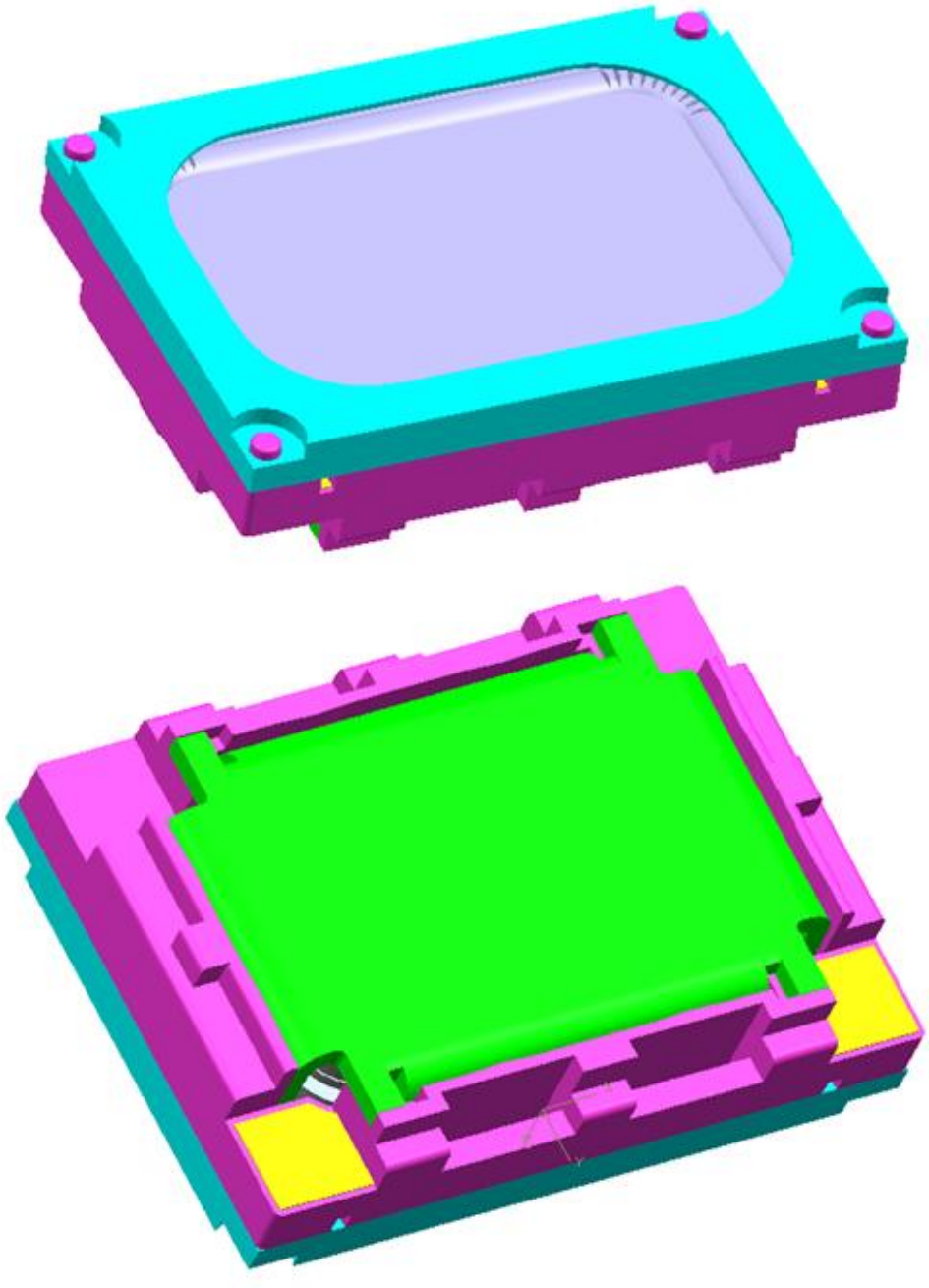
SPECIFICATION

BMS1813F-11C-08H4.5 LF



文件号：BS/QDTE045B

BeStar	APPROVAL SHEET FOR SMARTPHONE SPEAKER			
	TOTAL PAGE	12	www.bestargroups.com	RoHS/HF

Customer		Model Name	BMS1813F-11C-08H4.5 LF
Customer P/N		Product No.	139726
Date	10.Sep. 2013	Issue No.	BS/TES01.1230B
Page	02 of 13	Issue Date	2013/09/10

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Drawn by	Checked by	Approved by	Customer approved

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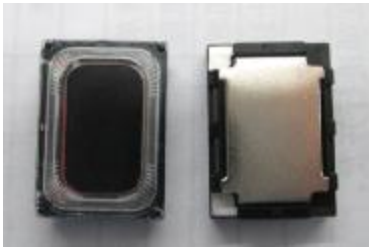
BMS1813F-11C-08H4.5 LF



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

2.Description

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

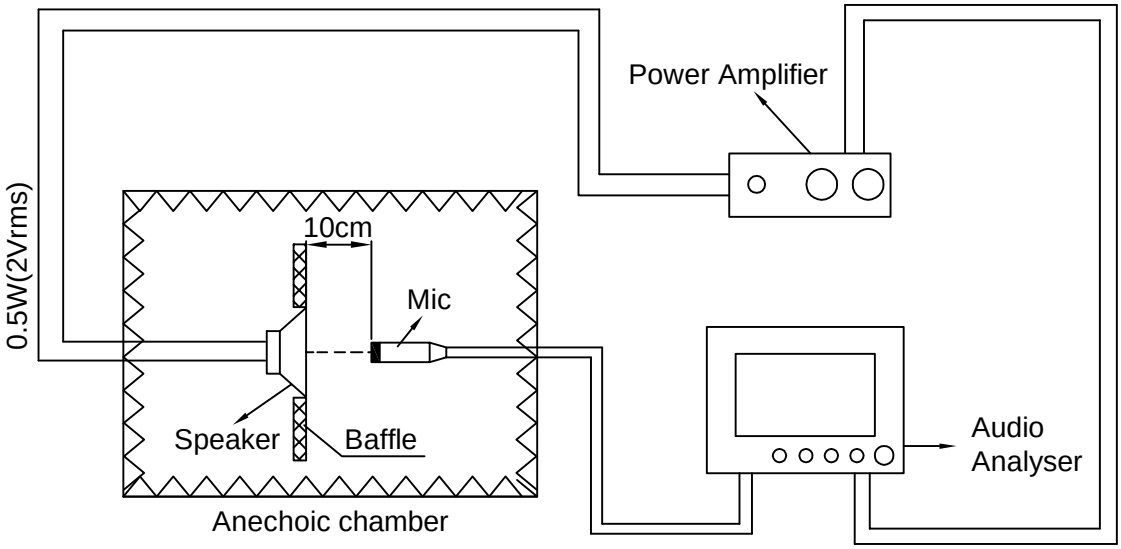
3.Characteristics

3.1 Electrical and Mechanical Characteristics

No.	Item	Specification
1.	Dimension	18 x13 x 4.5(mm)
2.	DC Resistance	7.8Ω±15%
3.	AC Impedance	8Ω±15%(at 2KHz/0.5W)
4.	Rated Power	0.5W(2.0V/ in 1.0cc box)
5.	Maximum Power	0.7W(2.37V/ in 1.0cc box)
6.	Resonance Frequency	800Hz ± 15% (in 1.0cc box)
		400Hz ±20% (in free air)
7.	Frequency Response	F0~20KHz
8.	S.P.L	92±3dB/0.1m/0.5W at 2.0KHz(in 1.0cc box)
9.	THD	≤30% at 600Hz/0.5W
		≤10% at 1KHz/0.5W
10.	Buzzes & Rattles	Must be normal at sine wave 0.89Vrms (in free air)
		/2.0Vrms(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	~2.7g±0.3g

4. Test Setup

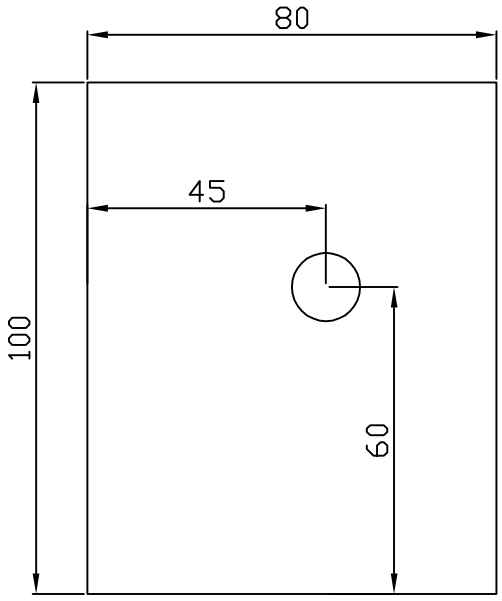
4.1 Speaker Measurement Circuit



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 0.5W and swept sine-wave range is 100Hz~20KHz with a R80 of test sequence

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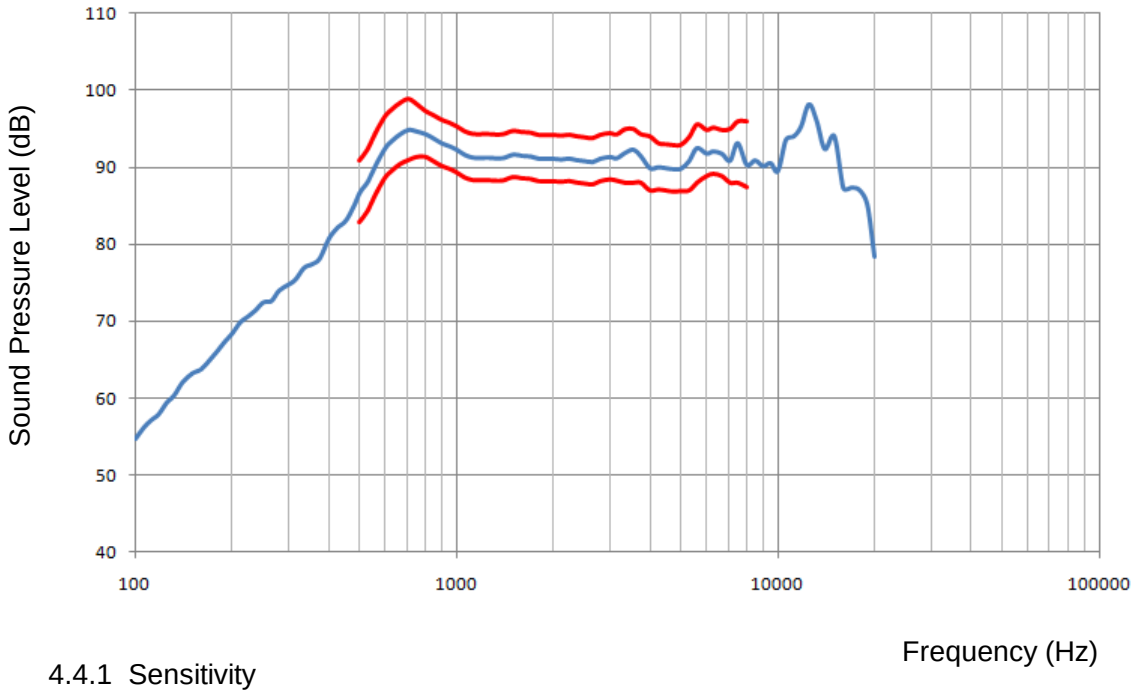
4.4 Frequency Response Curve (only for reference)

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



4.4.1 Sensitivity

SPL is expressed in dB rel 20μPa,computed according to IEC 268-5.

Measurement set up according chapter 4.1 and parameters according chapter 4.4.

This test is performed for 100% of products in the production line.

				Date:	2013/09/10	BMS1813F-11C-08H4.5 LF
				Drawn by:	王凯	
B	2013/09/10	王凯		Checked by:	王凯	Speaker
Rev.	Date	Drawn	Note	Approved by:	汪珍珍	
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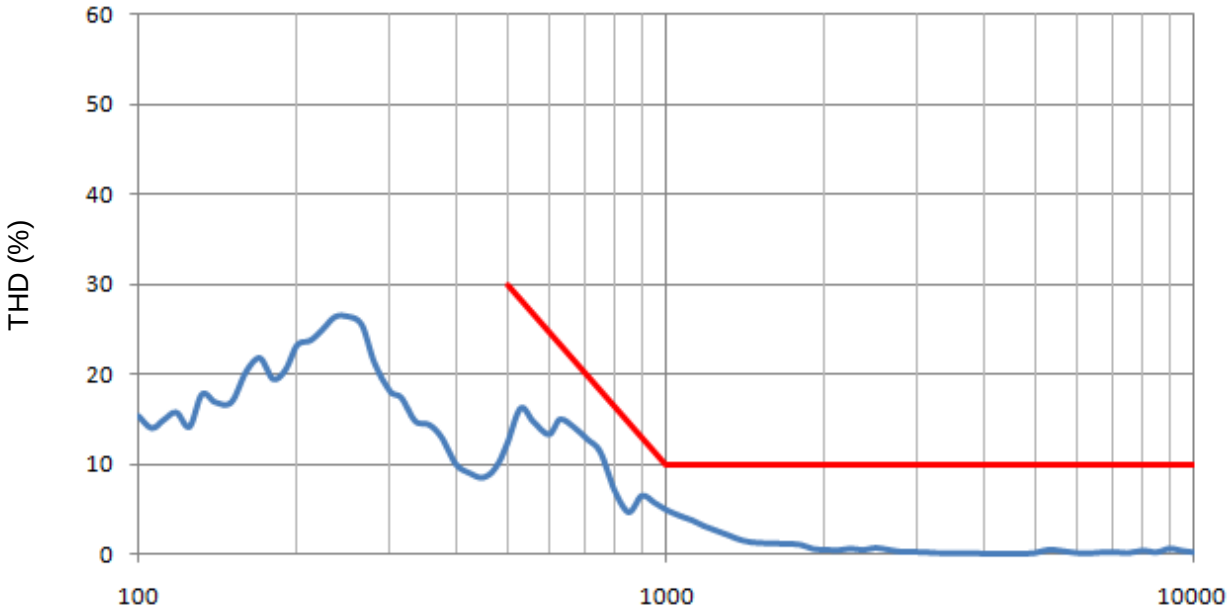
4.5 Total Harmonic Distortion (only for reference)

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



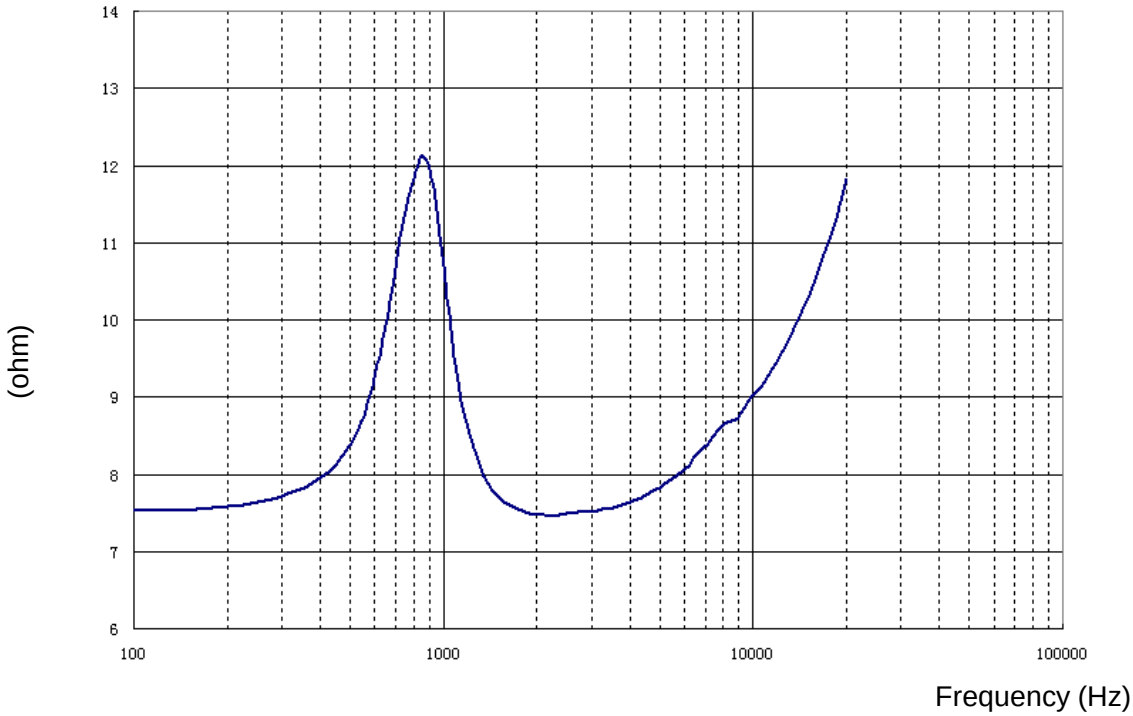
4.5.1 THD

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

This test is performed for 100% of products in production line

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 for 100% of products in the production line

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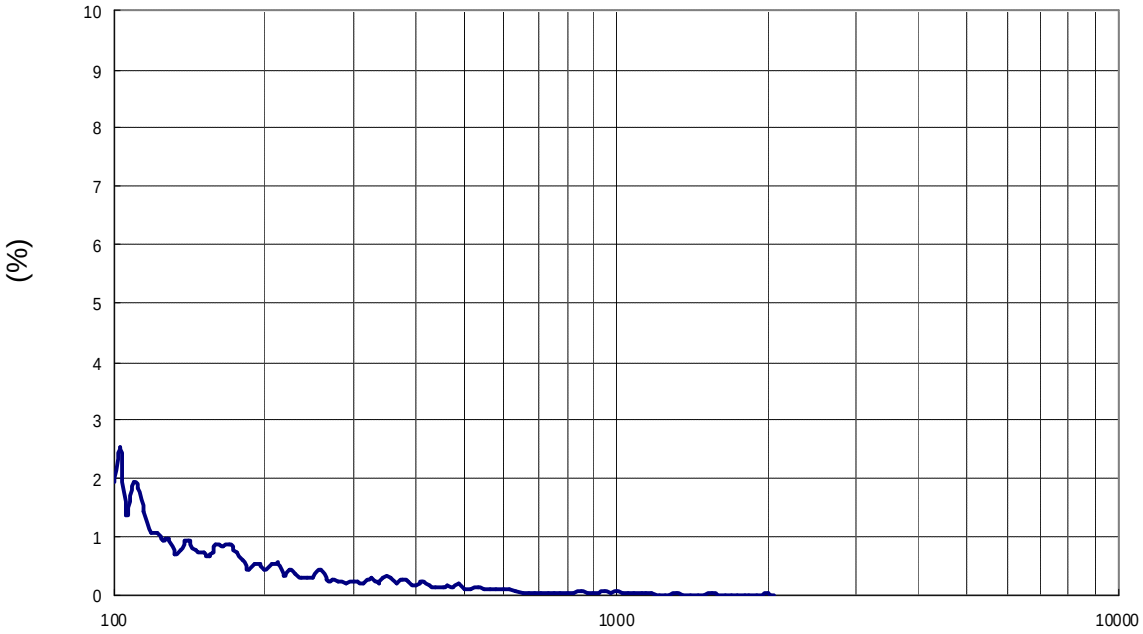
4.7 R&B Curve (only for reference)

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 for 100% of products in production line

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Rev.	Date	Drawn	Note	Approved by:	汪珍珍	
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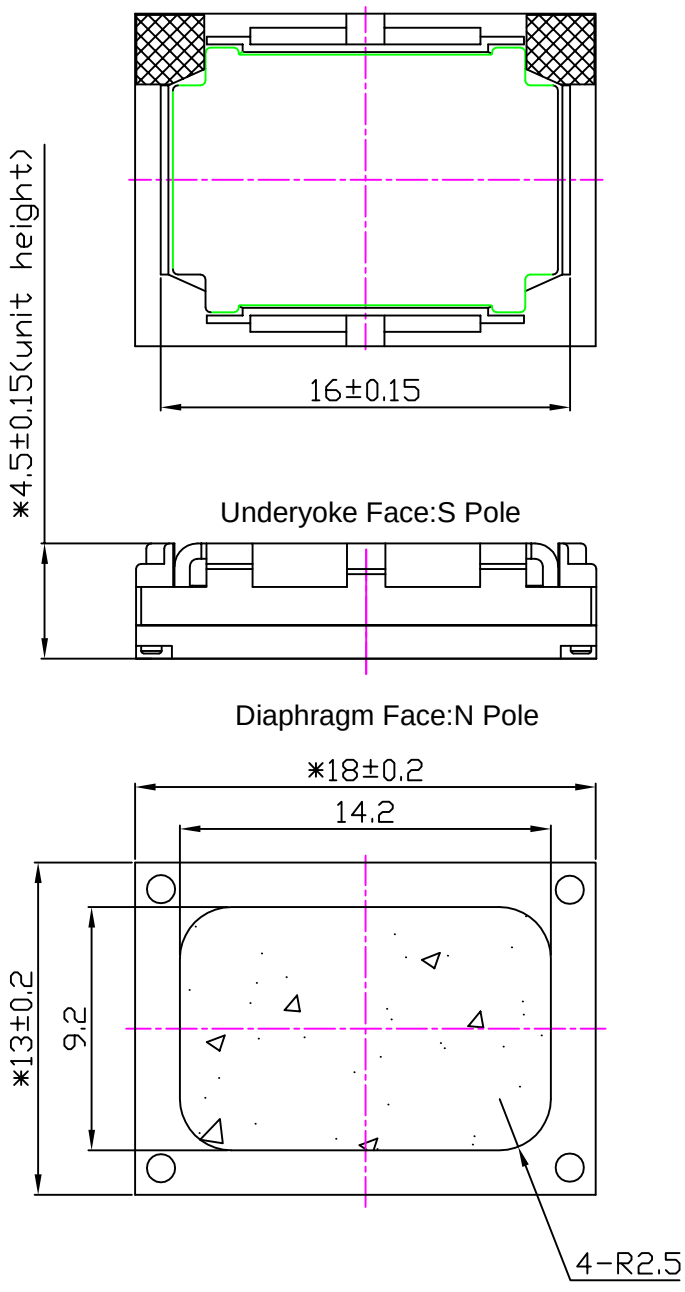
5. Drawing



unit:mm
tolerance:±0.2

				Date:	2013/09/10	BMS1813F-11C-08H4.5 LF
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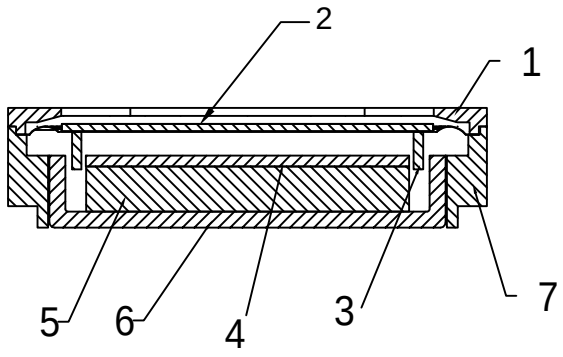
5. Drawing



No	Description of the part	Material
1	Front Cover	PC
2	Diaphragm	PEEK+AL
3	Coil	SDHT
4	Polar piece	SPCC
5	Magnet	Nd-Fe-B
6	Under Yoke	SPCC
7	Frame	PPA

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6. Reliability Test

6.1 Load Test

Power (Nom)	0.5W(sine wave/in 1cc box)
Duration	96hrs

6.2 High Temperature Test

Temperature	+85±3°C
Duration	96hrs

6.3 Low Temperature Test

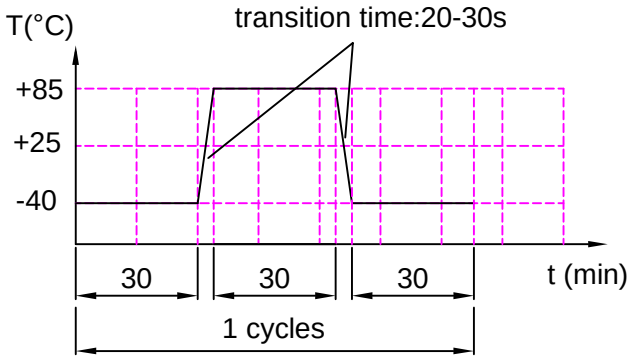
Temperature	-40±3°C
Duration	96hrs

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 board (20mm)
Times	10 (three times in each durection)

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 2.0KHz shall be within ±3dB from initial value after test.

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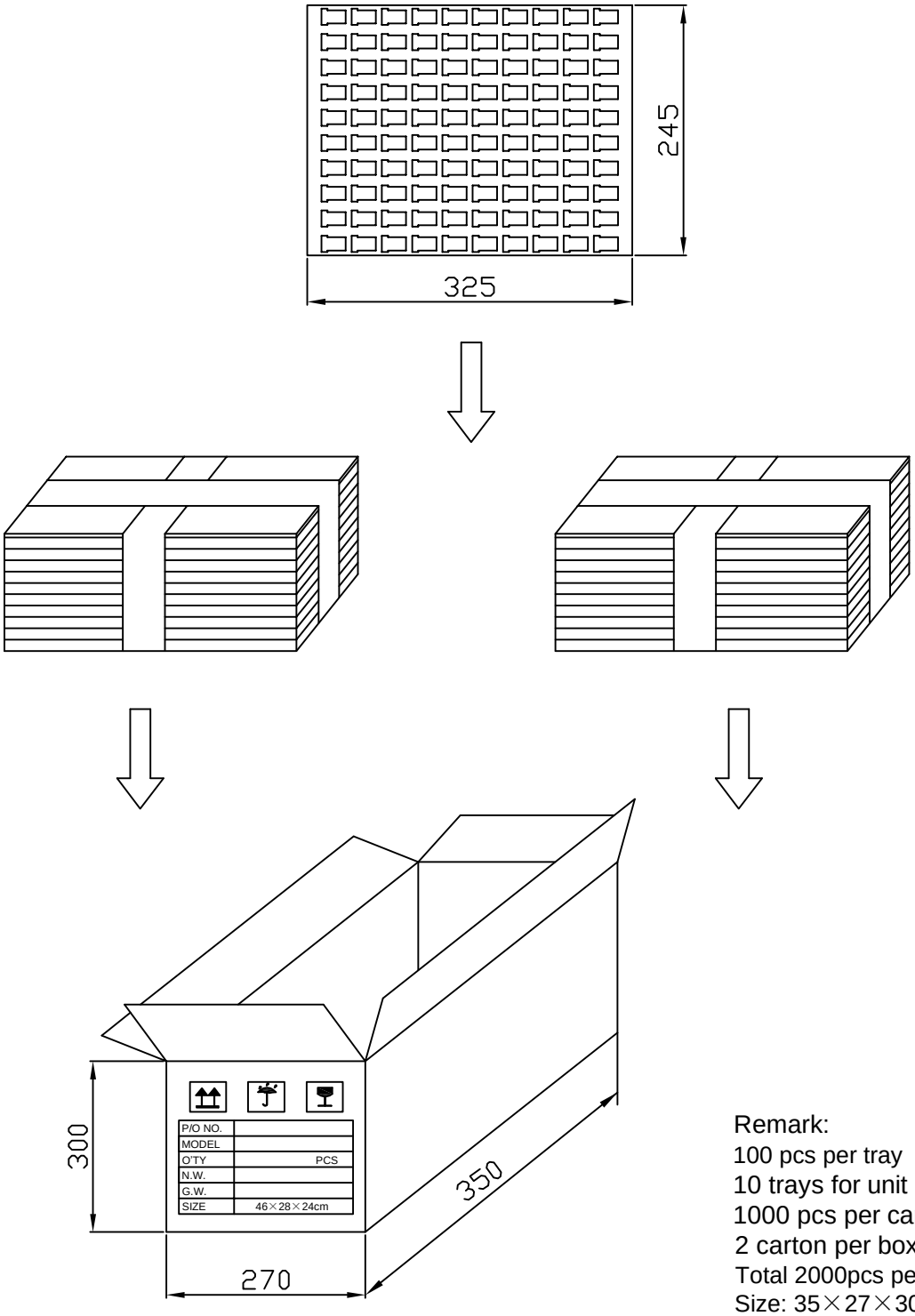
7. Packing



Remark:
100 pcs per tray
10 trays for unit
1000 pcs per carton
2 carton per box
Total 2000pcs per box
Size: 35×27×30(cm)

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8. History Change Record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			2013/08/02	乔明亮	汪珍珍
B	增加剖面图		2013/09/10	王 凯	汪珍珍