



Dynamic Loudspeaker

15 × 11 × 3.0 mm

CR1511L030UN8

Revision

Date	Version	Status	Changes	Approver
2018/07/02	V0.1	Draft	Initial release	AX

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.	0.5W (in 1.0cc box)
2-2	Max Input Power.	0.8W (in 1.0cc box)
2-3	Rated Impedance.	8Ω ± 15%
2-4	Sound Pressure Level. (S.P.L)	84 ± 3 dB SPL /0.1W/0.1M at 2.0K Hz
2-5	Resonance Frequency (Fo).	600±20% Hz 900±20% Hz while testing in 1cc box
2-6	Frequency Range.	F0~5kHz.
2-7	Distortion	Less than 15% 1KHz input 1V, in 1cc box.
2-8	Magnet	Rare earth permanent (NdFeB) magnet
2-9	Buzz, Rattle, etc.	Must be normal at sine wave 0.89V (in free air) /2V (in 1.0cc box) from 400~5000KHz
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.	APPROX. 1.5 grams
2-13	Temperature	Operating temperature: -25°C to +60°C Storage temperature: -25°C to +60°C

3. MEASURING METHOD

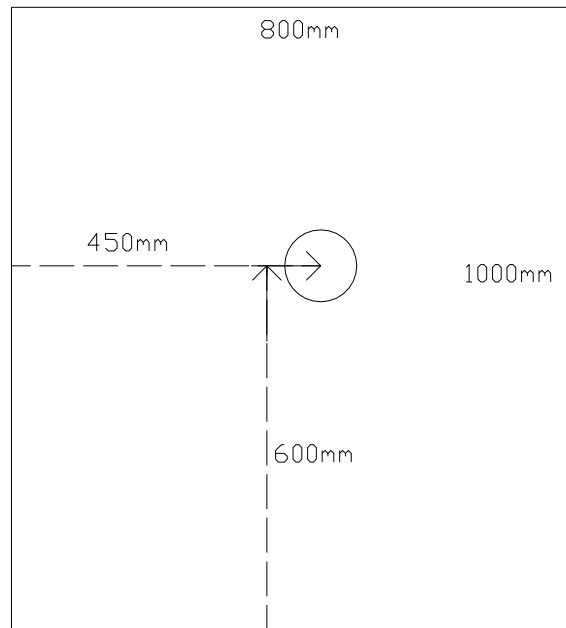


FIG.1

3. 1Block Diagram For Measurement Method.

Standard test condition of speaker

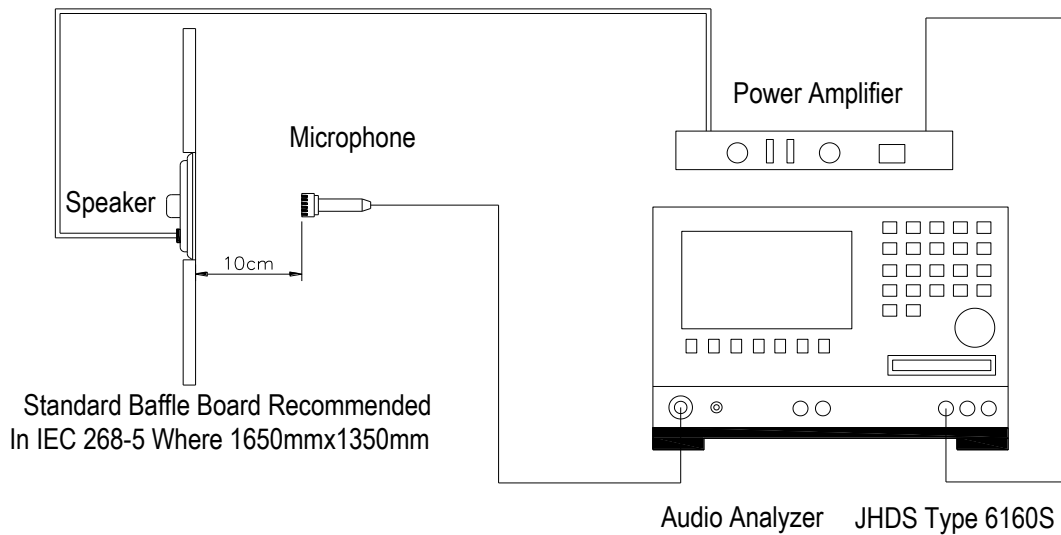


FIG.2

4. Frequency Response :

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

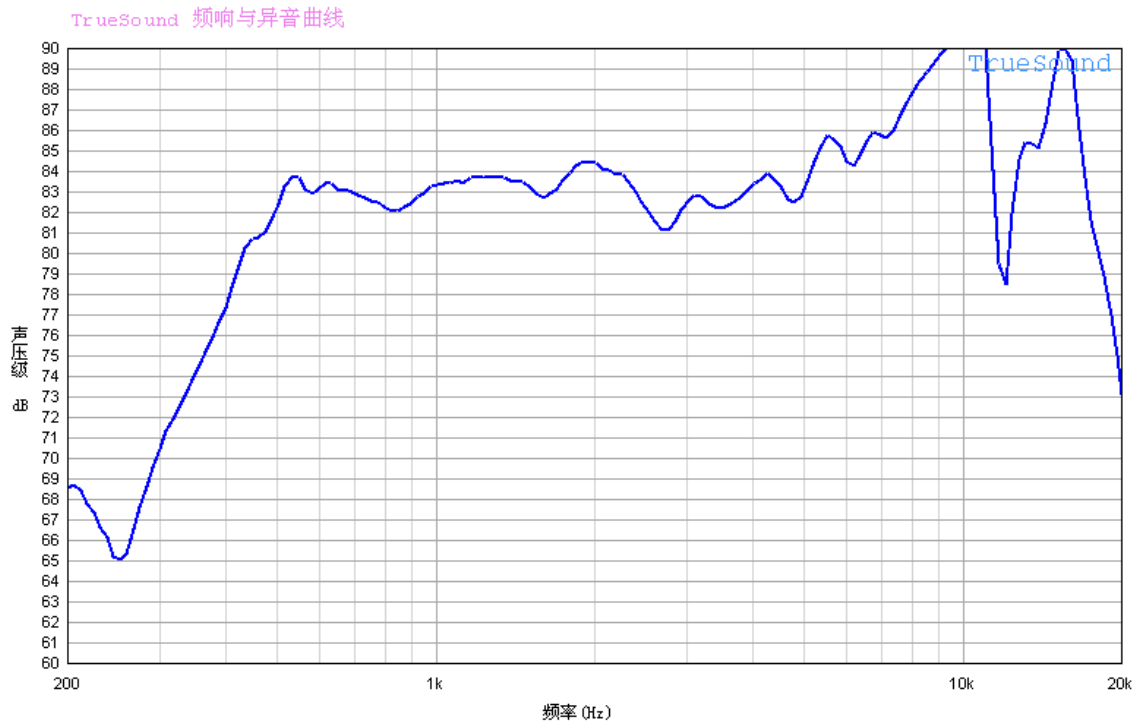
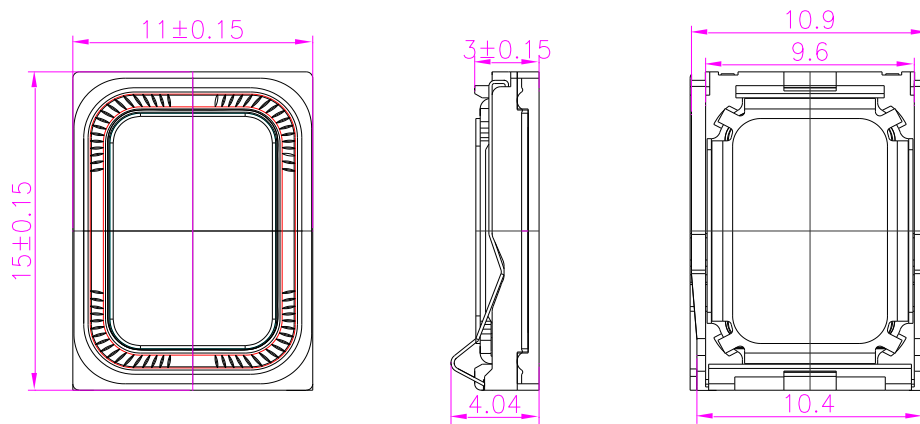


FIG.3

5. ENVIRONMENT TEST

ITEM		SPECIFICATIONS
01	High temp. Test	Keep 96 hours at $+60^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and leave 3 hours in normal temperature and then check
02	Low temp. Test	Keep 96 hours at $-25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ 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: $-25^{\circ}\text{C} \pm 3^{\circ}\text{C}$, temperature: $+60^{\circ}\text{C} \pm 3^{\circ}\text{C}$, 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 48 hours in 1.0cc box.
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>Criterion : After these test , the change of S.P.L shall be within ± 3 dB</p>		

6. Dimensions



Unit: mm Tol: ± 0.2

5	Diaphragm	1	PEEK	
4	VOICE COIL	1	COPPER WIRE	
3	Plate	1	SPCC	
2	Magnet	1	NdFeB	
1	Frame	1	PPA	
The material must be meet to GU-001				
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK

7.PACKING

每盘 100 个 100pcs of speaker in each tray

每箱 20 盘 20 trays in one carton

总计:2000 个 / 1 箱 Total:2000pcs / 1 carton

毛重: 4.5KGS Gross Weight:4.5KGS

净重: 3.0KGS Net Weight: 3.0KGS

