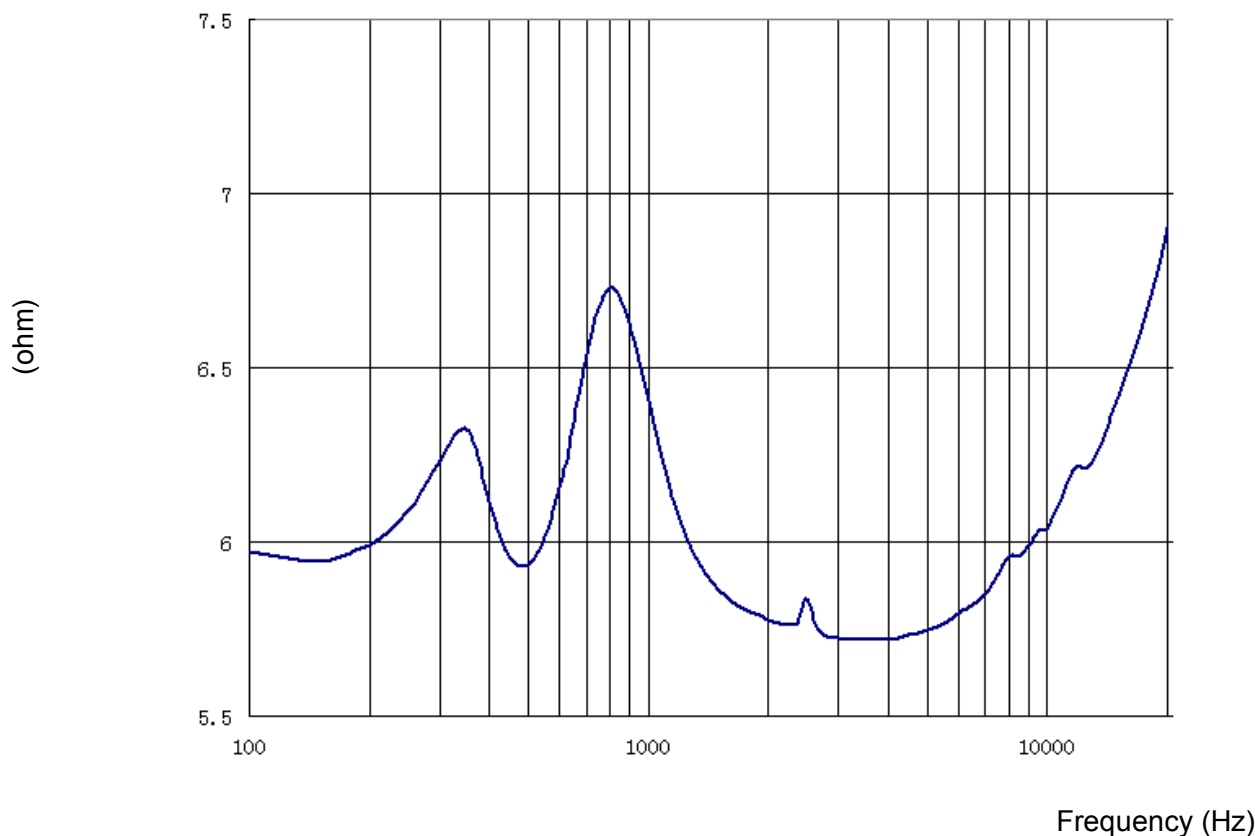
THD is measured according test set up in chapter 4.1 and parameters according chapter 4.5

This test is performed on the production line by 100%.

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4.6 F0 Curve (only for reference)

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

4.6.1 Resonance Frequency

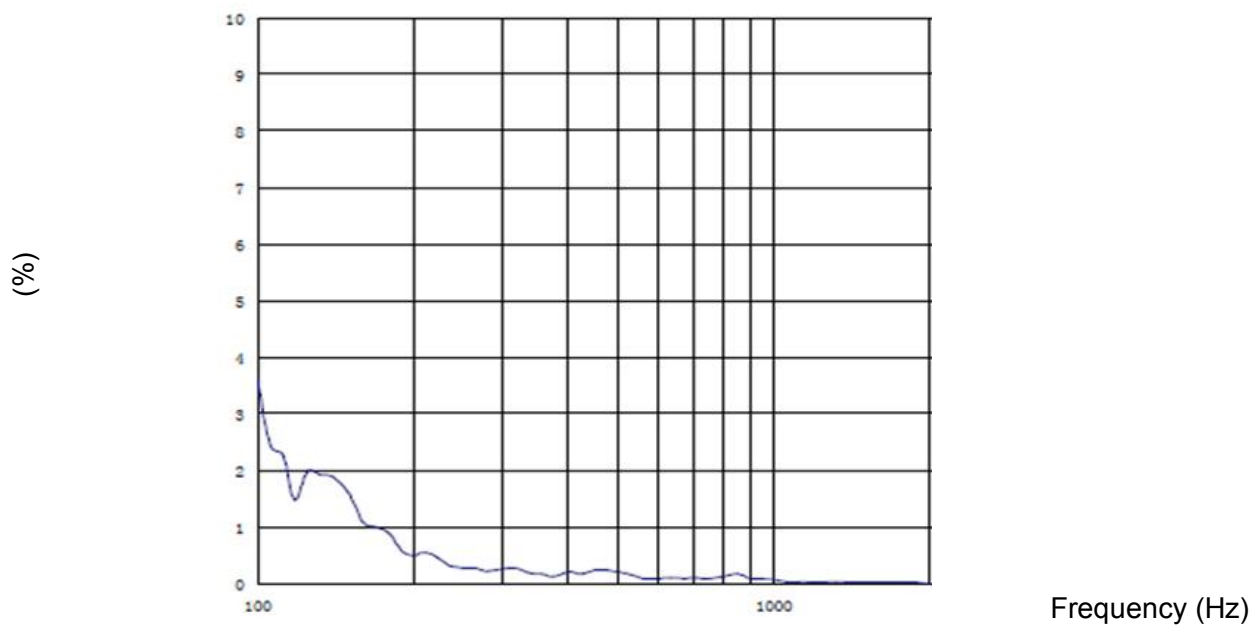
Resonance frequency is measured according test set up in chapter 4.1
and parameters according chapter 4.6

This test is performed on the production line by 100%.

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6		5		4		3		2		1	

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4.7 R&B Curve (only for reference)

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

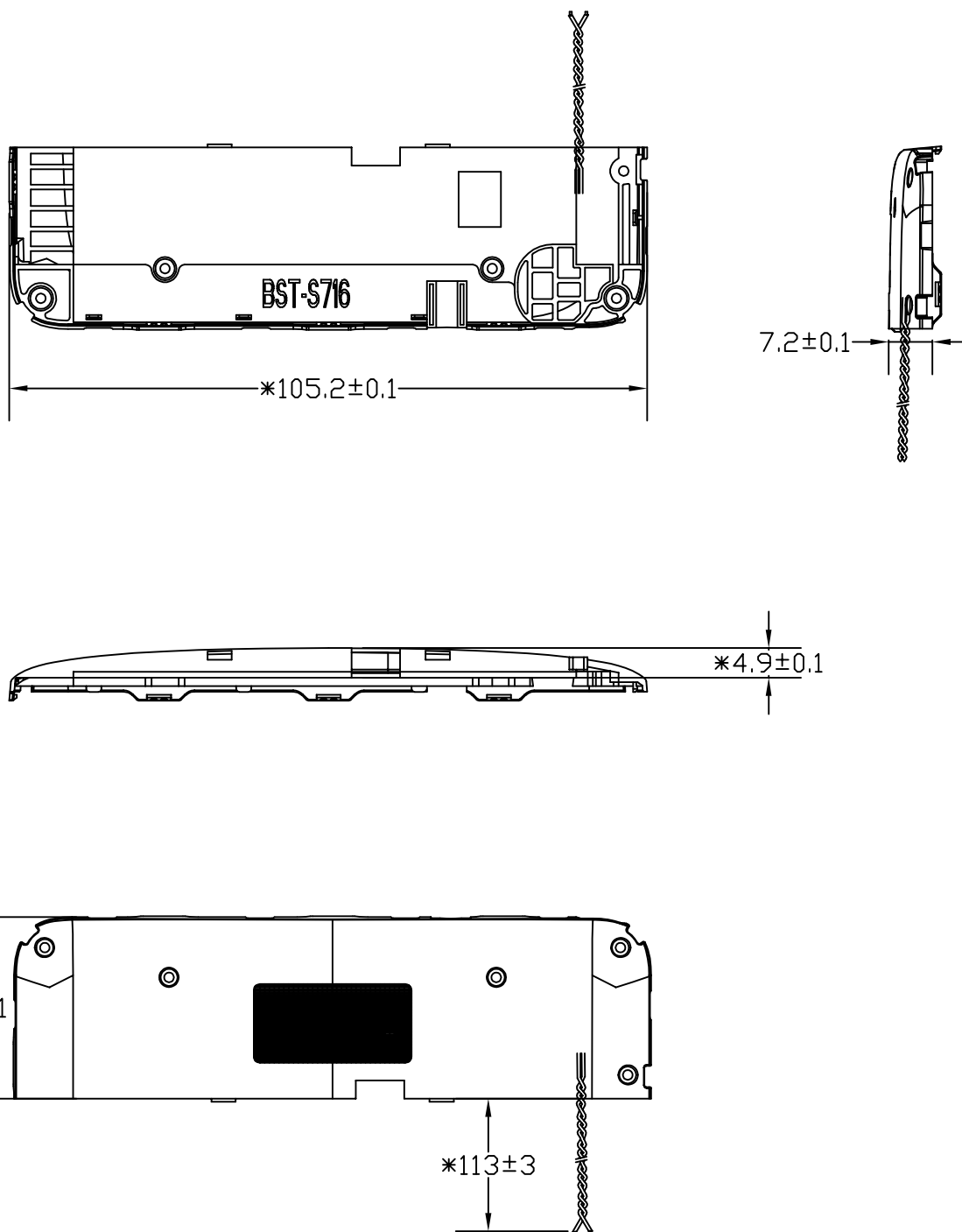
4.7.1 R&B

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

This test is performed on the production line by 100%.

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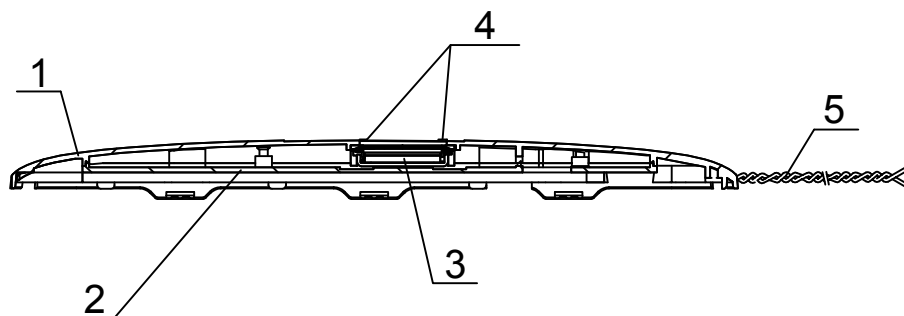


unit:mm
tolerance:±0.2

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★Permitted Force to Speaker



No	Description of the part	Material
1	Up Cover	ABS
2	Down Cover	ABS
3	Driver	BeStar Assemble
4	Dustproof Net	Net
5	Stranded wire	UL1571AWG32#

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6. Reliability Test

6.1 Load Test

Power (Nom)

0.9W(in Pink noise in 1cc box)

Duration

96hrs

6.2 High Temperature Test

Temperature

 $+70\pm 3^{\circ}\text{C}$

Duration

96hrs

6.3 Low Temperature Test

Temperature

 $-20\pm 3^{\circ}\text{C}$

Duration

96hrs

6.4 Damp Heat

Temperature

 $40\pm 3^{\circ}\text{C}$

Relative Humidity

90%-95%RH

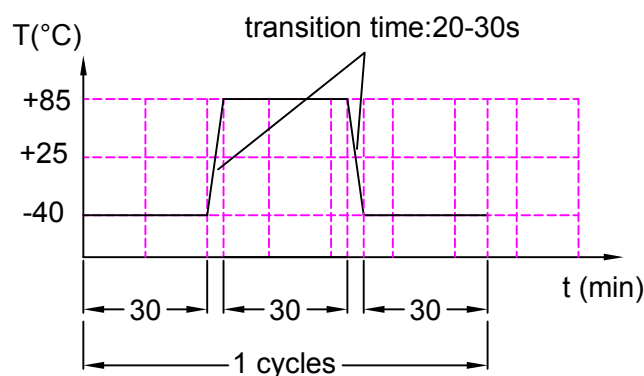
Duration

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)

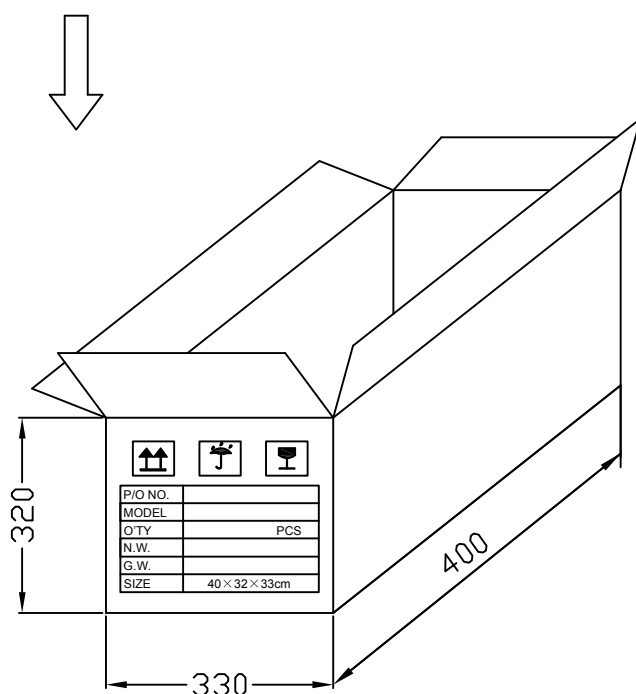
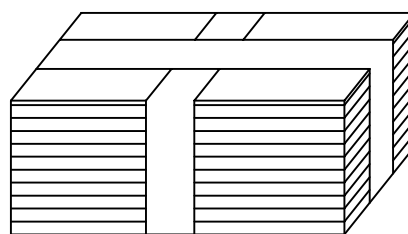
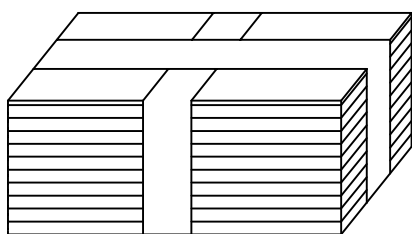
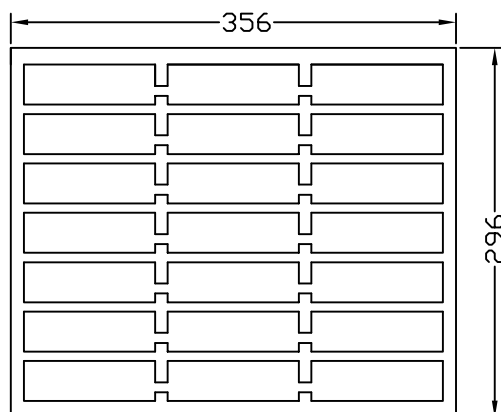
Notice:

- 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 $\pm 3\text{dB}$ from initial value after test.

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7. Packing



Remark:
21 pcs per carton
24 carton per box
Total 500pcs per box
Size: 40×32×33(cm)

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8. History Change Record

[illegible]

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