



Dynamic Loudspeaker

With gasket & waterproof

15 × 8 × 2.65mm

Revision

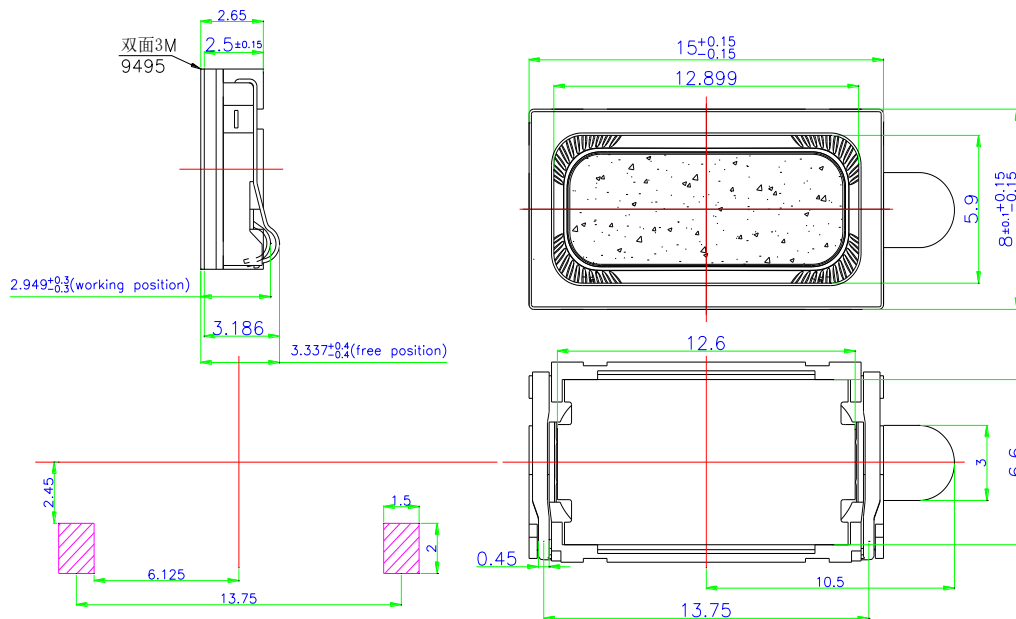
| Date | Version | Status | Changes | Approver |
|----------|---------|--------|-----------------|----------|
| 2020/5/7 | V0.1 | Draft | First release | AX |
| 2020/6/5 | V0.2 | Draft | Add layout size | AX |

Specifications

| Parameter | Conditions/Description | Values | Units |
|-------------------------------|---|--------------|-------|
| Rated Input Power | in 1.0cc closed box | 0.7 | W |
| Max Input Power | in 1.0cc closed box | 1.0 | W |
| Rated Impedance | | 6±15% | Ω |
| Sound Pressure Level (S.P.L.) | at 2.0KHz in 0.5W/0.1M average (0dB SPL=20μPa)(in 1.0cc box) | 86±3 | dB |
| Resonant Frequency (Fo) | in free air | 700±20% | Hz |
| | in 1.0cc closed box | 900±20% | Hz |
| Frequency Range | Output S.P.L. -10dB | Fo~20K | Hz |
| Distortion | at 1K Hz, input 0.5w/0.1m | < 10% | - |
| Magnet | NdFeB | 11.6*4.7*1.2 | mm |
| Buzz, Rattle, etc. | must be normal at sine wave between | 1.0 | V |
| | Fo ~ 5K Hz(Free air) | | |
| | must be normal at sine wave between | 2.05 | V |
| Polarity | Fo ~ 5K Hz (in 1.0cc box) | | |
| | cone will move forward with positive dc current to "+" terminal | | |
| Weight | | | g |
| Operating Temperature | | -20~+60 | °C |
| Storage Temperature | | -30~+70 | °C |
| Waterproof Rating | | IP67 | |

MECHANICAL DRAWING

Units: mm

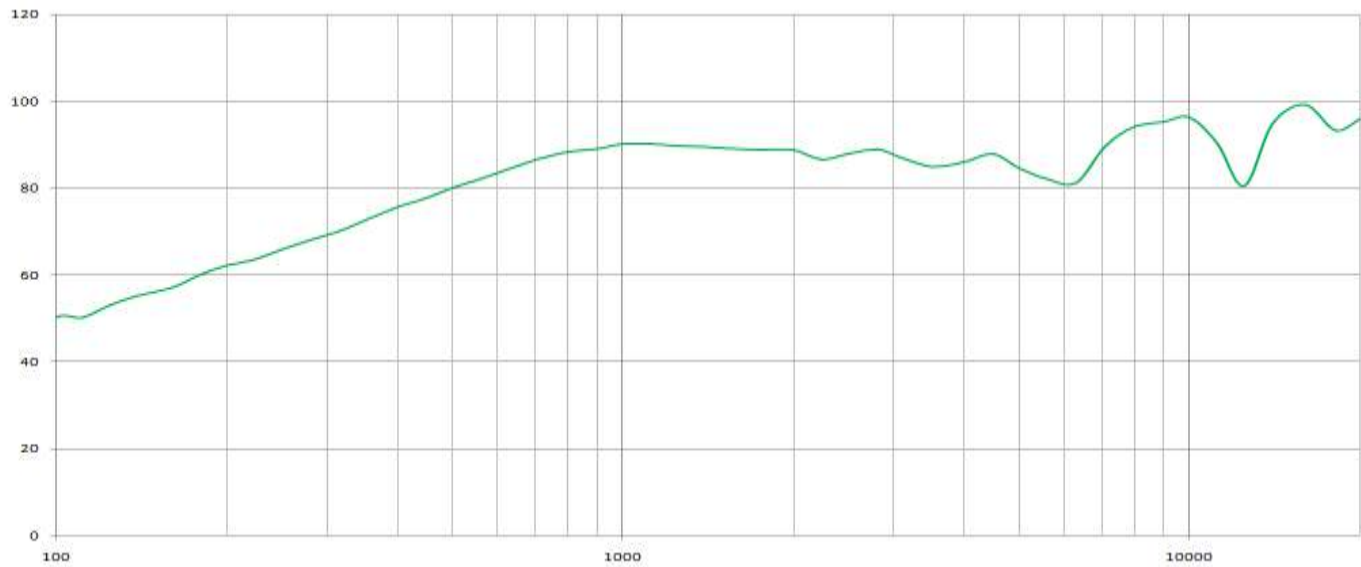
Tolerance: ± 0.2 mm

CONSTRUCTION DETAIL

| | | | | |
|--------|--------------------|-------------|---------|-----------|
| 9 | 垫圈 Gasket | 3M9495 | 1 | |
| 8 | 弹片 SPRING TERMINAL | SUS | 2 | |
| 7 | 前盖 FRONT CAP | PPA | 1 | |
| 6 | 音圈 VOICE COIL | COPPER WIRE | 1 | |
| 5 | 膜片 DIAPHRAGM | PEEK | 1 | |
| 4 | U 铁 U YOKE | SPCE | 1 | |
| 3 | 极片 POLE PIECE | SPCC | 1 | |
| 2 | 磁钢 MAGNET | Nd-Fe-B | 3 | |
| 1 | 主架 FRAME | PPA | 1 | |
| 编号 No. | 零件名称 PART NAME | 材料 MATERIAL | 数量 Q'TY | 备注 REMARK |

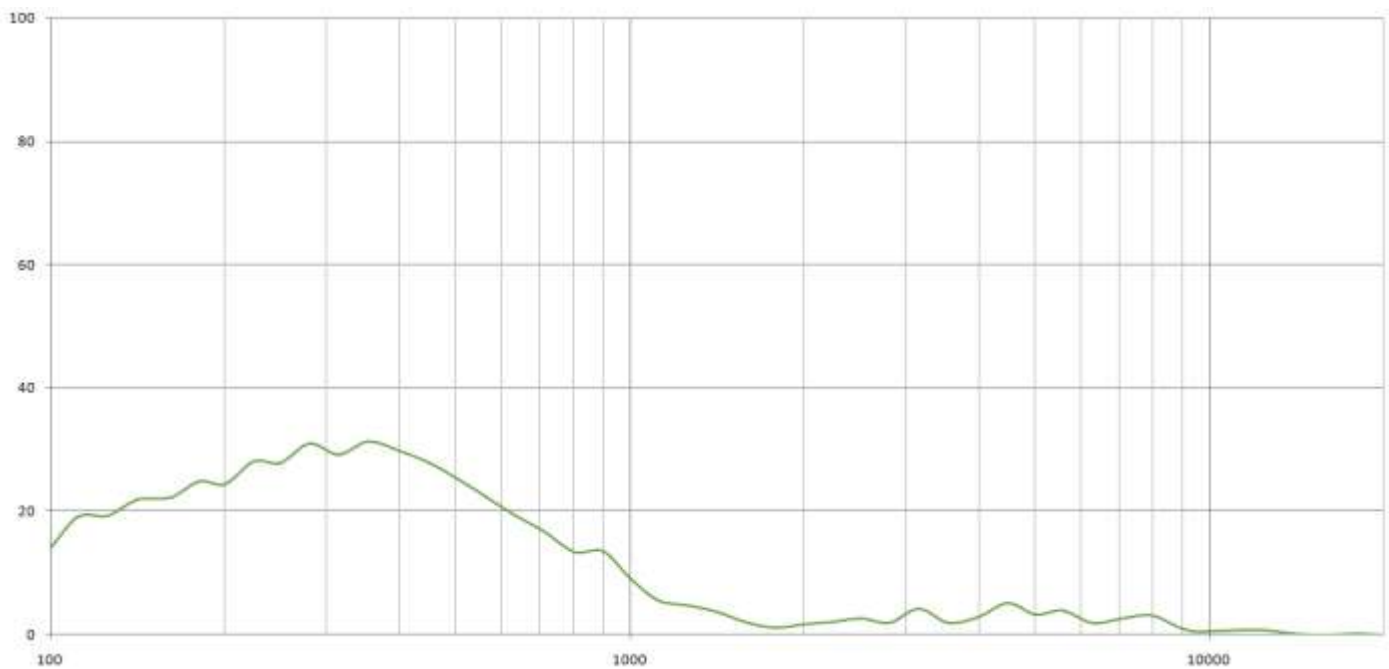
RESPONSE CURVES

Frequency Response Curve

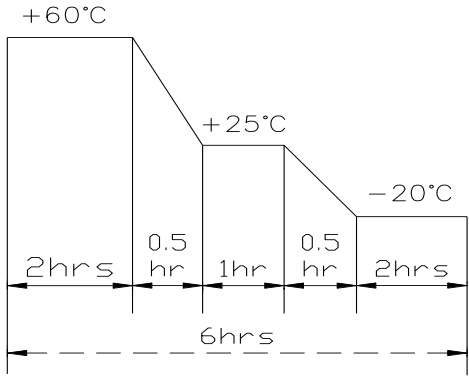


0.5w/0.1m in 1cc box

THD



RELIABILITY TEST

| | | |
|---|------------------------------|--|
| 1 | Reliability Test Performance | After any following test, parts should conform to original performance within ± 3 dB tested with Rated Power, after 6 hours of recovery period. |
| 2 | High Temperature Test | 96 hours at $+60^{\circ}\text{C} \pm 3^{\circ}\text{C}$ |
| 3 | Low Temperature Test | 96 hours at $-20^{\circ}\text{C} \pm 3^{\circ}\text{C}$ |
| 4 | Humidity Test | 96 hours at $+40^{\circ}\text{C} \pm 3^{\circ}\text{C}$, 92-95% RH |
| 5 | Temp./Humidity Cycle | <p>The part shall be subjected 5 cycles. One cycle shall be 6 hours and consist of</p>  |
| 6 | Vibration Test | <p>Frequency: 10~55~10Hz Oct/min Amplitude: 1.5mm</p> <p>Duration: 2 hours each of 3 perpendicular directions</p> |
| 7 | Drop Test | Drop the speaker contained in normal box onto the surface of 40mm thick board 10 times from the height of 75cm |
| 8 | Operation Life Test | Must perform normal with program Pink-Noise source at Rated Power for 96 Hours |
| 9 | Termination Strength | Apply 3.0N(0.306kg) to each terminal in horizontal direction for 30 seconds; Apply 2.0N(0.204kg) to each terminal in vertical direction for 30 seconds; |

MEASURING METHOD

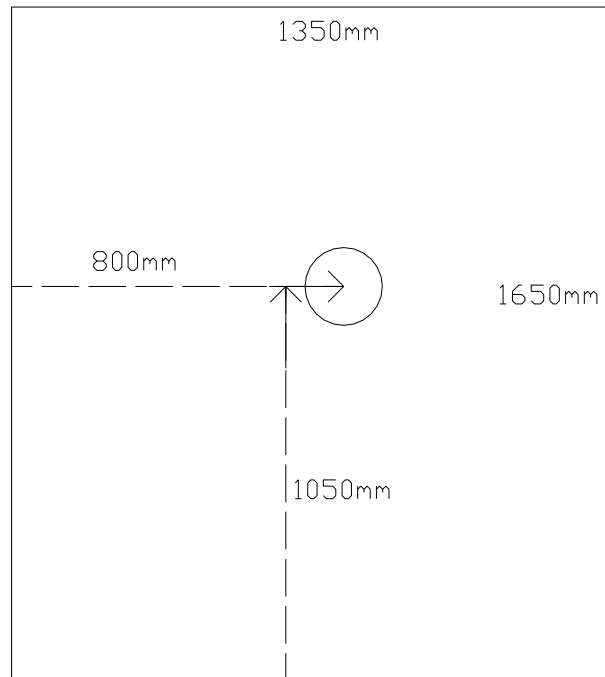


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker

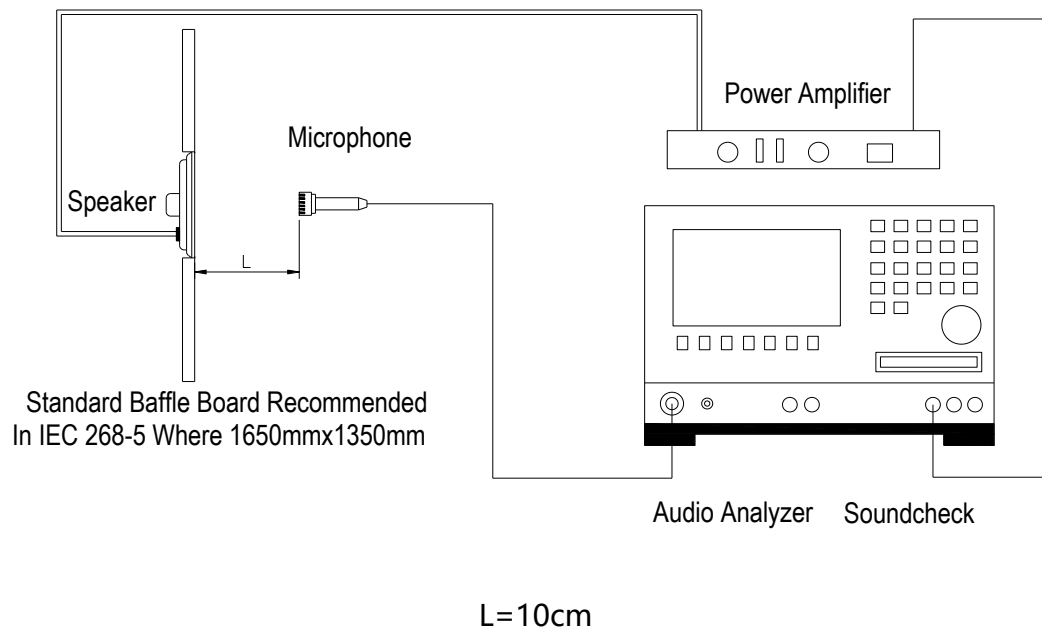


Fig. 2 Speaker Test Condition

PACKAGING

units: mm

Remark;

100pcs of speaker in each tray

20 trays in one carton

Total:2000pcs / 1 carton

