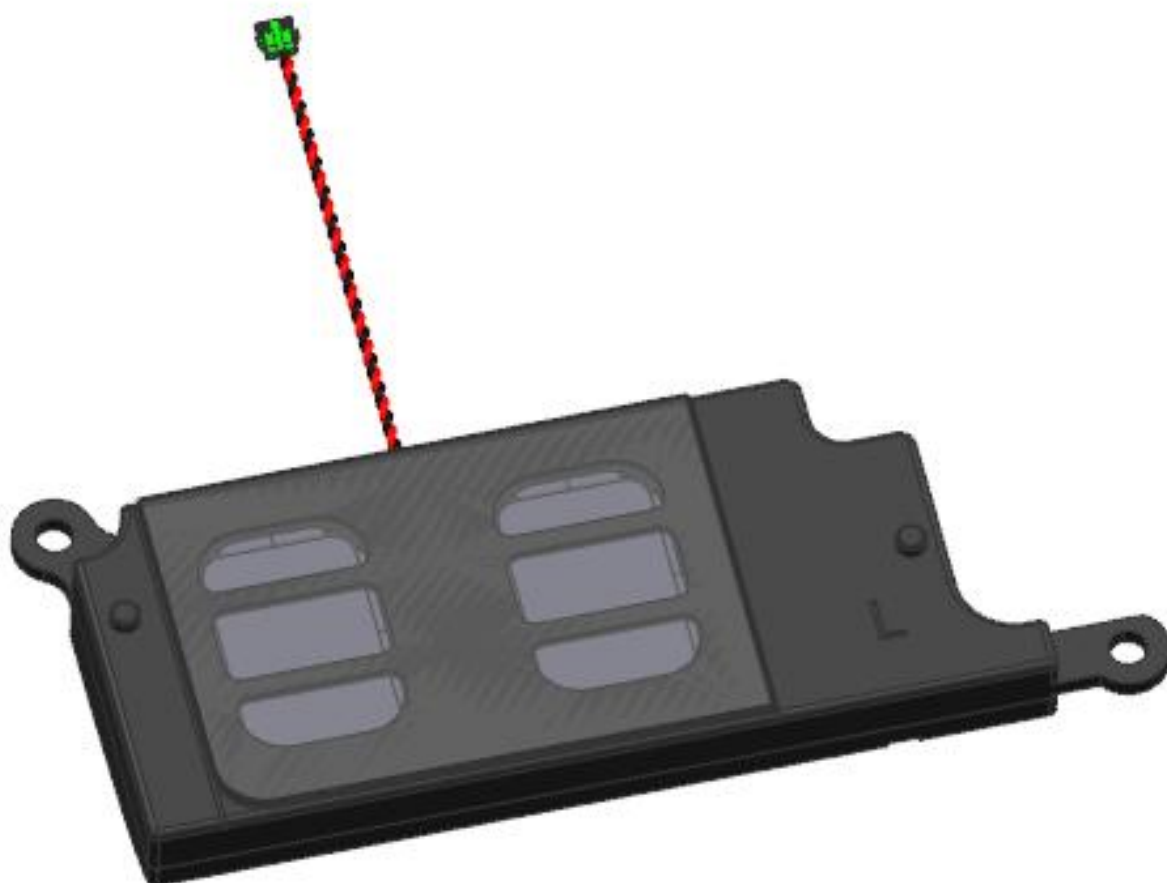


# SPECIFICATION

BBS129-04H8.7-L





# APPROVAL SHEET FOR SMARTPHONE SPEAKER

TOTAL PAGE

12

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RoHS/HF

Customer		Model Name	BBS129-04H8.7-L
Customer P/N		Product No.	139518
Date	31 May.2016	Issue No.	BS/TES01.1609A
Page	01 of 12	Issue Date	2016/05/31

## 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

## BESTAR HOLDING CO.,LTD

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

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文件号: BS/QDTE045B

## BBS129-04H8.7-L

## 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	50.22x23 x 8.7(mm)
2.	AC Impedance	4 Ω ±20%(at 2KHz/1Vrms)
3.	Rated Input Power	1.4W(2.37Vrms)
4.	Maximum Input Power	2.0W(2.83Vrms)
5.	Fo	750 Hz ±20%
6.	Frequency Response	F0~20KHz
7.	S.P.L	98±3dB/0.1m/1.4W at 2KHz ,Show in Page4
8.	THD	≤10% (at 1KHz/1.4W) ,Show in Page5
9.	Buzzes & Rattles	Must be normal at sine wave 2.37V from 300~3400Hz
10.	Polarity	Positive voltage to (+),Diaphragm moves forward
11.	Operating Temperature	-20~+ 70°C
12.	Storage Temperature	-20~+ 70°C
13.	Weight	~8.5±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

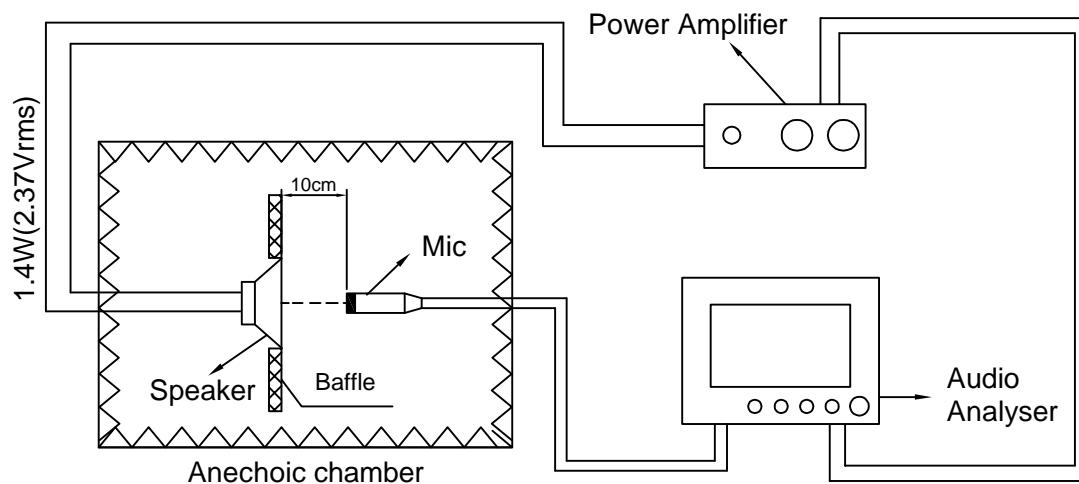
3.1 Electrical and Mechanical Characteristics

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## BBS129-04H8.7-L

## 4. Test Setup

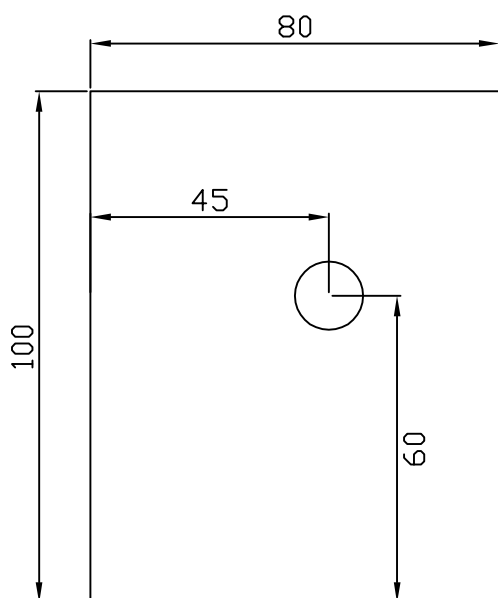
## 4.1 Speaker Measurement Circuit



## 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,

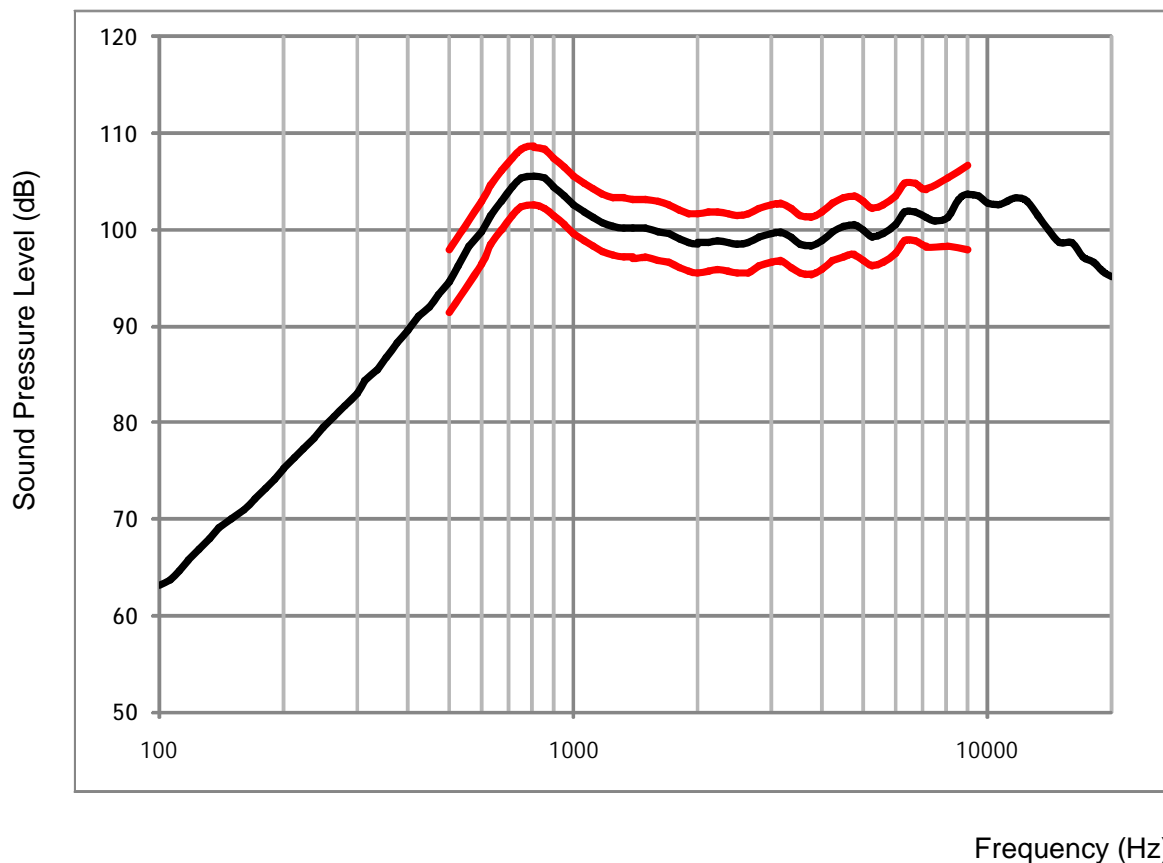
The measuring free-field microphone shall be placed 10cm from DUT, on axis.

The test voltage is 1.4W 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  $\mu$ Pa/V 1/12Oct

## 4.4.1 Sensitivity

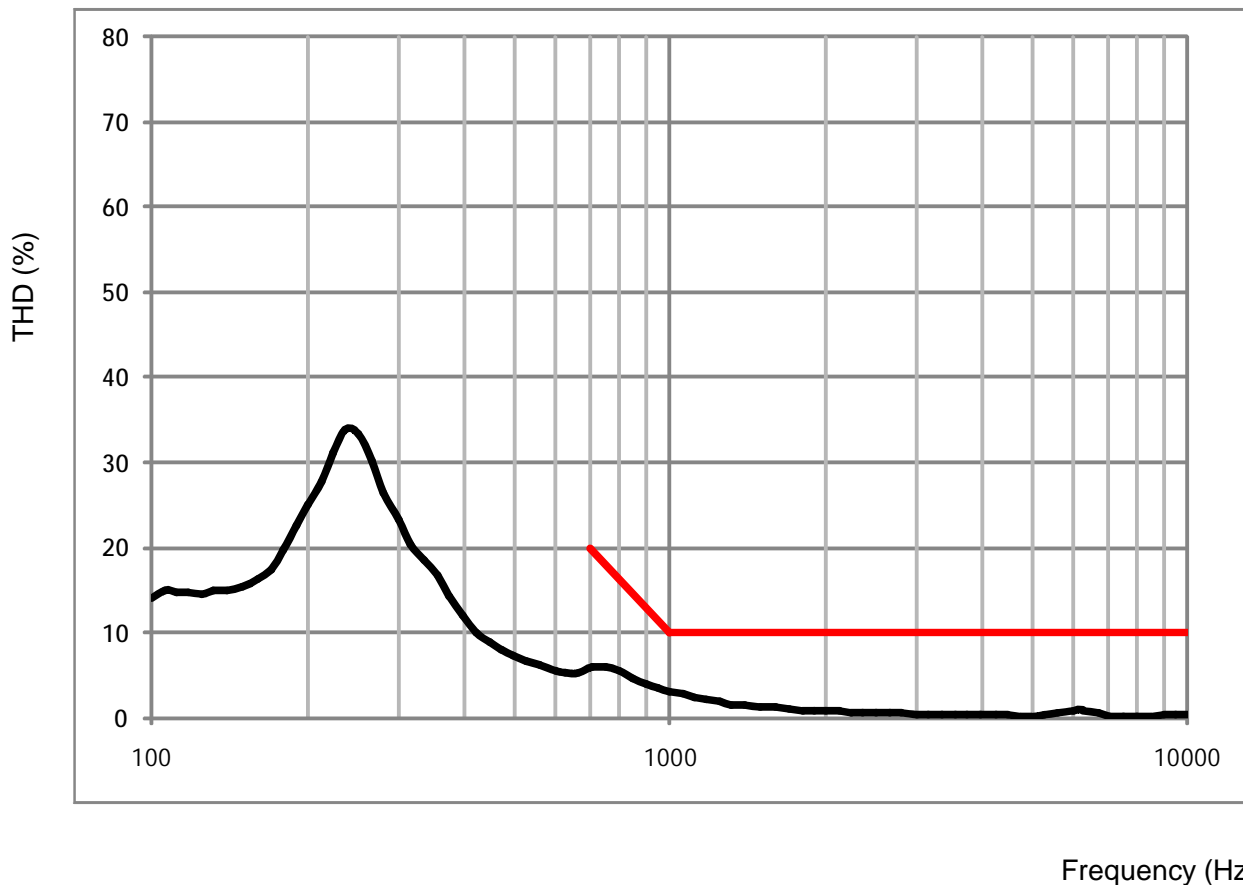
SPL is expressed in dB rel 20  $\mu$ Pa, computed according to IEC 268-5.  
Measurement set up according chapter 4.1 and parameters according chapter 4.4.

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

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## BBS129-04H8.7-L

4.5 Total Harmonic Distortion (only for reference)

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

## 4.5.1 THD

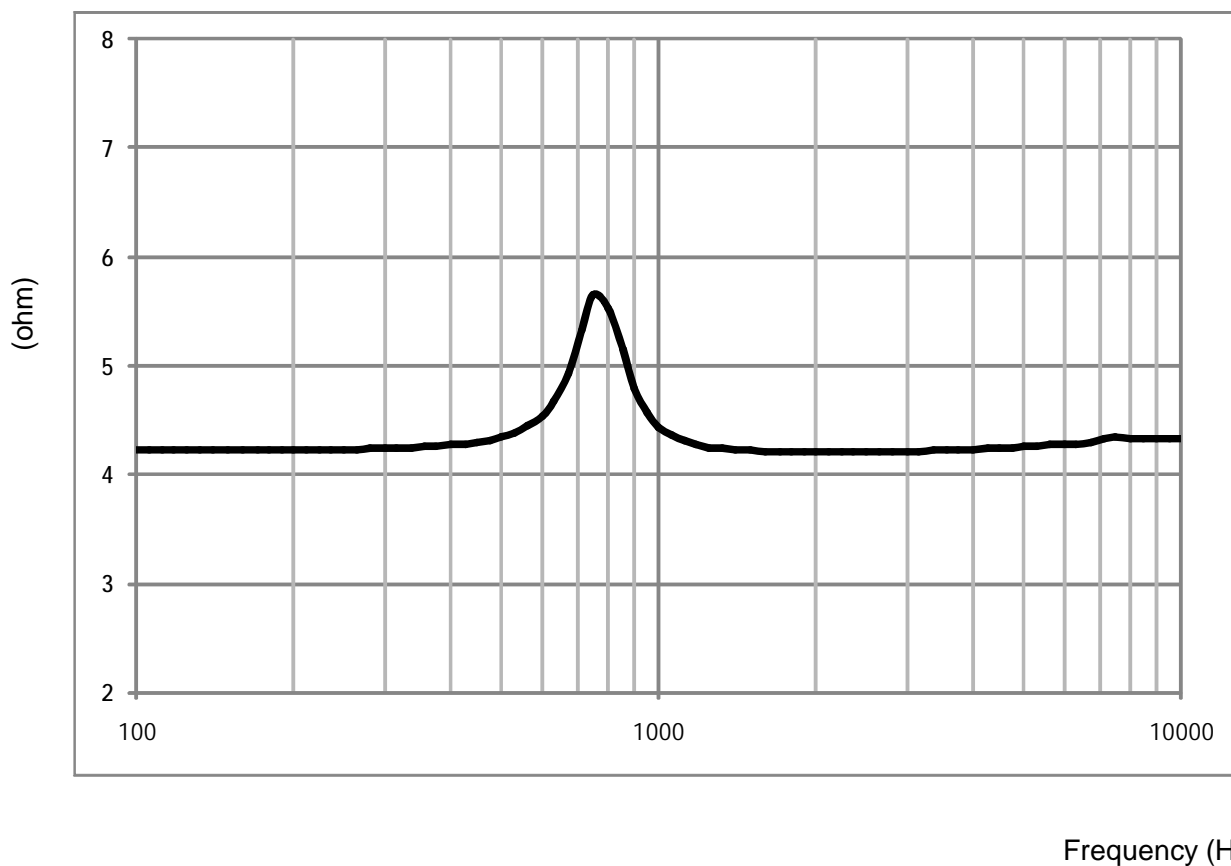
THD is measured according test set up in chapter 4.1 and parameters according chapter 4.5

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

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## BBS129-04H8.7-L

4.6 F0 Curve (only for reference)

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

## 4.6.1 Resonance Frequency

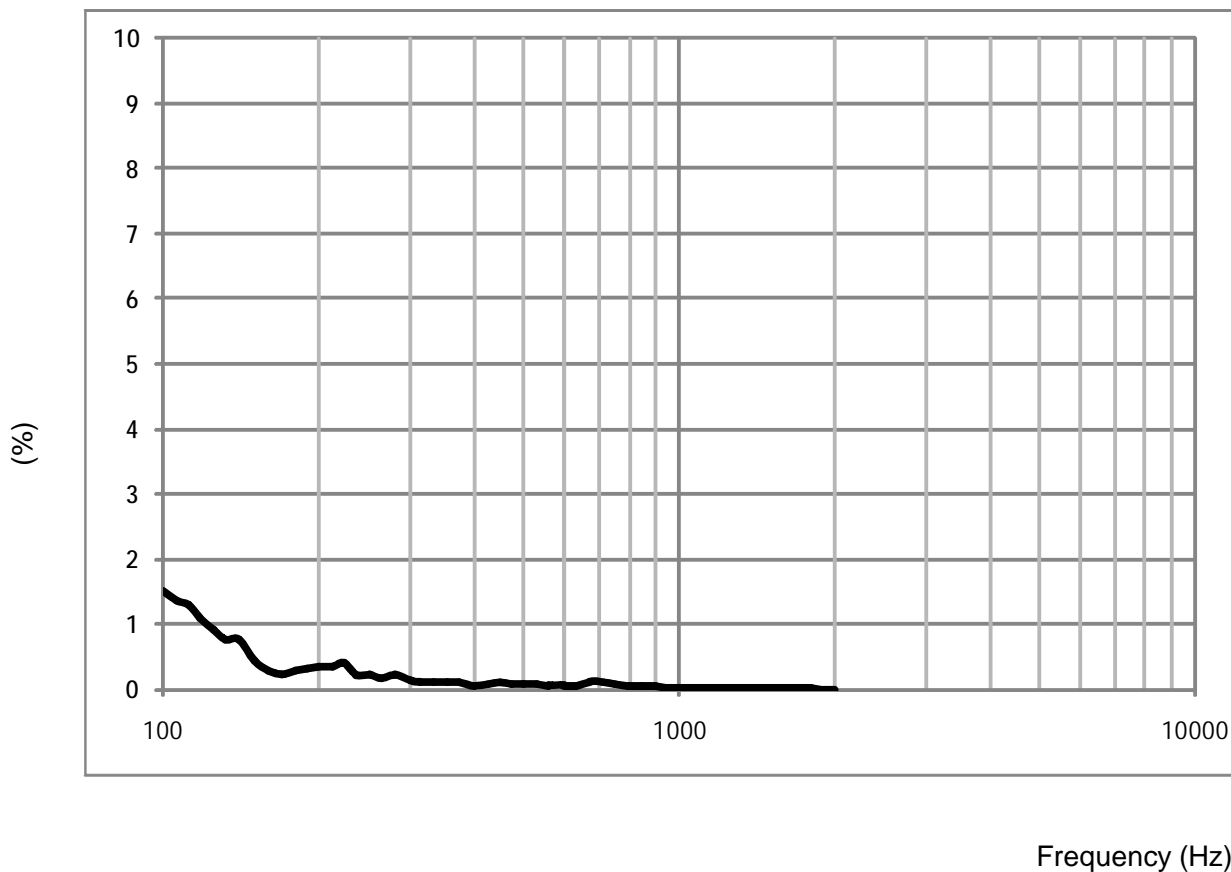
Resonance frequency is measured according test set up in chapter 4.1 and parameters according chapter 4.6

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

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## BBS129-04H8.7-L

4.7 R&amp;B Curve (only for reference)

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

## 4.7.1 R&amp;B

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

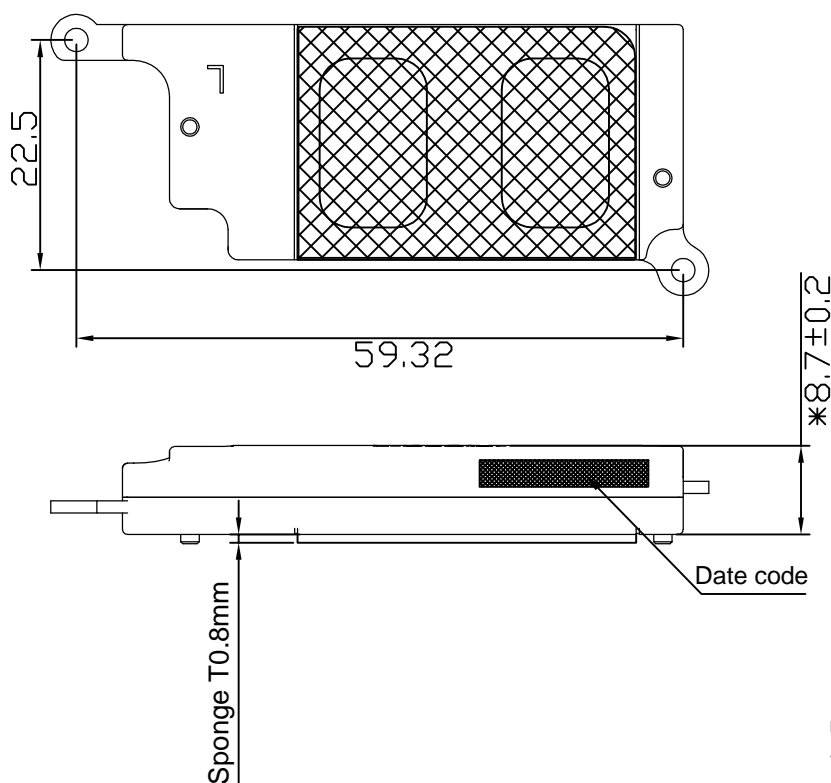
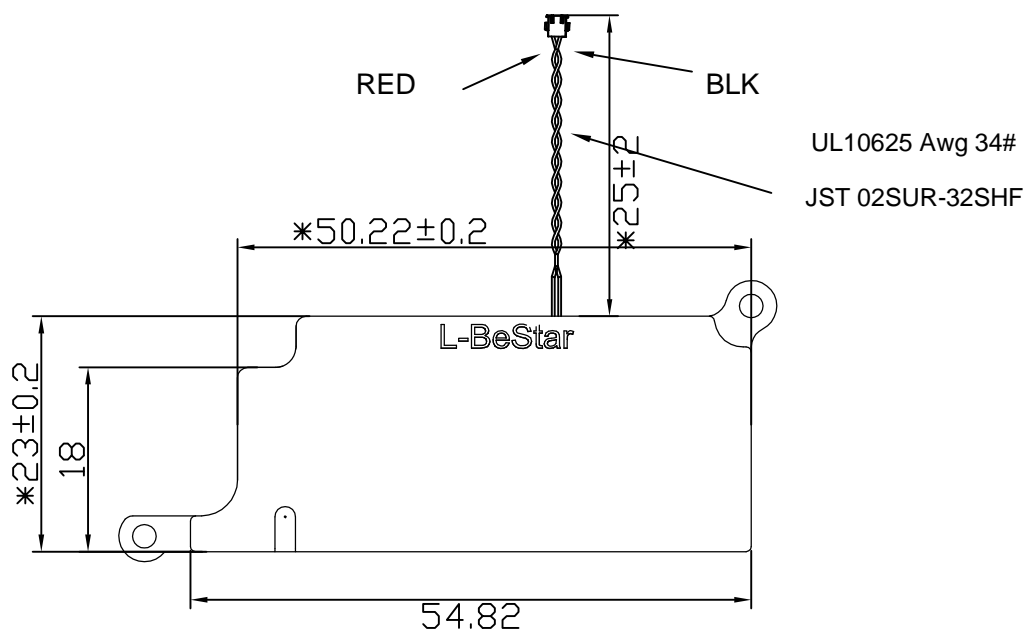
This test is performed on the production line by 100%.

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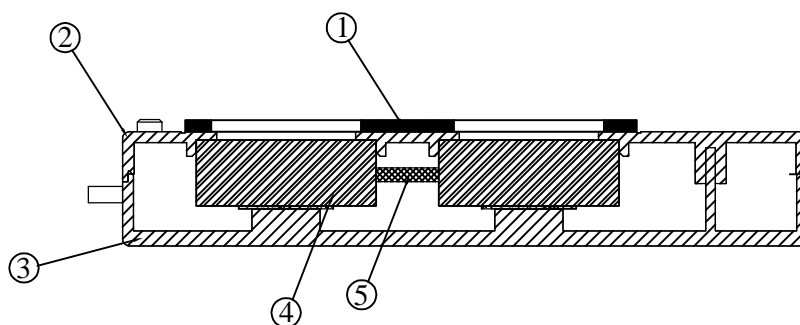
## 5. Drawing



unit:mm  
tolerance:±0.2

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## BBS129-04H8.7-L



No	Description of the part	Material
1	Sponge	PE+Net
2	Top Cover	ABS
3	Bottom Cover	ABS
4	Driver	BeStar Assemble
5	Cable	UL1867+JST

unit:mm  
tolerance:±0.2

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## BBS129-04H8.7-L

## 6. Reliability Test

## 6.1 Load Test

Power (Nom) 1.4W  
Duration 96hrs

## 6.2 High Temperature Test

Temperature  $+70\pm 3^{\circ}\text{C}$   
Duration 96hrs

## 6.3 Low Temperature Test

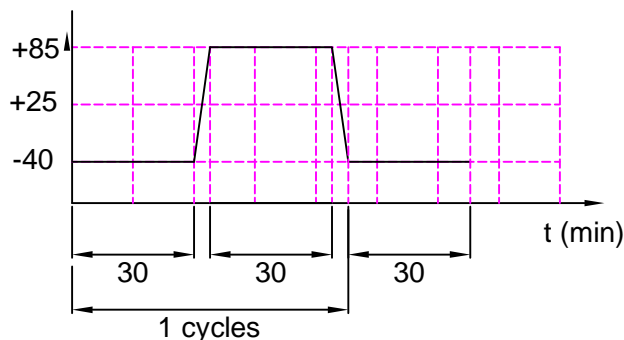
Temperature  $-20\pm 3^{\circ}\text{C}$   
Duration 96hrs

## 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 Three times in each direction

## 6.7 Package Vibration Test

Range of frequency 10 to 200Hz  
Amplitude 10g  
Frequency sweep 1 Cycle/min  
Duration 2h each of 3 axis

## 6.8 Package Drop Test

Height 0.8m  
Drop face Cement floor  
Times Three times in each direction

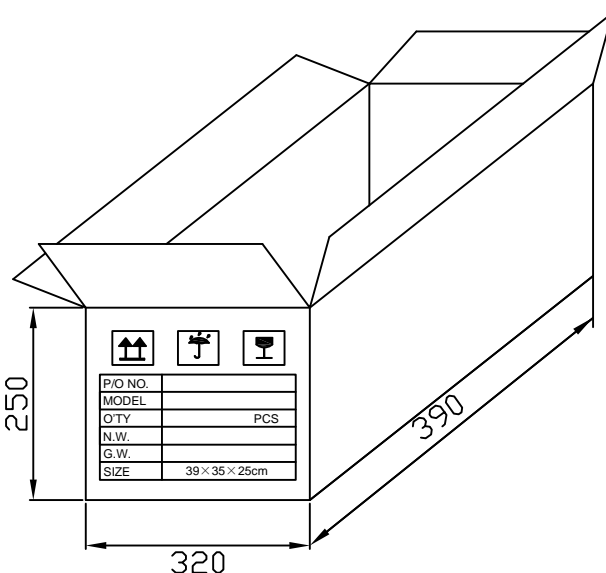
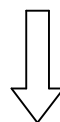
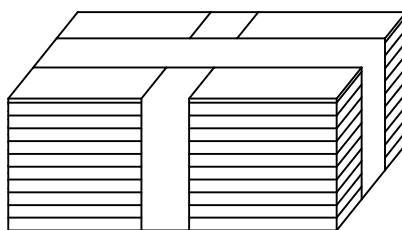
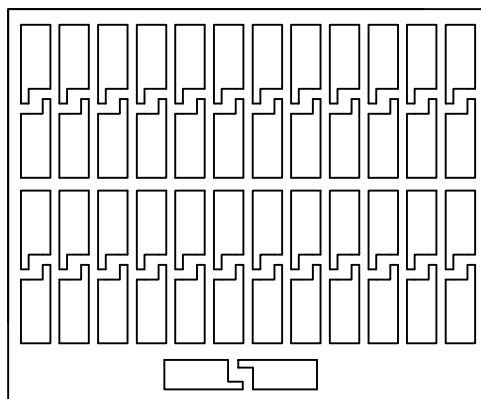
## Notice:

- 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

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## 7. Packing



Remark:  
50 pcs per carton  
10 carton per box  
Total 500pcs per box  
Size: 39 × 32 × 25(cm)

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8. History Change Record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			2016/05/31	任江凤	汪珍珍

				Date:	2016/05/31	BBS129-04H8.7-L	
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