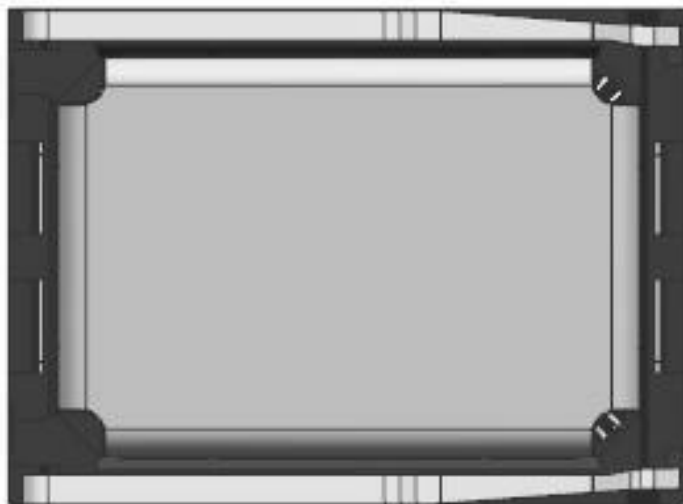


SPECIFICATION

BMS1511F-11C-08H03P LF





APPROVAL SHEET FOR SMARTPHONE SPEAKER

TOTAL PAGE	13	www.bestargroups.com	RoHS
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Customer		Model Name	BMS1511F-11C-08H03P LF
Customer P/N		Product No.	139706
Date	20 Jul.2016	Issue No.	BS/TES01.1170E
Page	02 of 13	Issue Date	2016/07/20

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	姬后哲	徐金国	

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E-mail:wu@be-star.com **http://www.bestargroups.com**

BMS1511F-11C-08H03P LF

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	15 x11 x 3.0(mm)
2.	AC Impedance	8 Ω ±15%(at 2KHz/1Vrms)
3.	Rated Input Power	0.7W(2.37Vrms/in 1cc box)
4.	Maximum Input Power	1.0W(2.83Vrms/in 1cc box)
5.	Resonance Frequency	500Hz ±20% (in free air)
6.	Resonance Frequency	800Hz ±20% (in 1.0cc box)
7.	Frequency Response	F0~20KHz
8.	S.P.L	89±3dB/0.1m/0.7W at 2KHz
9.	THD	≤10% (at 1.0~10KHz/0.7W)
10.	Buzzes & Rattles	Must be normal at sine wave 0.89Vrms (in free air) /2.37Vrms(in 1.0cc 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	~1.5g±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

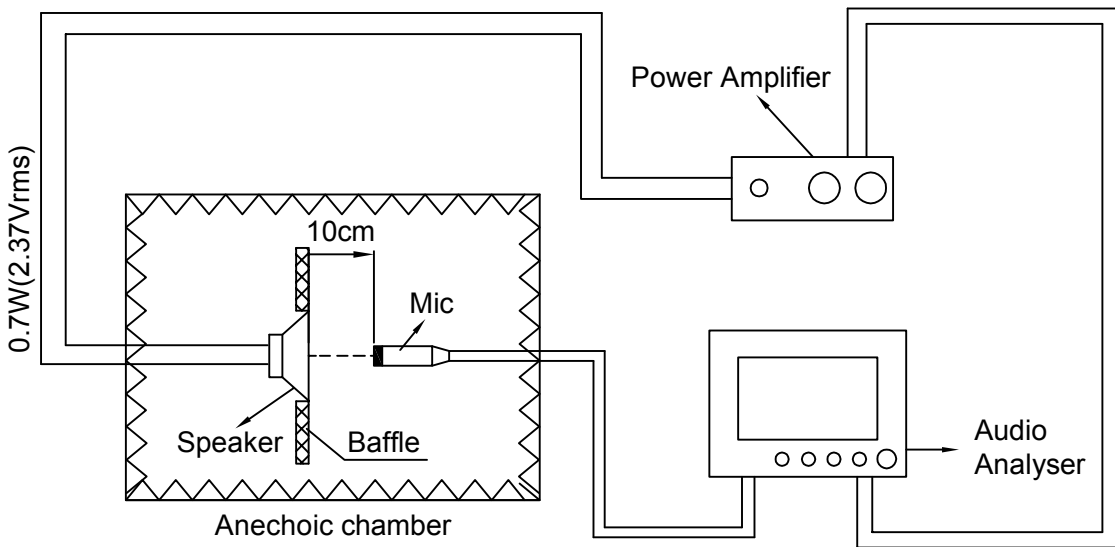
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Rev.	Date	Drawn	Note	Approved by:	徐金国		
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4. Test Setup

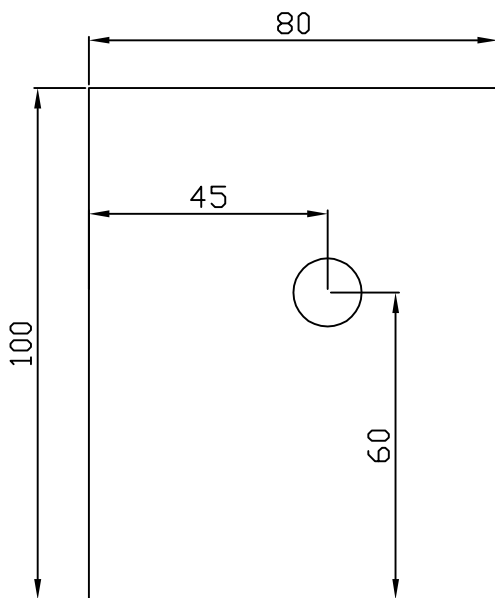
4.1 Speaker Measurement Circuit



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 0.7W and swept sine-wave range is 100Hz~20KHz with a R80 of test sequence

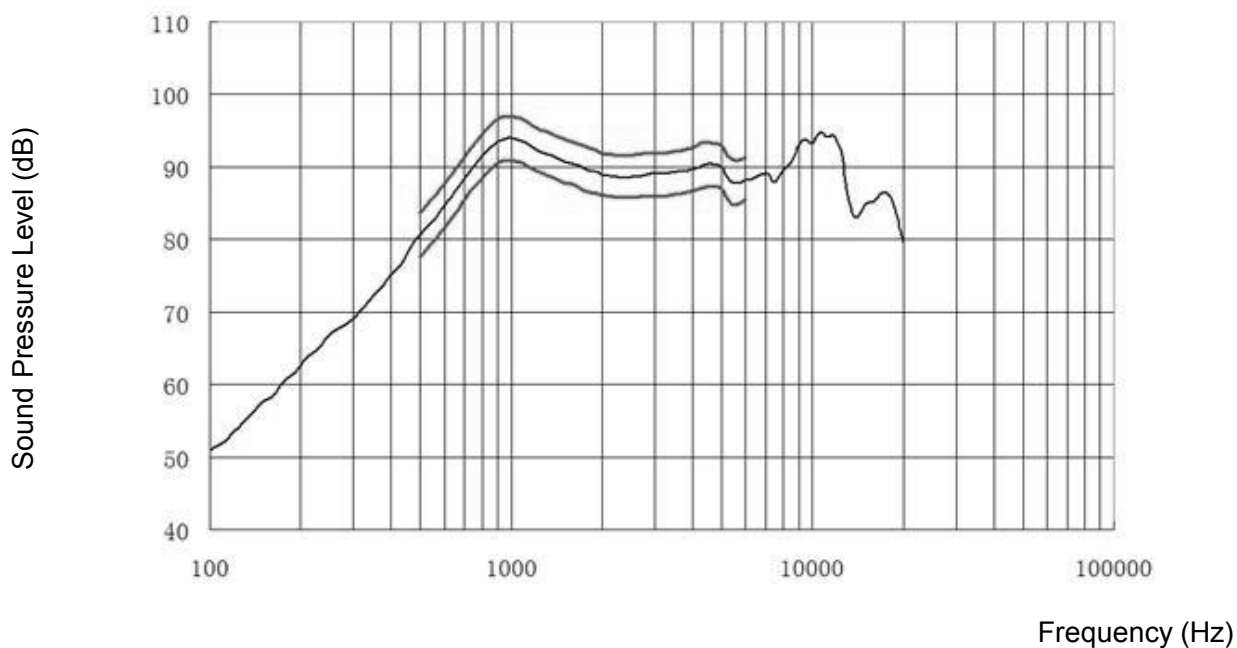
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4.4 Frequency Response Curve (only for reference)

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%.

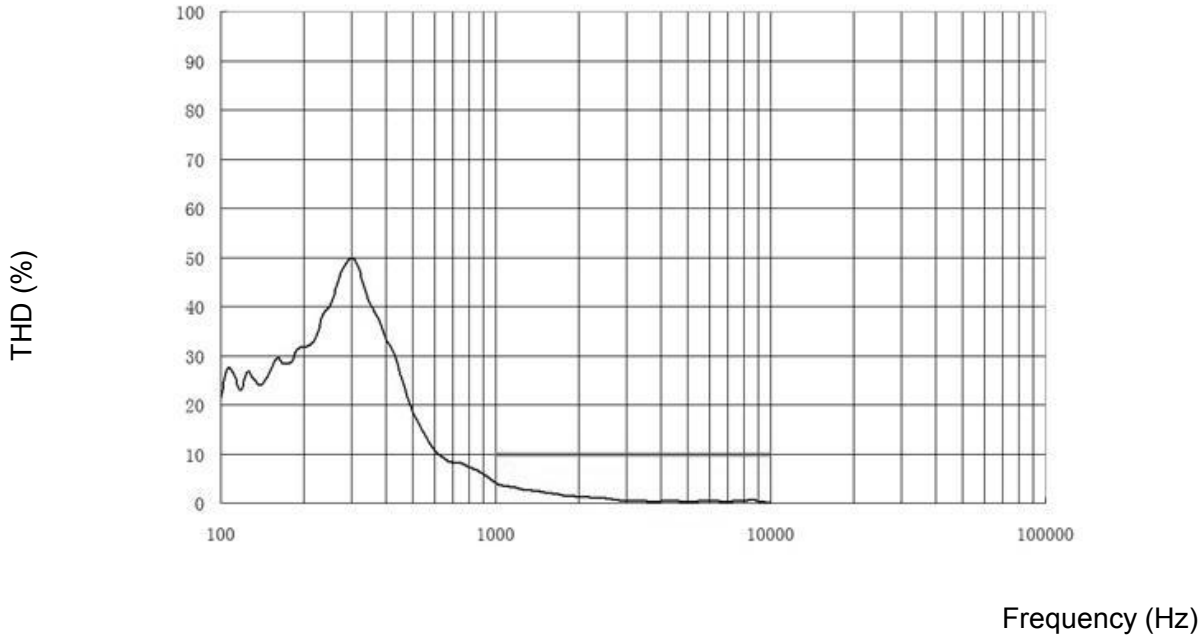
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BMS1511F-11C-08H03P LF

4.5 Total Harmonic Distortion (only for reference)

A: Frequency Response Magn 0 dB re 20.00 μ 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%.

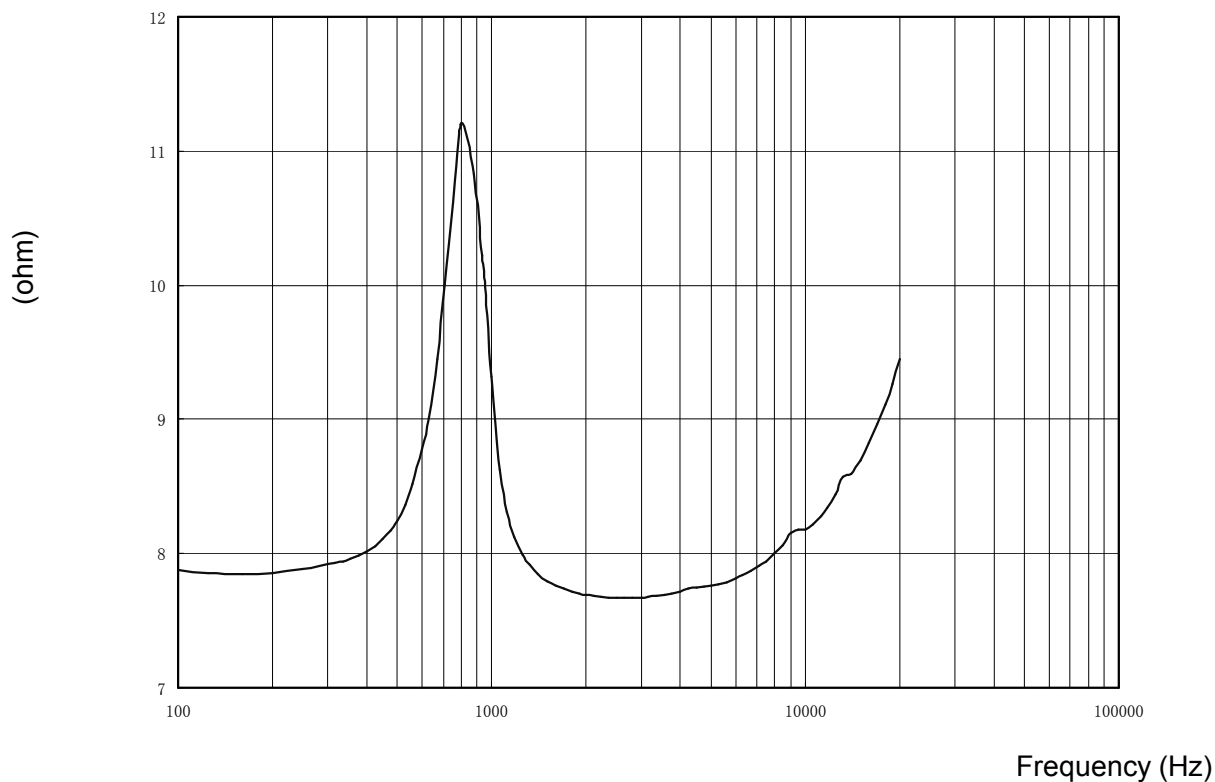
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4.6 F0 Curve (only for reference)

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%.

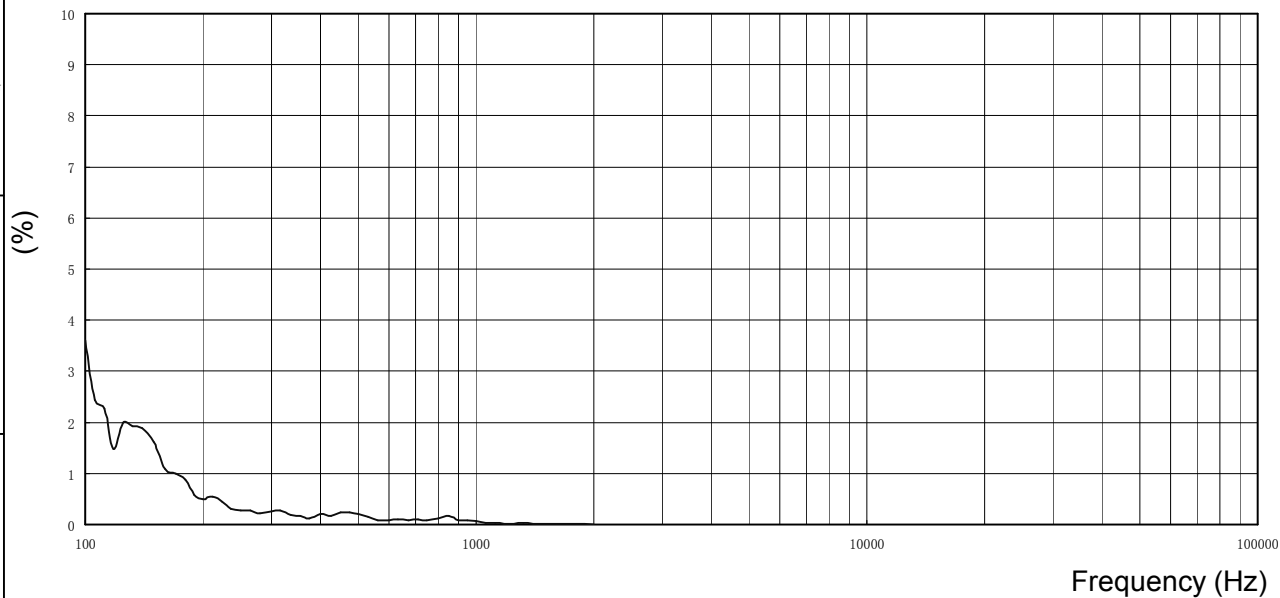
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BMS1511F-11C-08H03P LF

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

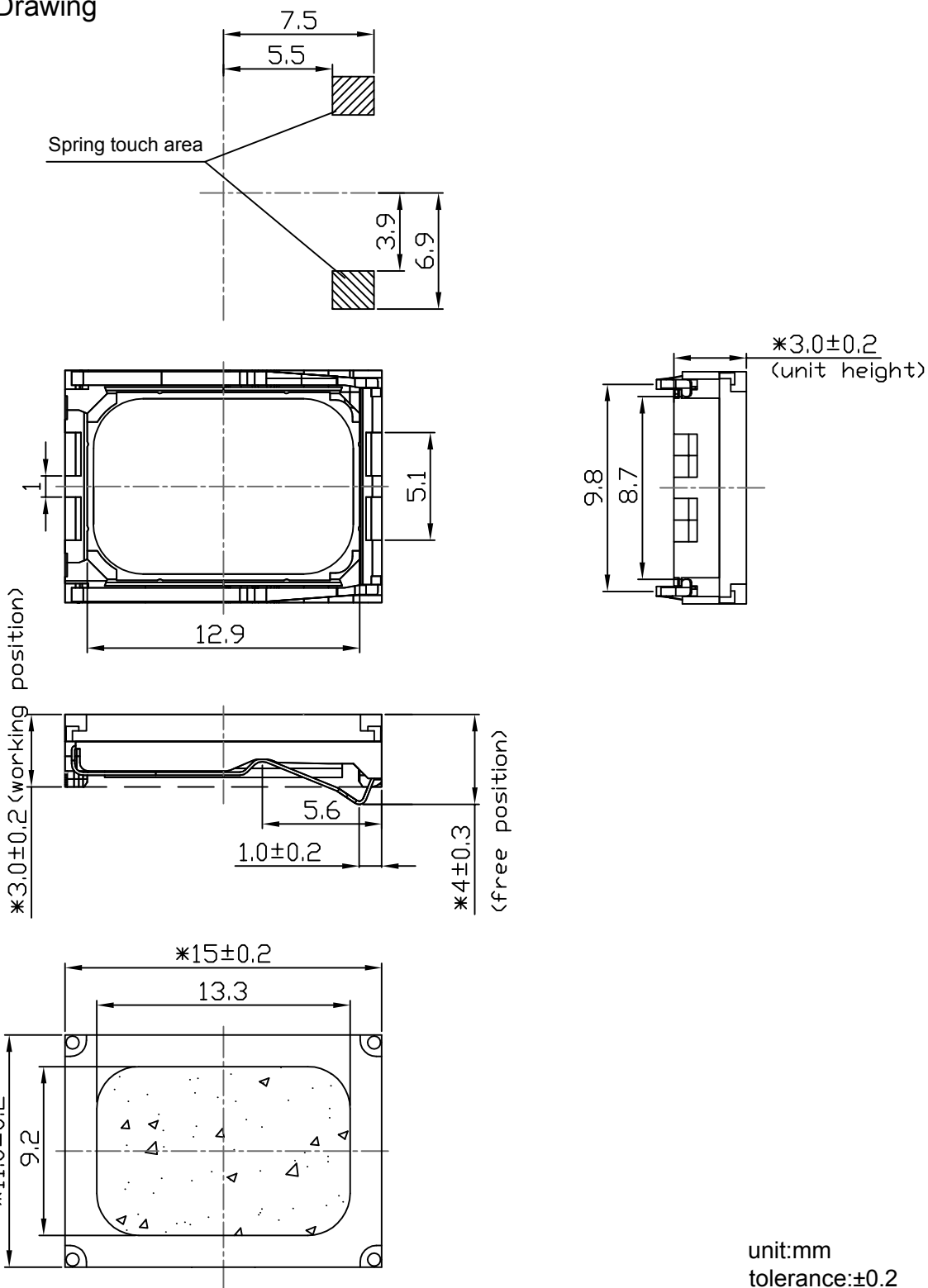
This test is performed on the production line by 100%.

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5. Drawing



unit:mm
tolerance:±0.2

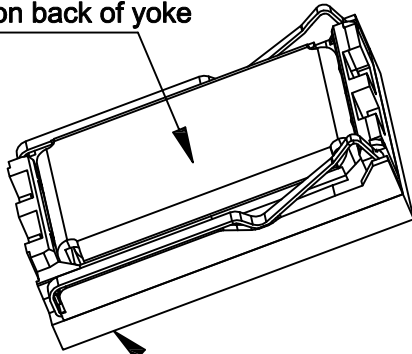
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★Permitted Force to Speaker

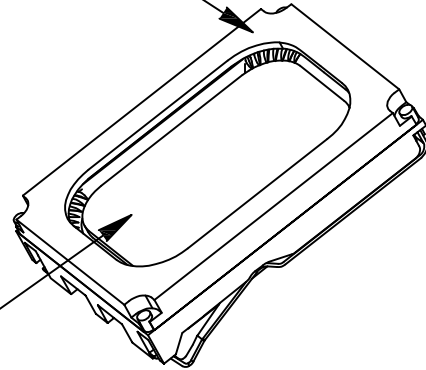
F3:on back of yoke



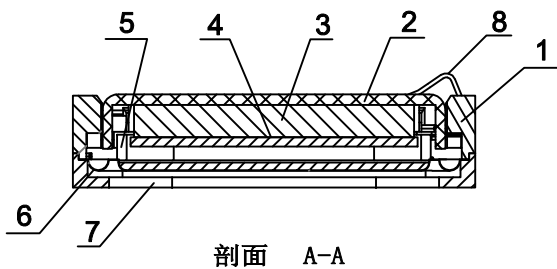
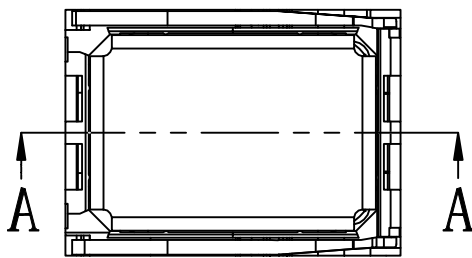
F3:on back of frame

F1:on gasket area

F2:on Diaphragm



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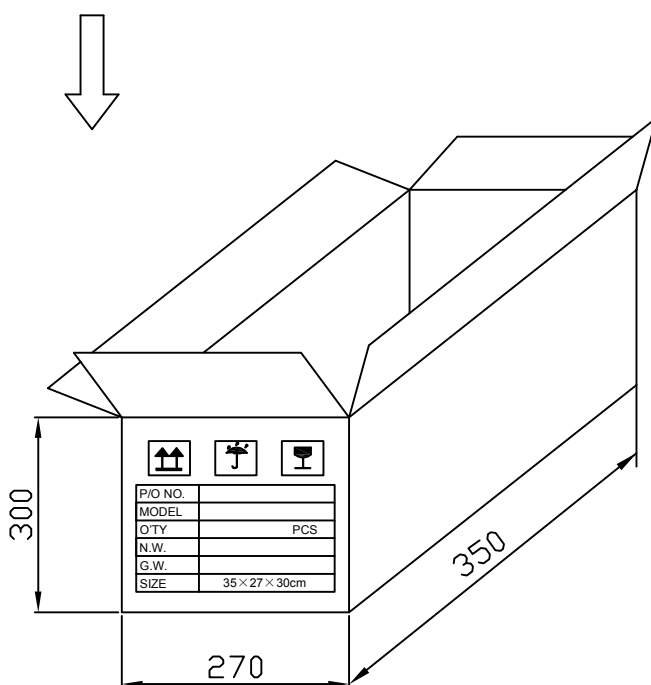
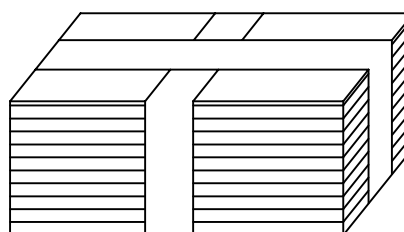
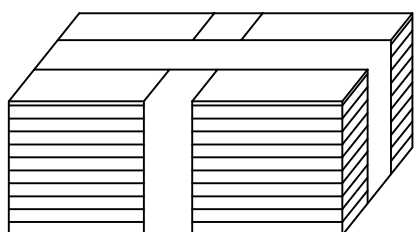
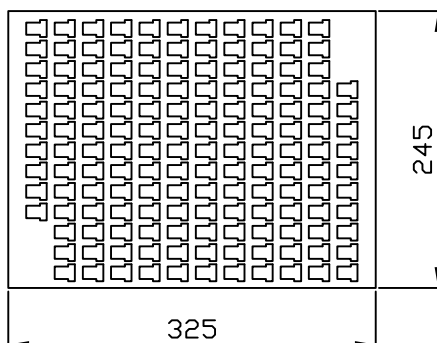
Max Permitted Compression Force			
No	From	To	Max Force
1	F1	F3	10N
2	F2		0
3	F3	F1	10N

No	Description of the part	Material
1	Frame	PPA BLK
2	Yoke	SPCC
3	Magnet	Nd-Fe-B N45M
4	Plate	SPCC
5	Coil	0.07
6	Diaphragm	PEEK
7	Front Cover	PBT+20%GF
8	Spring leg	SUS

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7. Packing



Remark:
 150 pcs per tray
 24 trays for unit
 Total 3600pcs per box LF
 Size: 35×27×30(cm)

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8. History Change Record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			2011/09/08	任江凤	汪珍珍
B	听测频率300~10KHz	听测频率200~3400Hz	2013/07/13	乔明亮	汪珍珍
	测试范围200Hz~20KHz	测试范围100Hz~20KHz			
		添加产品3D图			
C		添加套框	2013/09/10	乔明亮	汪珍珍
D	额定功率0.5W改为0.7W		2014/09/24	杨紫群	汪珍珍
E	更改铆钉式盆架		2016/07/20	杨紫群	徐金国

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