

REV:01

ROHS

## SPECIFICATION OF PRODUCT

CUSTOMER: TOP

DESCRIPTION : SPEAKER

EKEYSOUND P/N: EKS3070

CUSTOMER P/N: \_\_\_\_\_

DATE : 2023-03-22

## 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°C±2°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.	1.0W
2-2	Max Input Power.	3.0W
2-3	Rated Impedance.	8Ω ± 15%
2-4	Sound Pressure Level. (S.P.L)	90dB(0.1W/0.1m) ± 3 dB at AVE 0.8K 1.0K 1.2K 1.5K Hz
2-5	Resonance Frequency (Fo).	700±20%Hz0
2-6	Frequency Range.	F0~20kHz.
2-7	Distortion	Less than 5% at 1KHz input Rated Power
2-8	Magnet	Rare earth permanent (NdFeB) magnet Φ 11*2mm
2-9	Buzz, Rattle, etc.	Should not be audible at 4.8V 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.	g
2-13	Temperature	Operating temperature: -30°C to +70°C Storage temperature: -40°C to +85°C

## Specification for speaker

### 3. MEASURING METHOD

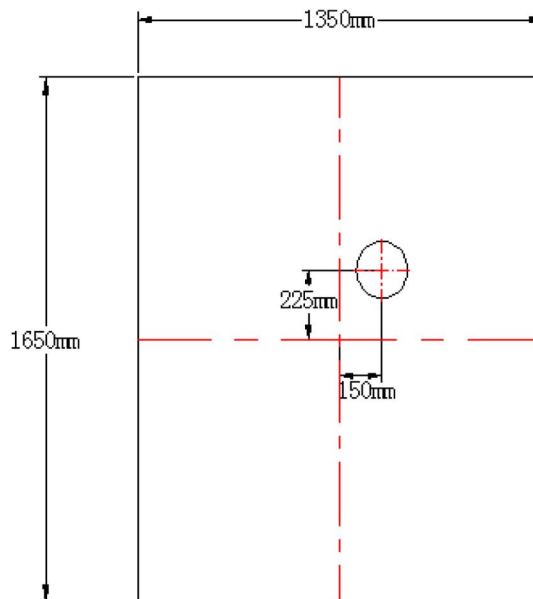
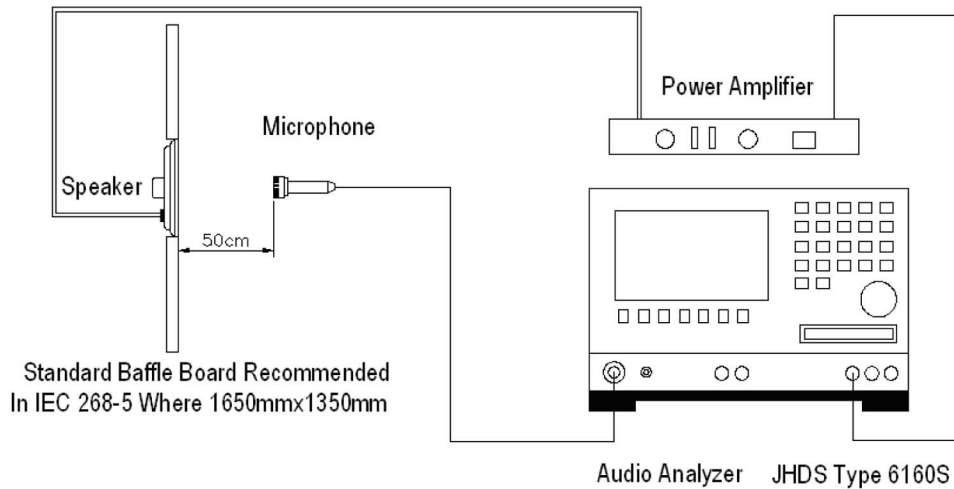


FIG.1

### 3.1 Block Diagram For Measurement Method.

FIG.2

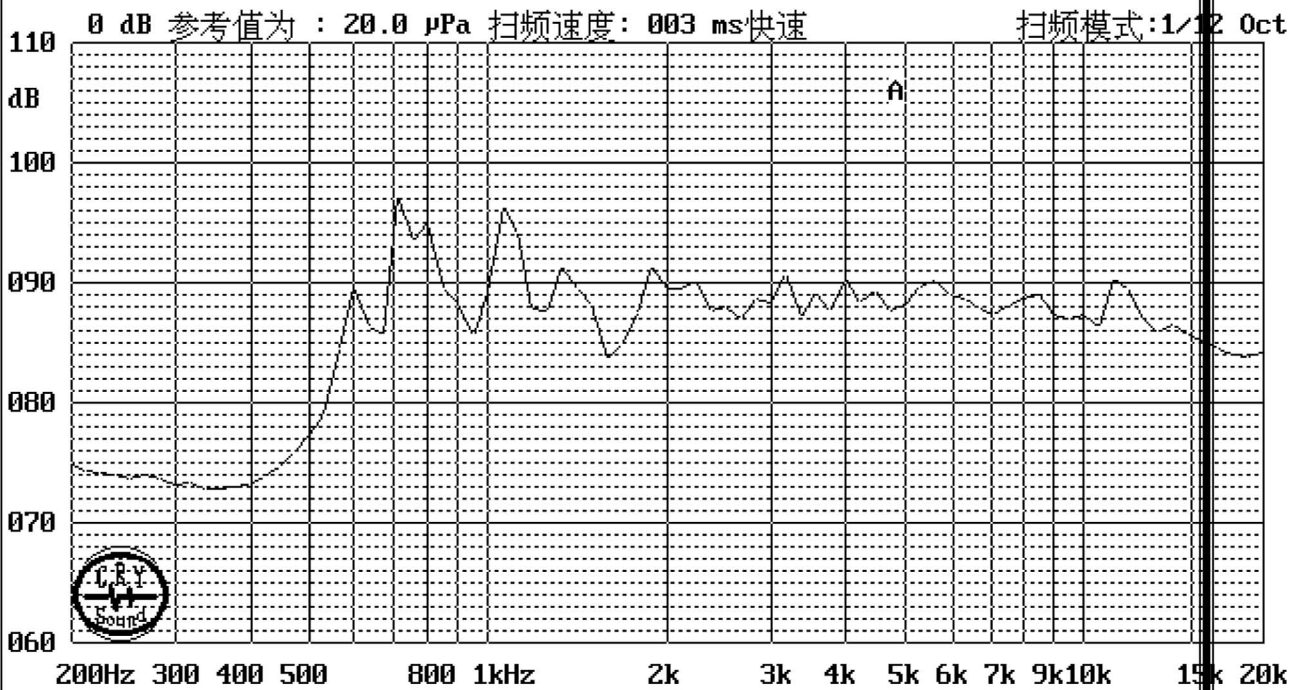
Standard test condition of speaker



## Specification for speaker

### 4. Frequency Response :

The swept sine-wave frequency response of a Loud speaker should ideally not deviate more than indicated per Fig.3



## Specification for speaker

### 5. ENVIRONMENT TEST

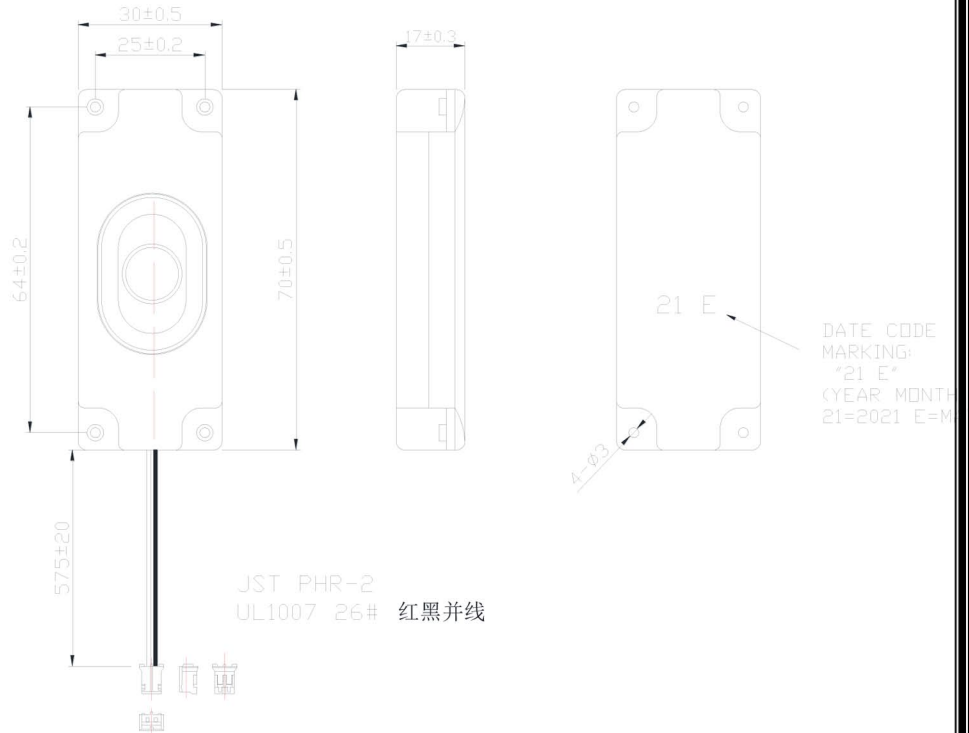
ITEM		SPECIFICATIONS
01	<b>High temp. Test</b>	Keep 96 hours at $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
02	<b>Low temp. Test</b>	Keep 96 hours at $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
03	<b>Humidity test</b>	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	<b>Temp./Humidity cycle</b>	<p>The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of;</p> <p style="text-align: center;"> <math>90 \sim 95\% \text{ RH}</math>  <math>65^{\circ}\text{C}</math>  <math>25^{\circ}\text{C}</math>  <math>0.5\text{hr}</math>   <math>6\text{hrs}</math>   <math>0.5\text{hr}</math>   <math>5\text{hrs}</math> </p>
05	<b>Thermal cycle test.</b>	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	<b>Vibration</b>	10~55~10Hz sin-wave sweep 15min. 5G(constant) X,Y, Z 3 direction. 2 hours each, total 6 hours.
07	<b>Fix drop test</b>	Fix on jig. Then drop from 152cm height to the concrete floor X,y, z 6 direction. 5 times each, total 30 times.
08	<b>Free drop test</b>	Free drop from 100cm height to the concrete floor X,Y, Z 6 direction. 1 times each, total 6 times.
09	<b>Load test</b>	Rated Power White noise is applied for 96 hours
10	<b>Max Power test</b>	Max power 1 min. on - 2 min. off 10 cycles.
11	<b>Terminal strength test</b>	Capable of withstand 1kg load for 30 seconds without resulting in any damage or rejection.

**Criterion :**

After these test , the change of S.P.L shall be within  $\pm 3 \text{ dB}$

## Specification for speaker

### 6.Dimensions

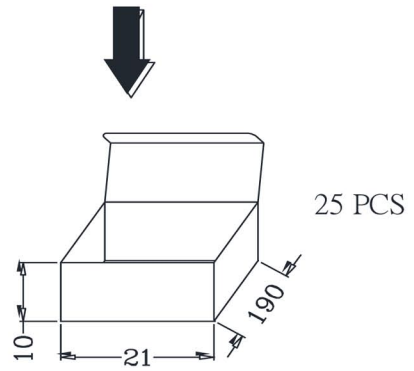
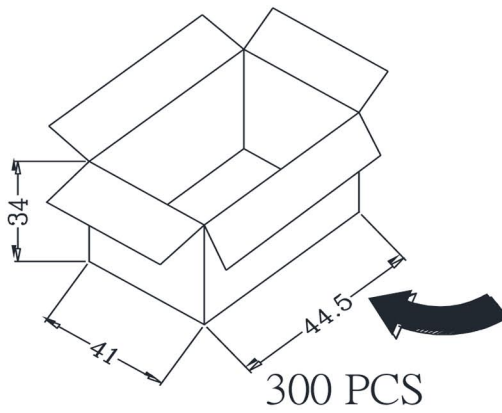
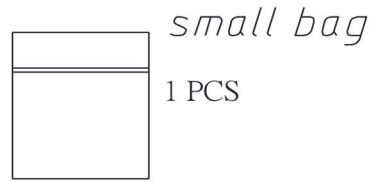


Unit:mm Tol:±0.5

7	CASE	1	ABS	
7	Paper cone	1	Paper+cloth	
6	VOICE COIL	1	Paper+cu	
5	Plate	1	SPCC	
4	Magnet	1	NdFeB	
3	PCB Terminal	1	Paper+cu	
2	YOKE	1	SPCC	
1	Frame-spk	1	ABS	
The material must be meet to GU-001				
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK

# Specification for speaker

## 7.PACKING



Remark:

1 pcs per small bag

25pcs for per carton

Total:300 pcs per box

Size:44.5\*41\*34cm