



Loudspeaker

Specification for rectangular speaker 70mm x 30mm

Order No.: CR7030S18AN8

Revision

| Date | Version | Status | Changes | Approver |
|------------|---------|--------|---------------|----------|
| 2016/09/06 | V0.1 | | First release | NN |

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 \pm 2°C 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. | 5.0W |
| 2-2 | Max Input Power. | 8.0W |
| 2-3 | Rated Impedance. | 8 Ω \pm 15% |
| 2-4 | Sound Pressure Level. (S.P.L) | 87 \pm 3dB (AT0.1M/0.1W, Average of 0.6,0.8,1.0,1.2KHZ |
| 2-5 | Resonance Frequency (Fo). | 550 \pm 20%Hz |
| 2-6 | Frequency Range. | F0~10kHz. |
| 2-7 | Distortion | Less than 5% at 1KHz input 0.1W |
| 2-8 | Magnet | Rare earth permanent (NdFeB) magnet Φ 12.5*2.5mm |
| 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. | 22g \pm 8% |
| 2-13 | Temperature | Operating temperature: -20°C to +50°C Storage temperature: -20°C to +60°C |

3. MEASURING METHOD

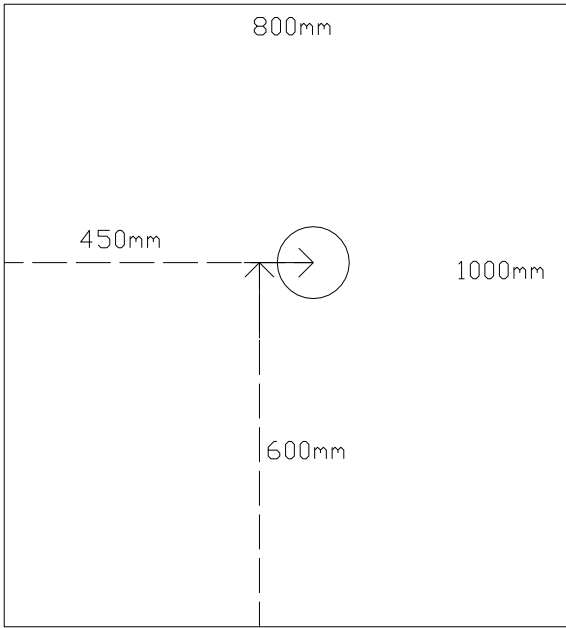


FIG1

3.1 Block Diagram For Measurement Method.

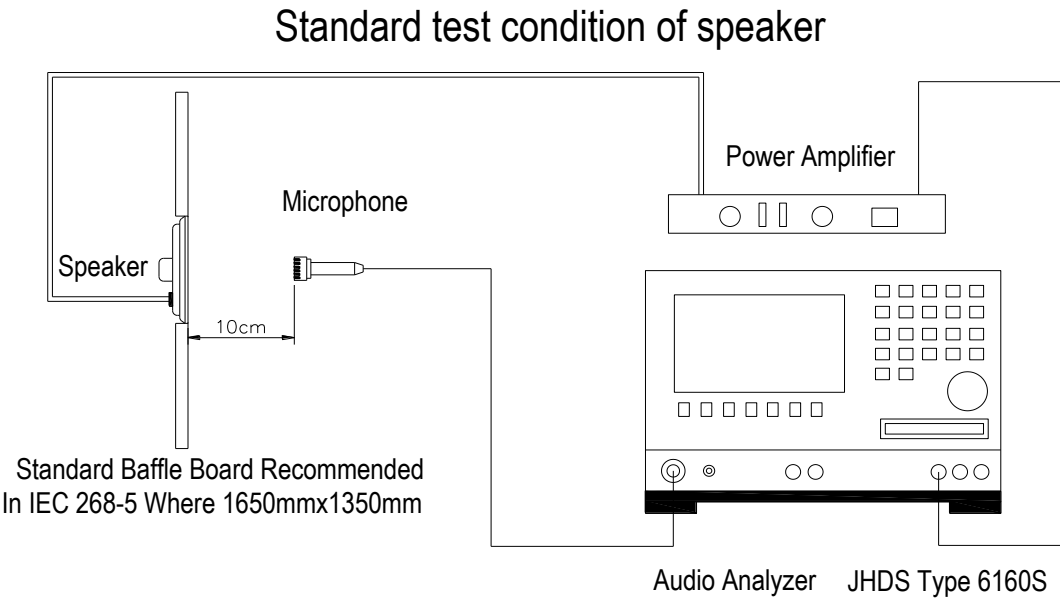


FIG 2

4. Frequency Response:

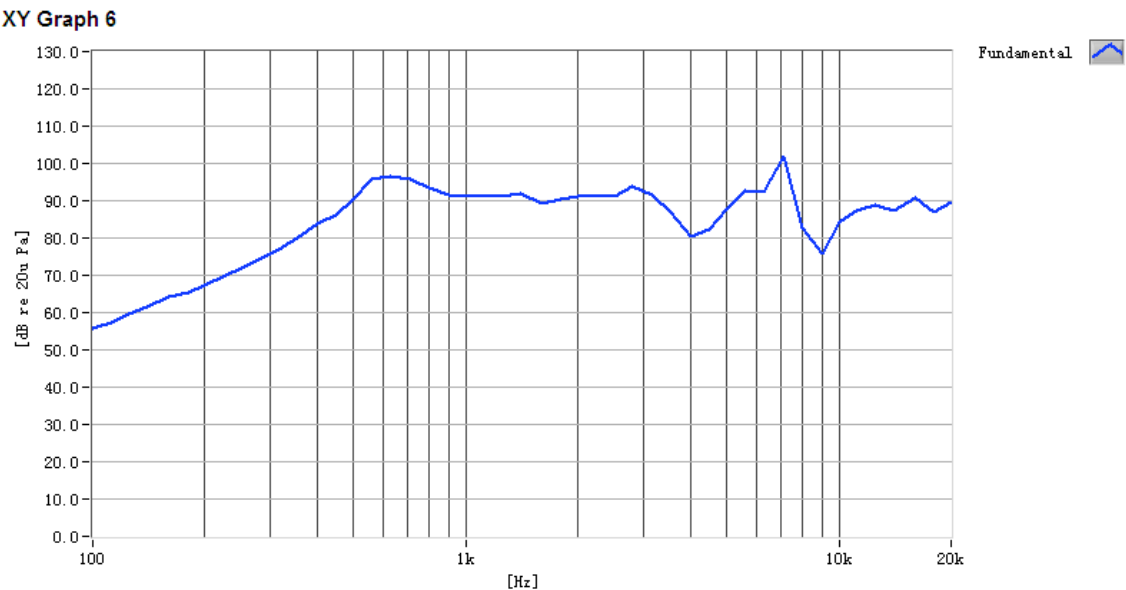
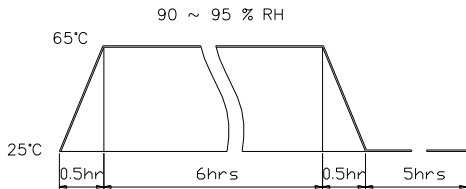
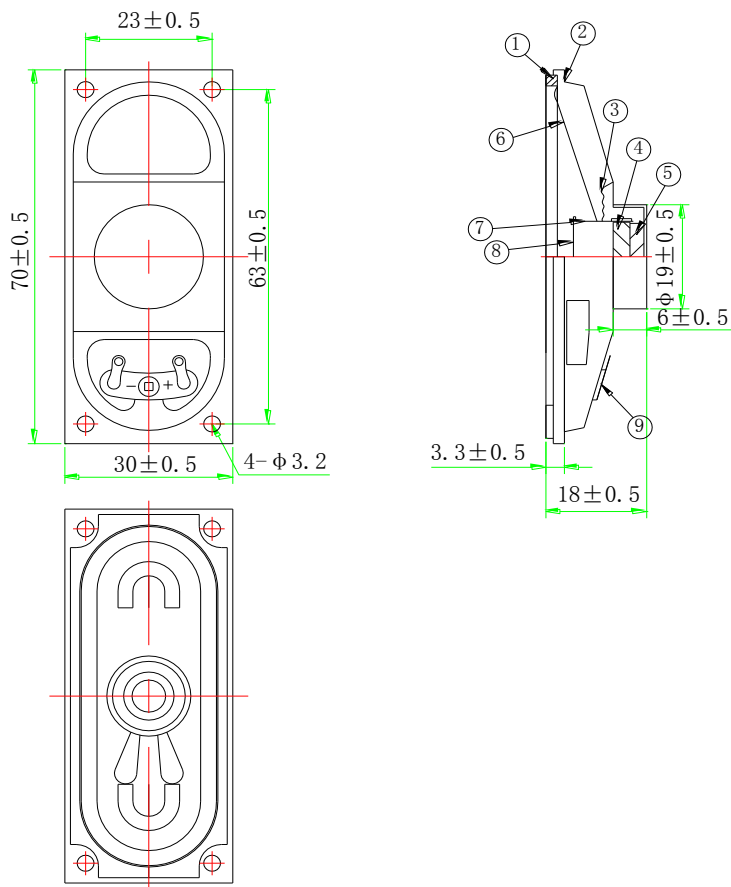


FIG 3

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 $-20^{\circ}\text{C}\pm 3^{\circ}\text{C}$ 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: $-20^{\circ}\text{C}\pm 3^{\circ}\text{C}$, 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 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 | | |

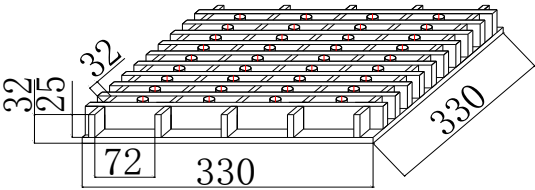
6. Dimensions



Unit:mm Tol : ± 1.0

| | | | | |
|-------------------------------------|------------|------|----------|--------|
| | | | | |
| | Diaphragm | 1 | PU+Paper | |
| | VOICE COIL | 1 | KSV+Cu | |
| | Plate | 1 | SPCC | |
| | Magnet | 1 | NdFeB | |
| | PCB | 1 | FR4 | |
| | Frame | 1 | SPCC | |
| The material must be meet to GU-001 | | | | |
| PART NO. | PART NAME | Q'TY | MATERIAL | REMARK |

7. PACKING



- 1. Each clapboard 36pcs,
each carton 10 clapboards,
360 pcs/carton
N.W: 7.9 KG, G.W:9.9 KG
- 2. Corrugated paper: 330*330 mm 2 pcs
- 3. Carton box size: 350*350*350mm 1 pcs

