



Dynamic loudspeaker

With spring

$16 \times 9 \times 3.0$ mm

CR1609S030BN6

Revision

Date	Version	Status	Changes	Approver
2018/11/15	V0.1	Draft	First release	AX

Specifications

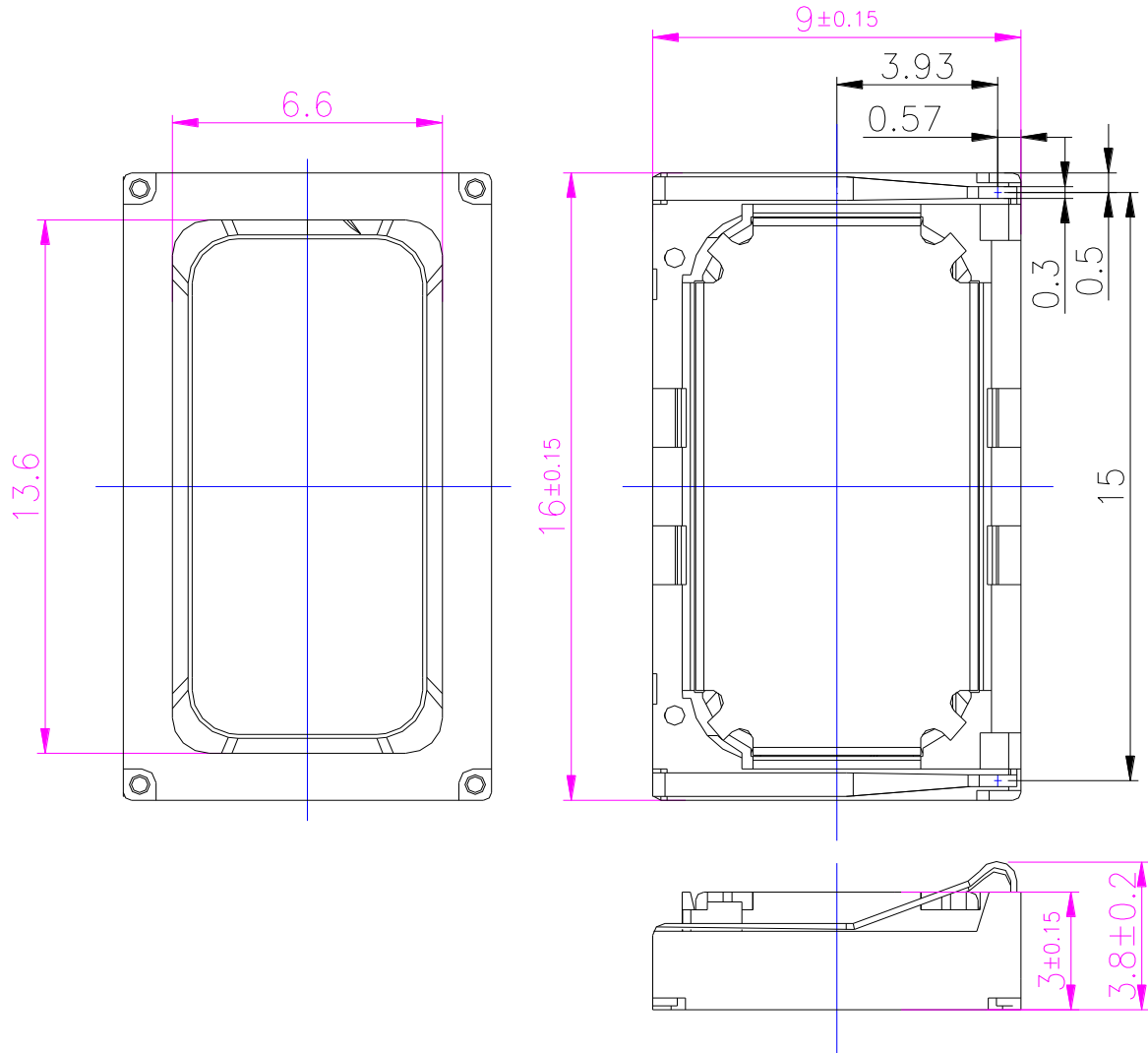
Parameter	Conditions/Description	Values	Units
Rated Input Power	in 1cc closed box	0.7	W
Max Input Power	in 1cc closed box	1.0	W
Rated Impedance	at 2.0K Hz, 1V input	6±15%	Ω
Sound Pressure Level	1.0v/0.1M at 2.0K Hz	86±3	dB
Resonant Frequency (Fo)	In FREE AIR	700±20%	Hz
Frequency Range		400~20K	Hz
Distortion	at 1K Hz, input 0.5W, in 1cc box	< 15%	-
Magnet	NdFeB		
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 20 kHz, in free air	2.4	V
Polarity	cone will move forward with positive dc current to “+” terminal		
Weight		1.8	g
Operating		-20~+70	°C
Storage Temperature		-40~+85	°C

Notes: All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

MECHANICAL DRAWING

Units: mm

Tolerance: ± 0.15 mm

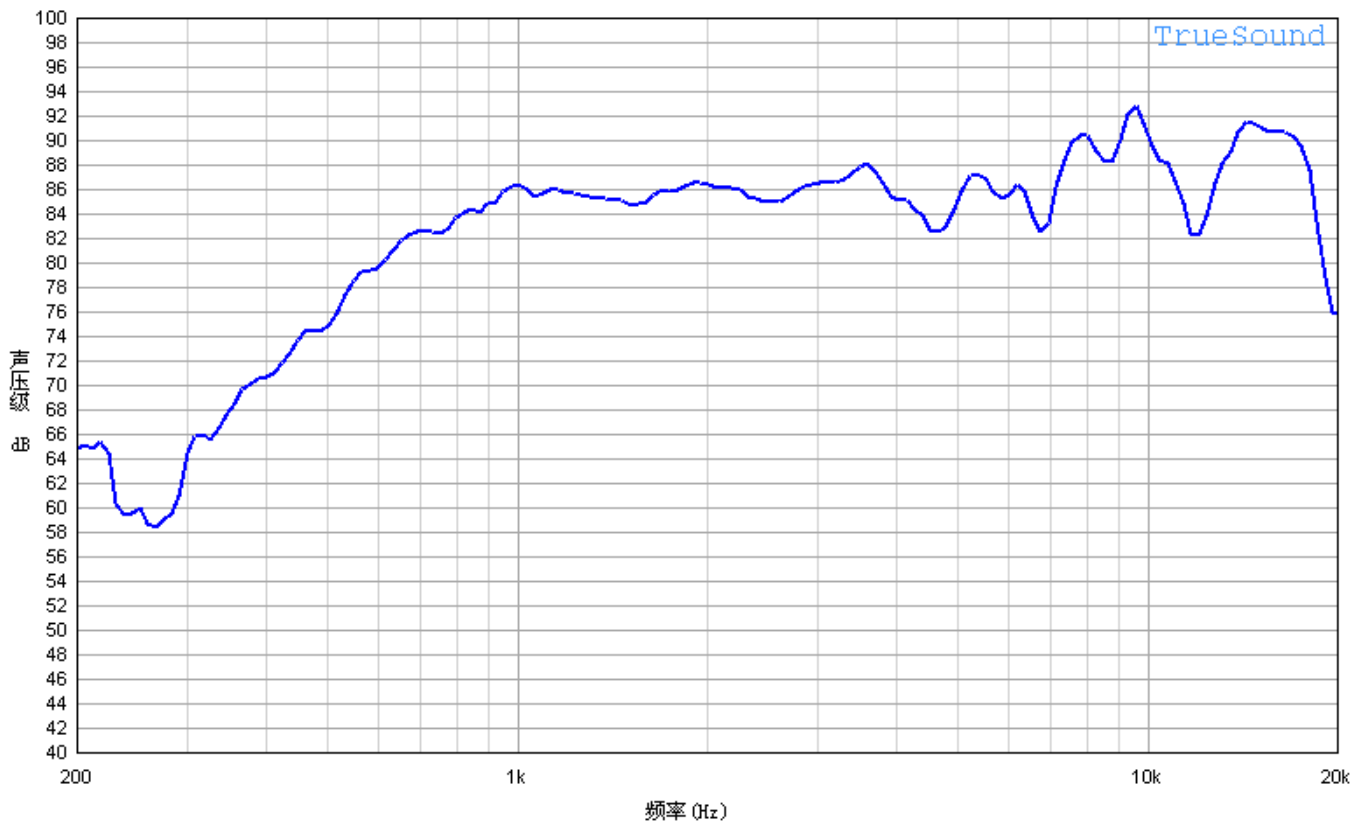


CONSTRUCTION DETAIL

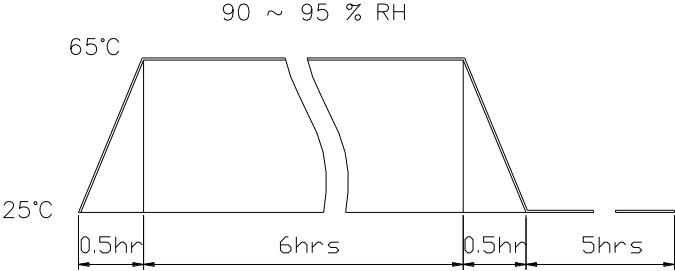
8	弹片 SPRING TERMINAL	SUS	2	
7	前盖 FRONT CAP	Plastic	1	
6	音圈 VOICE COIL	COPPER WIRE	1	
5	膜片 DIAPHRAGM	PEEK	1	
4	极片 POLE PIECE	SPCC	1	
3	磁钢 MAGNET	N42	1	
2	U 铁 U YOKE	SPCE	1	
1	主架 FRAME	Plastic	1	
编号 No.	零件名称 PART NAME	材料 MATERIAL	数量 Q'TY	备注 REMARK

RESPONSE CURVES

VOL:1V DIS:0.1M IN FREE AIR



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 $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$
3	Low Temperature Test	96 hours at $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$
4	Humidity Test	96 hours at $+30^{\circ}\text{C} \pm 3^{\circ}\text{C}$, 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>  <p style="text-align: center;">90 ~ 95 % RH</p> <p style="text-align: center;">65°C</p> <p style="text-align: center;">25°C</p> <p style="text-align: center;">0.5hr 6hrs 0.5hr 5hrs</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

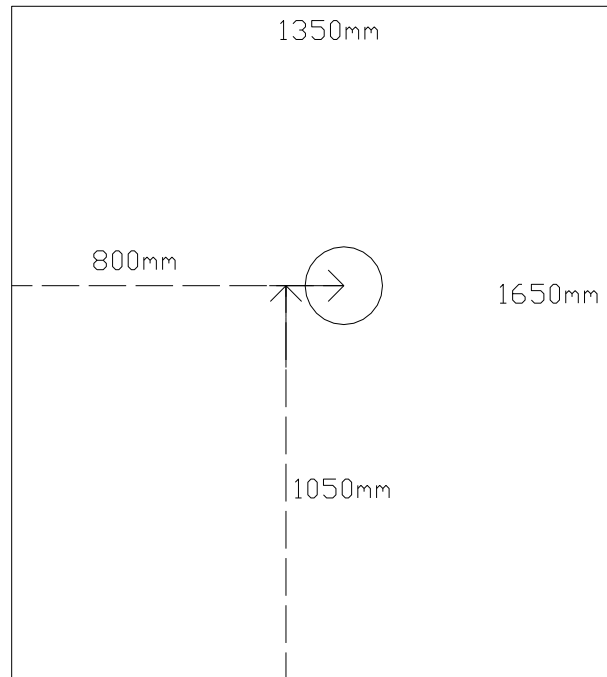


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker

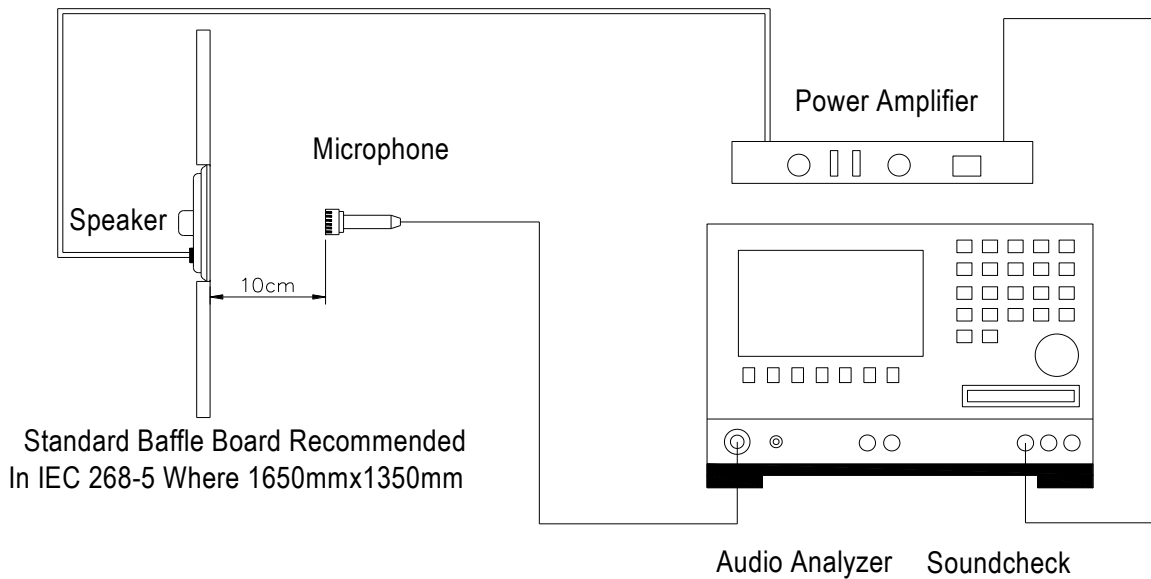


Fig. 2 Speaker Test Condition

PACKAGING

units: mm

100pcs of speaker in each tray

20 trays in one carton

Total:2000 pcs / 1 carton

Gross Weight: 4 KGS

Net Weight: 2 KGS

