Loudspeaker

52 x 28 mm

CC52S28DN8G

Revision

Date	Version	Status	Changes	Approver
2017/08/01	V0.1	Draft	First release	LC

1. Condition

Test and measurement will be carried out under normal condition of temperature within 5℃ to 35℃, 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℃±2℃ and relative humidity within 60%and 70%, with air pressure remaining un-changed, to be enforced.

2. Electrical and acoustical specification

2-1	**Rated Input Power.**	2.0W
2-2	**Max Input Power.**	3.0W
2-3	**Rated Impedance.**	8Ω ± 15%
2-4	**Sound Pressure Level. (S.P.L)**	84±3dB （AT 2.83V/1M，Average of 0.8、1.0、1.2、1.5 KHz）
2-5	**Resonance Frequency (Fo).**	160±20%Hz
2-6	**Frequency Range.**	F0~15kHz.
2-7	**Distortion**	Less than 5% at 1KHz
2-8	**Magnet**	Rare earth permanent (NdFeB) magnetΦ15*5+Φ12.5*2.5， mm
2-9	**Buzz, Rattle, etc.**	Should not be audible at 4V sine Wave between Fo to 15KHz
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.**	40g ±8%
2-13	**Temperature**	Operating temperature: -20℃ to +60℃ Storage temperature: -30℃ to +70℃

3. Measuring method

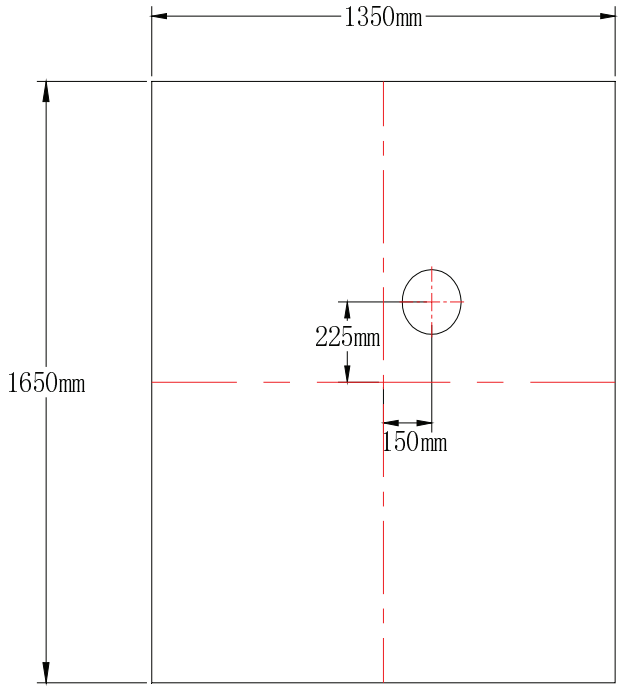


FIG.1

3. 1 Block Diagram For Measurement Method.

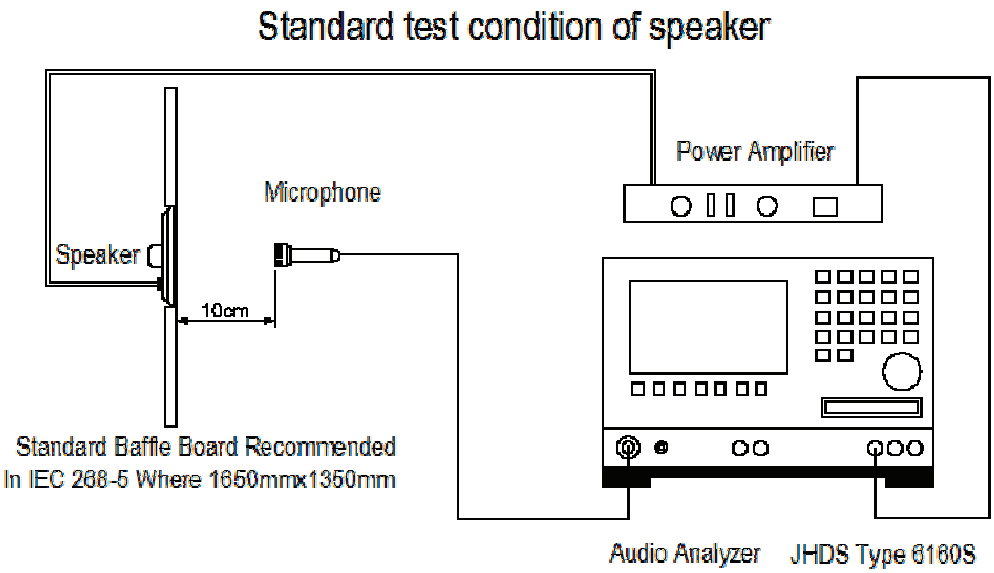


FIG.2

4. Frequency Response

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

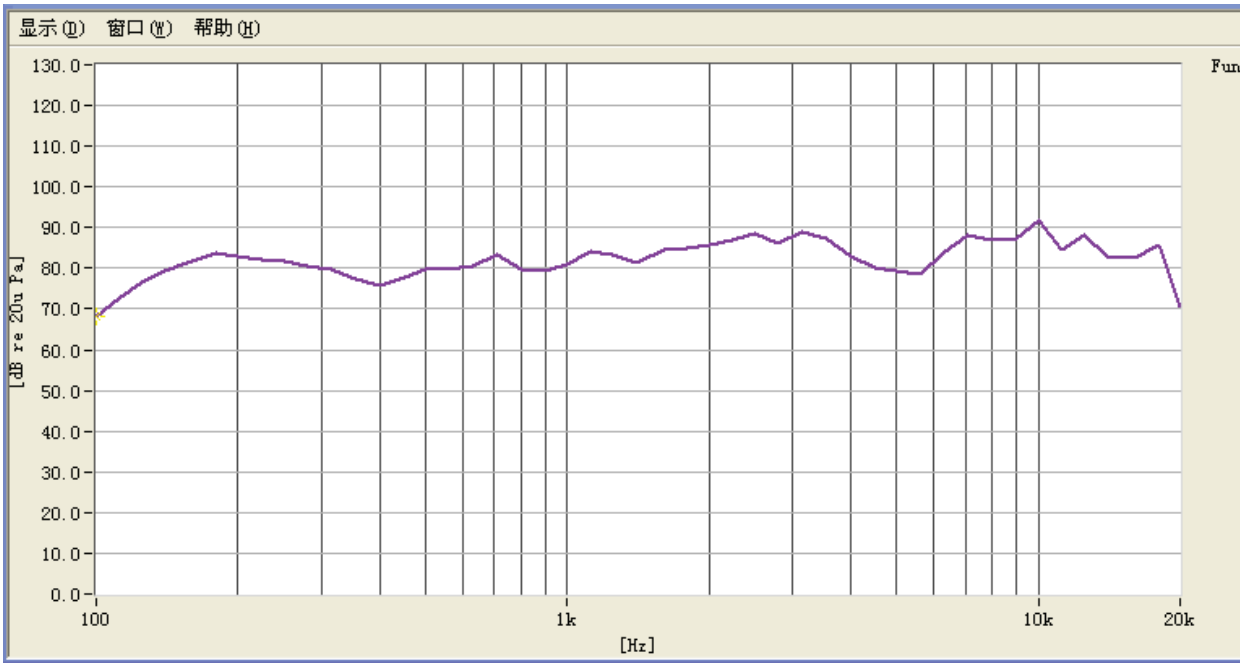
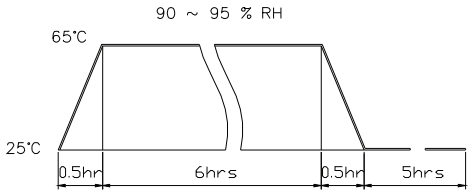
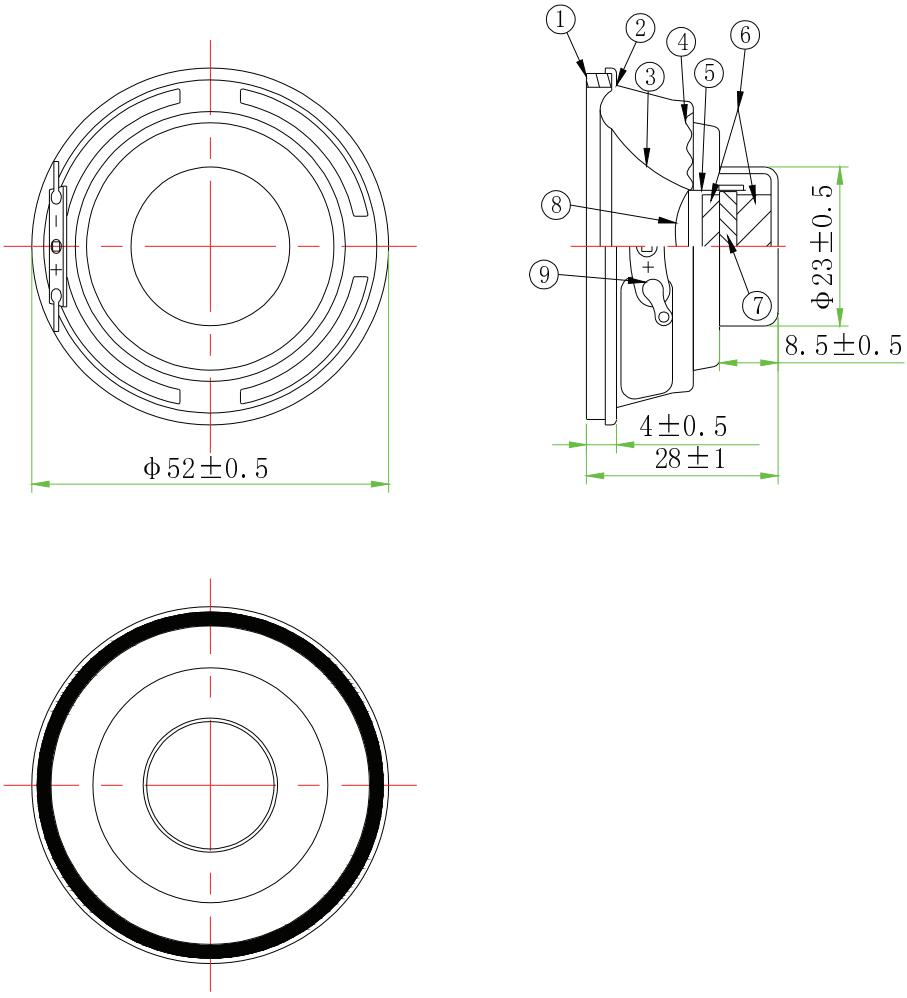


FIG.3

5. Environment test

ITEM		SPECIFICATIONS
01	**High temp. Test**	Keep 96 hours at +70℃±3℃ and leave 3 hours in normal temperature and then check
02	**Low temp. Test**	Keep 96 hours at -30℃±3℃ and leave 3 hours in normal temperature and then check
03	**Humidity test**	Keep 96 hours at + 40℃±3℃ relative humidity 92-95% and leave 3 hours in normal temperature and then checked.
04	**Temp./Humidity cycle**	The part shall be subjected 5 cycles. One cycle shall be 12 hours and consist of; 
05	**Thermal cycle test.**	Low temperature: -30℃±3℃, temperature:+70℃±3℃, 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**		

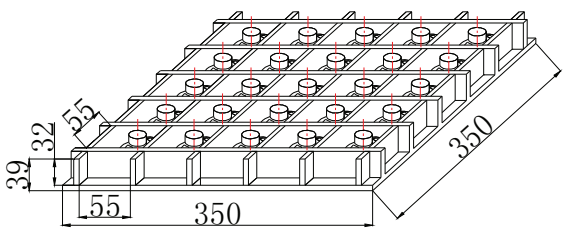
6. Dimensions



8	CAP	1	Paper	
7	Gasket	1	Paper	
6	Diaphragm	1	Foam+Paper	
5	VOICE COIL	1	KSV+Cu	
4	Plate	1	SPCC	
3	Magnet	1	NdFeB	
2	PCB Terminal	1	Paper+meter	
1	Frame	1	Spcc	
The material must be meet to GU-001				
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK

Unit:mm Tol:±0.5

7. Packing



1.Each clapboard 25pcs,
Each carton 10 clapboards,
250pcs/carton
N.W:10 KG, G.W:12 KG
2.Corrugated paper: 350*350mm 2 pcs
3.Carton size:370*370*425mm 1 pcs