



SPECIFICATION OF PRODUCT

CUSTOMER: _____

DESCRIPTION : SPEAKER

EKEYSOUND P/N: EKS5090

DATE : 2019-3-7

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.	3.0W.
2-2	Max Input Power.	5.0W
2-3	Rated Impedance.	8Ω ± 15%
2-4	Sound Pressure Level. (S.P.L)	86 ± 3dB(AT0.5M/1.0W,AT0.6,0.8,1.0,1.2KHZ)
2-5	Resonance Frequency (Fo).	200±20%Hz
2-6	Frequency Range.	F0~20kHz.
2-7	Distortion	Less than 5% at 1KHz input 1W 0.5m
2-8	Magnet	Rare earth permanent (Ferrite) magnet Φ 13.5*5mm
2-9	Buzz, Rattle, etc.	Should not be audible at 6.32V 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.	
2-13	Temperature	Operating temperature: -20°C to +60°C Storage temperature: -30°C to +70°C

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3. MEASURING METHOD

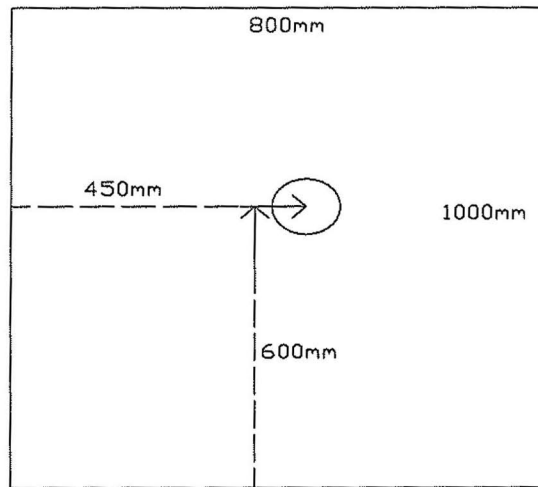


FIG.1

3.1 Block Diagram For Measurement Method.

Standard test condition of speaker

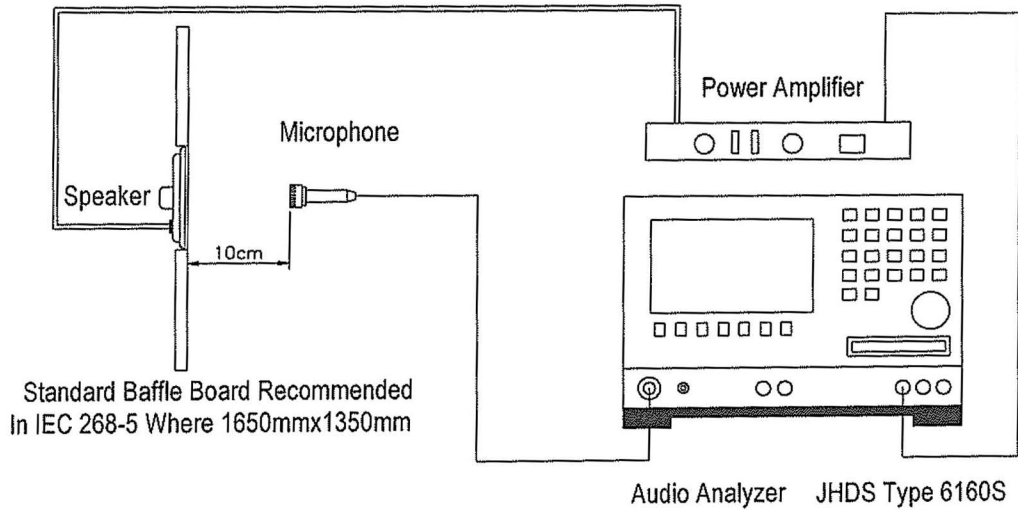


FIG.2

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

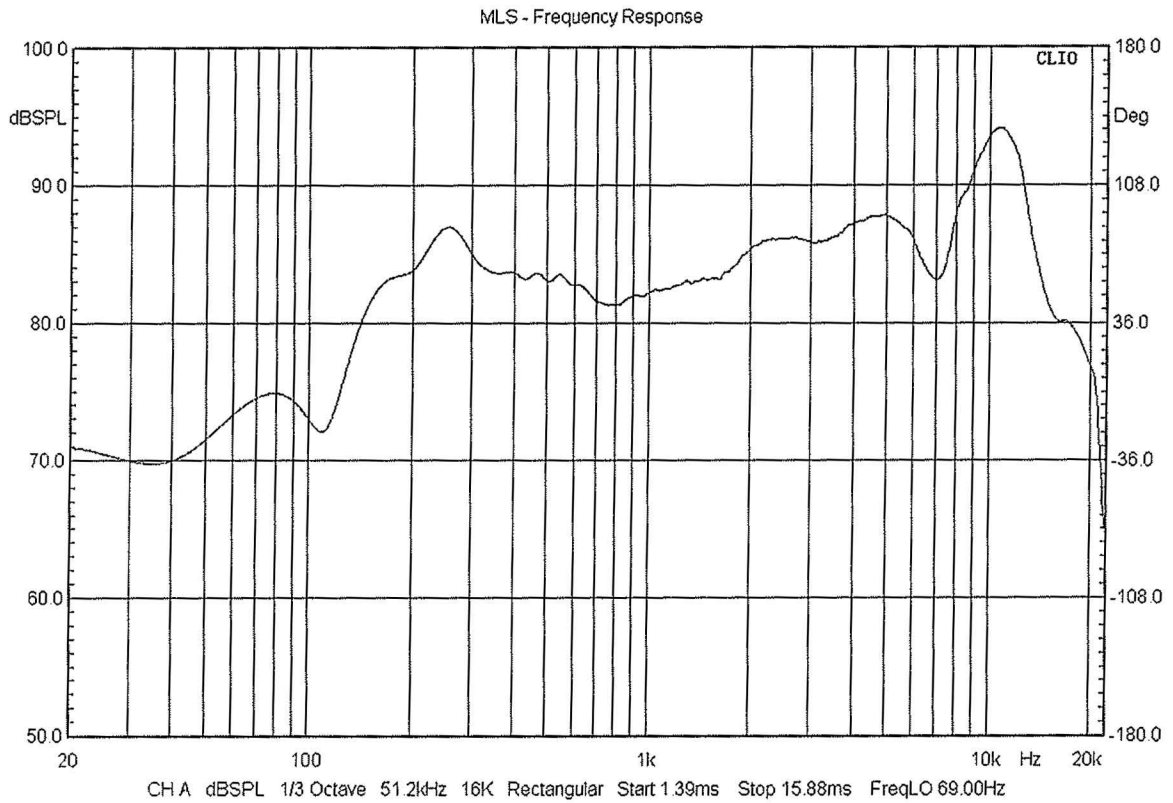
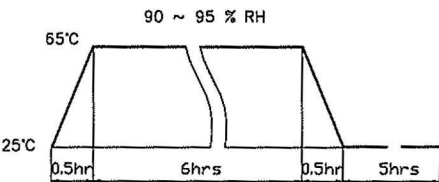


FIG.3

Specification for speaker

5. ENVIRONMENT TEST

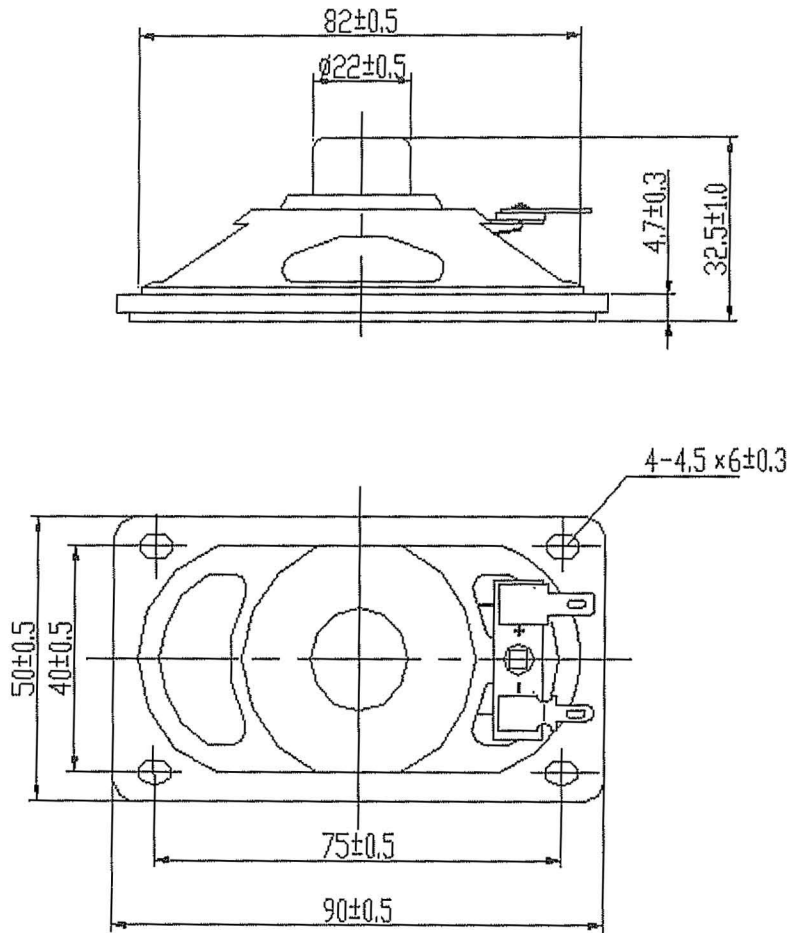
ITEM		SPECIFICATIONS
01	High temp. Test	Keep 96 hours at $+70^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
02	Low temp. Test	Keep 96 hours at $-30^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
03	Humidity 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: $-30^{\circ}\text{C} \pm 3^{\circ}\text{C}$, temperature: $+70^{\circ}\text{C} \pm 3^{\circ}\text{C}$, 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.

Criterion :

After these test , the change of S.P.L shall be within ± 3 dB

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6. Dimensions



Unit:mm Tol:±0.5

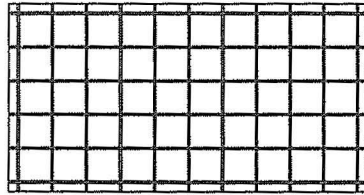
7	Cap	1	Paper	
6	Diaphragm	1	Foam+Paper	
5	VOICE COIL	1	Paper+Cu	
4	Plate	1	SPCC	
3	Magnet	1	Ferrite	
2	PCB Terminal	1	Paper+Cu	
1	Frame	1	SPCC	

The material must be meet to GU-001

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
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7.Packing



$100=2^2 * 50$ PCS

