

ROHS

## SPECIFICATION OF PRODUCT

### 産 品 承 認 書

DESCRIPTION : SPEAKER

CHENGXUN P/N: PMB15P

**PMB**

상표등록 <제40-0729433호>

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**PMB ELECTECH**

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## Specification for speaker

### 1. CONDITION.

Test and measurement will be carried out under normal condition of temperature within 5°C to 35°C, relative humidity within 45% to 85% and air pressure of 860 mbar to 1060 mbar.

Should uncertainly arise in data obtained from the above atmosphere, control of temperature at  $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$  and relative humidity within 60% and 70%, with air pressure remaining unchanged, to be enforced.

### 2. ELECTRICAL AND ACOUSTICAL SPECIFICATION.

2-1	Rated Input Power.	0.3W
2-2	Max Input Power.	0.5W
2-3	Rated Impedance.	$8\Omega \pm 15\%$
2-4	Sound Pressure Level. (S.P.L)	90dB(0.1W/0.1m) $\pm 3$ dB at AVE 2.0K 2.5K 3.0K 4.0K Hz
2-5	Resonance Frequency (Fo).	$2000 \pm 20\%$ Hz
2-6	Frequency Range.	F0~20kHz.
2-7	Distortion	Less than 10% at 1KHz input Rated Power
2-8	Magnet	Rare earth permanent (NdFeB) magnet $\Phi$ 6.95*1.0 mm
2-9	Buzz, Rattle, etc.	Should not be audible at 1.55V sine Wave between Fo to 20KHz
2-10	Polarity	When positive voltage is applied to the terminal marked (+), diaphragm should move to the front.
2-11	Appearance	Should not exist any obstacle to be harmful to normal operation; damages, cracks, rusts and distortions, etc.
2-12	Weight.	2g
2-13	Temperature	Operating temperature: $-30^{\circ}\text{C}$ to $+70^{\circ}\text{C}$ Storage temperature: $-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$

## Specification for speaker

### 3. MEASURING METHOD

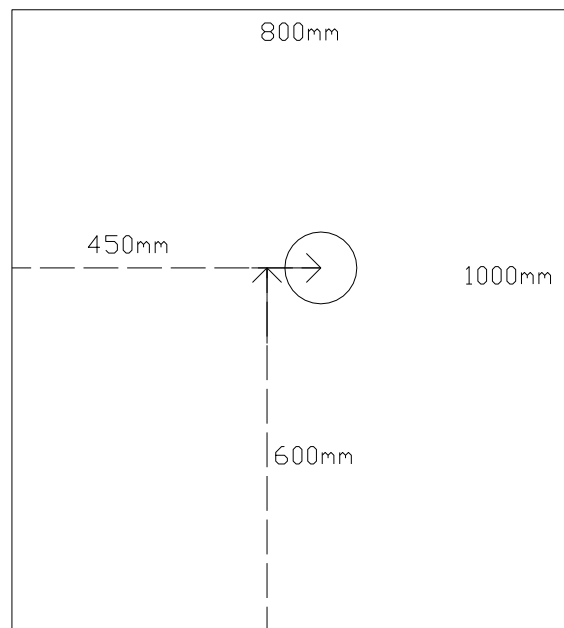


FIG.1

#### 3. 1Block Diagram For Measurement Method.

### Standard test condition of speaker

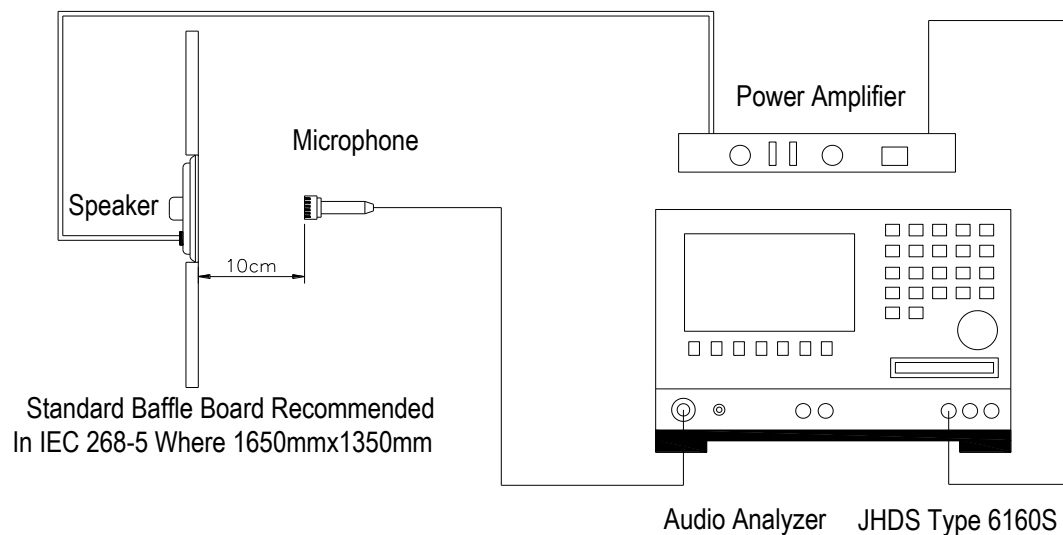


FIG.2

#### 4. Frequency Response :

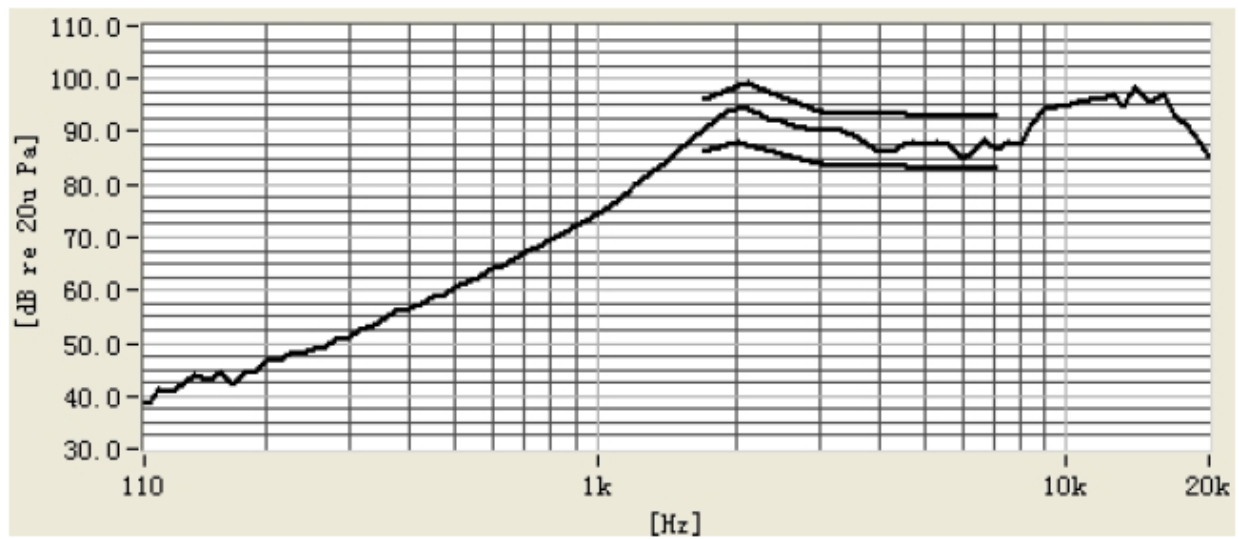
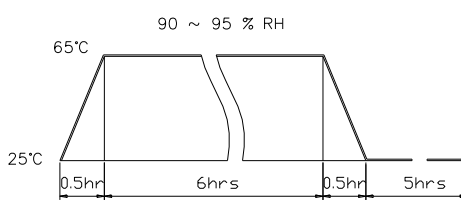
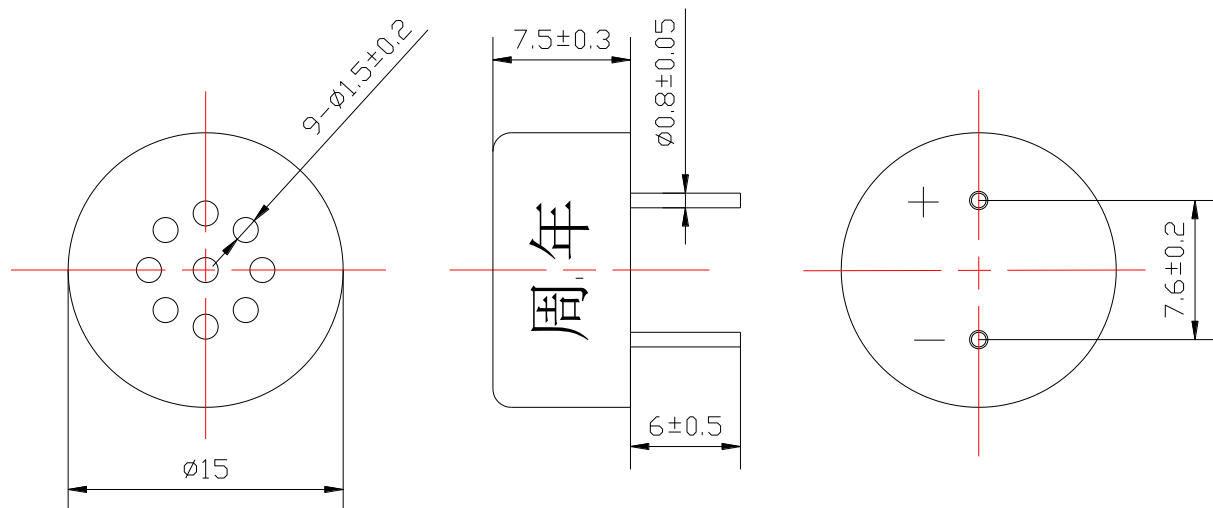


FIG.3

## 5. ENVIRONMENT TEST

ITEM		SPECIFICATIONS
01	High temp. Test	Keep 96 hours at $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
02	Low temp. Test	Keep 96 hours at $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
03	Humidity test	Keep 96 hours at $+40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ relative humidity 92-95% and leave 3 hours in normal temperature and then checked.
04	Temp./Humidity cycle	<p>The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of;</p> 
05	Thermal cycle test.	Low temperature: $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ , temperature: $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$ , cycle: 1 hour/cycle each, and then keep 5 cycles in a room.
06	Vibration	10~55~10Hz sin-wave sweep 15min. 5G(constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.
07	Fix drop test	Fix on jig. Then drop from 152cm height to the concrete floor X,y, z 6 direction. 5 times each, total 30 times.
08	Free drop test	Free drop from 100cm height to the concrete floor X,Y, Z 6 direction. 1 times each, total 6 times.
09	Load test	Rated Power White noise is applied for 96 hours
10	Max Power test	Max power 1 min. on - 2 min. off 10 cycles.
11	Terminal strength test	Capable of withstand 1kg load for 30 seconds without resulting in any damage or rejection.
<p><b>Criterion :</b> After these test , the change of S.P.L shall be within <math>\pm 3 \text{ dB}</math></p>		

## 6.Dimensions

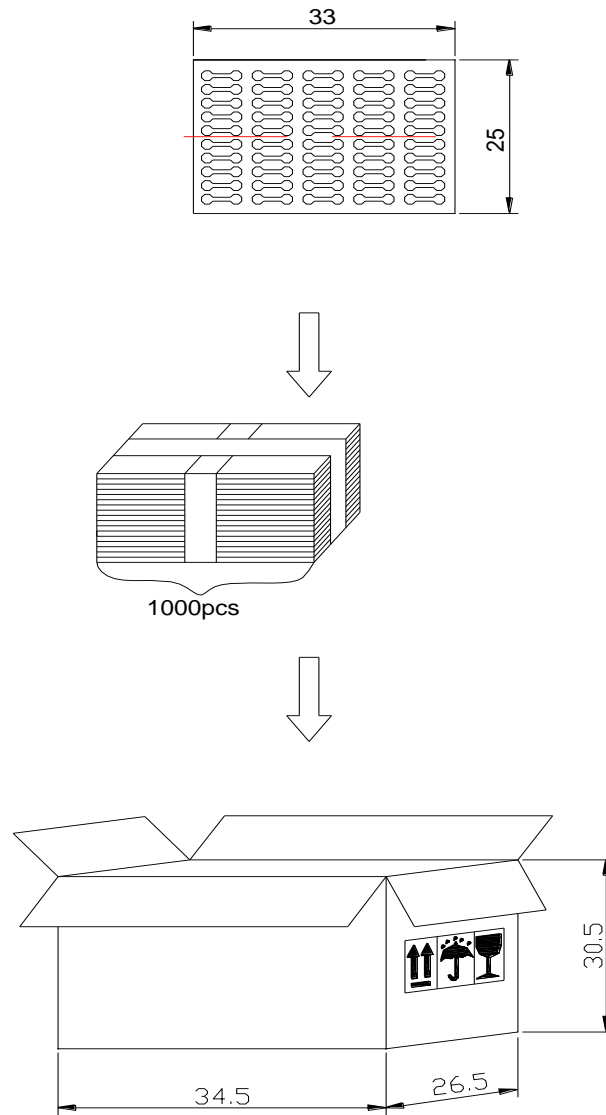


PIN: Plate with gold

Unit:mm Tol:±0.5

8				
7	CASE	1	PBT	
6	Diaphragm	1	Pet	
5	VOICE COIL	1	Cu	Φ7.4
4	Plate	1	SPCC	
3	Magnet	1	NdFeB	6.95*1.0
2	PCB	1	FR4	
1	Frame	1	Spcc	
The material must be meet to GU-001				
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK

## 7.PACKING



Remark:

100pcs per tray

10 trays for unit,

Total:1000 pcs per box

Size:34.5\*26.5\*30.5cm

净重: 1.7kg 毛重 3.7kg