Dynamic Speaker

34×11×4.0 mm

CR3411S040BN8

Revision

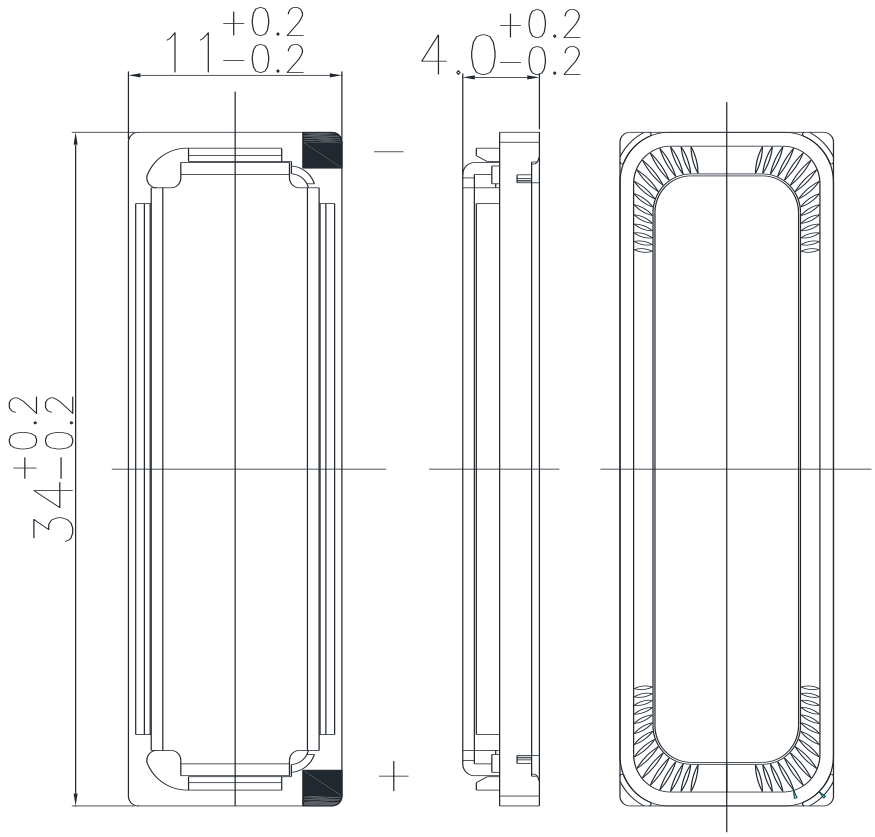
Date	Version	Status	Changes	Approver
2024/1/25	V0.1	Draft	Initial release	AX

Parameter	Conditions/Description	Values	Units
Rated Input Power	In 3cc box	2.0	W
	In Free air	0.1	W
Max Input Power	In 3cc box	2.5	W
	In Free air	0.2	W
Impedance	At 2.0KHz 1V	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 2.0KHz in 4.0V/0.1M average IN 3CC BOX(0dB SPL=20μPa)	98±3	dB
Resonant Frequency (Fo)	IN 3CC BOX	800±20%	Hz
	IN Free air	450±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K Hz, input 2.0W, IN 3CC BOX	< 10%	-
Magnet	NdFeB		mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz IN 3CC BOX	4.0	V
Polarity	cone will move forward with positive dc current to"+" terminal		
Weight		8	g
Operating Temperature		-40~+85	℃
Storage Temperature		-40~+85	℃
Waterproof		N/A	

MECHANICAL DRAWING

Units: mm

Tolerance: ±0.5mm



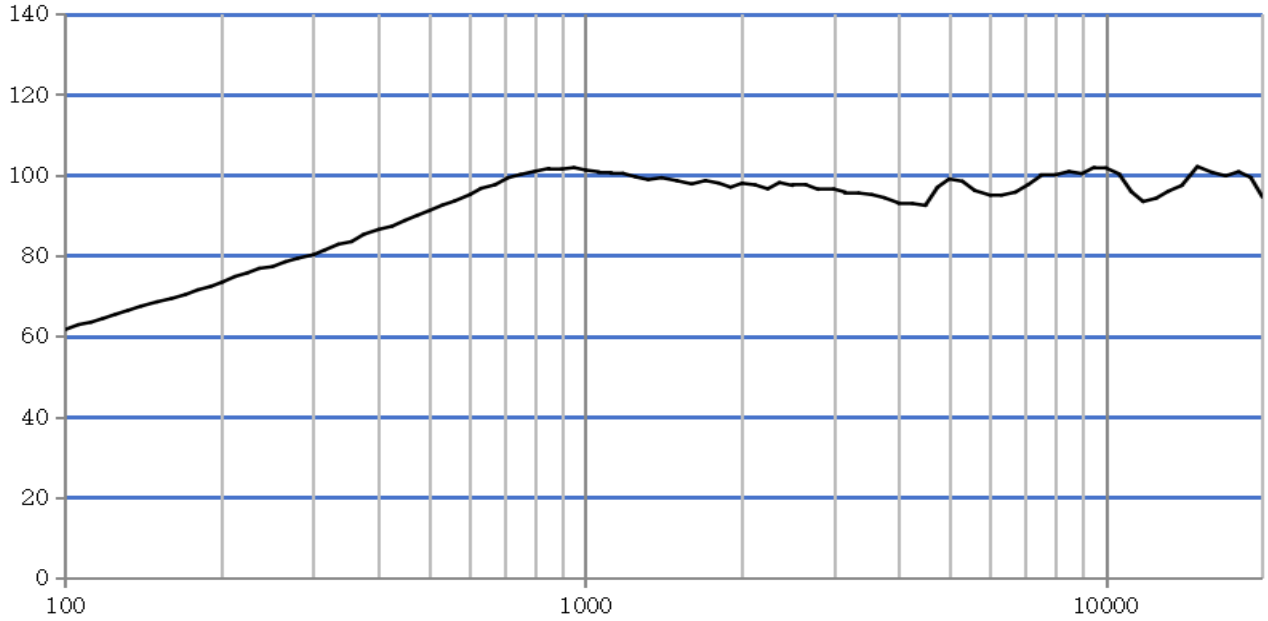
CONSTRUCTION DETAIL

NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	terminal	2	SUS	
2	VOICE COIL	1	COPPER WIRE	
3	DIAPHRAGM	1	PEEK	
4	U YOKE	1	SPCE	
5	POLE PIECE	1	SPCC	
6	MAGNET	1	NdFeB	
7	FRAME	1	PPA	
8	terminal	1	SUS	

RESPONSE CURVES

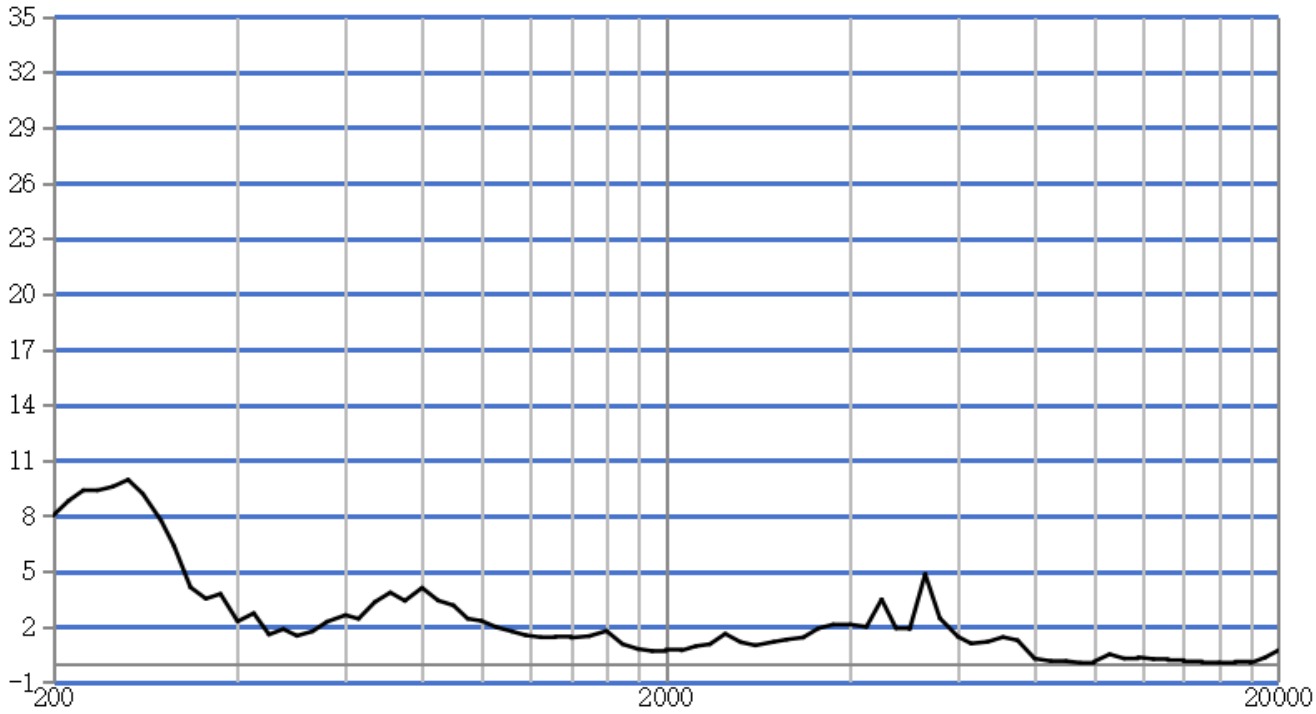
Frequency Response Curve

Test condition: 4.0V/0.1M, in 3CCBOX

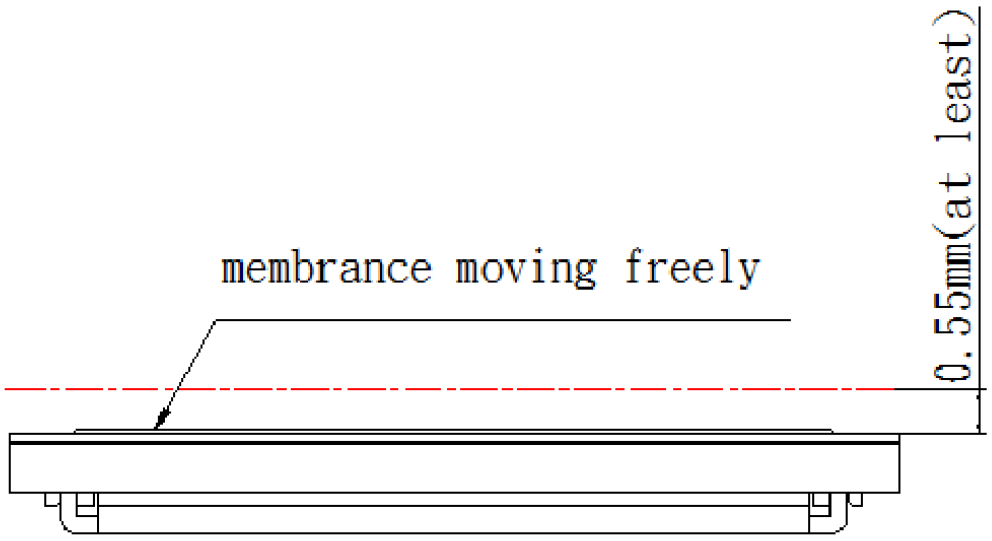


Total Harmonic Distortion Curve

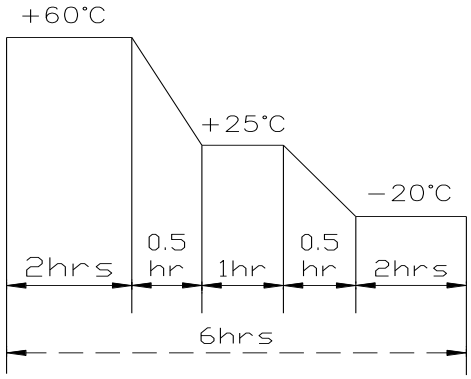
Test condition: 4.0V/0.1M, in 3CCBOX



Keep clearance in front of the speaker, at least leave 0.55mm for membrane moving freely.



RELIABLITY 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 Operation and Storage	+ 85± 2 °C Humidity Random for 96 Hours. (GB/T 9397—200X)
3	Low Temperature Operation and Storage	− 30 ± 2 °C Humidity Random for 96 Hours. (GB/T 9397—200X)
4	Humidity Test	+40℃±2℃ Relative Humidity(RH)90~95% 48 Hours
5	Temp Cycle	The part shall be subjected 4cycles. One cycle shall be 6 hours and consist of (GB5170.18-87) 
6	Vibration Test	Frequency 30 ± 15 Hz, Amplitude 1.5 mm for 3 Hours. (GB11606.8-89)
7	Drop Test	75 CM free falling on Concrete floor, 10 times. (GB2423. 8-81)
8	Load test	Must perform normal with program White-Noise source at Rated Power for 96 Hours(GB/T 9397—200X)
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

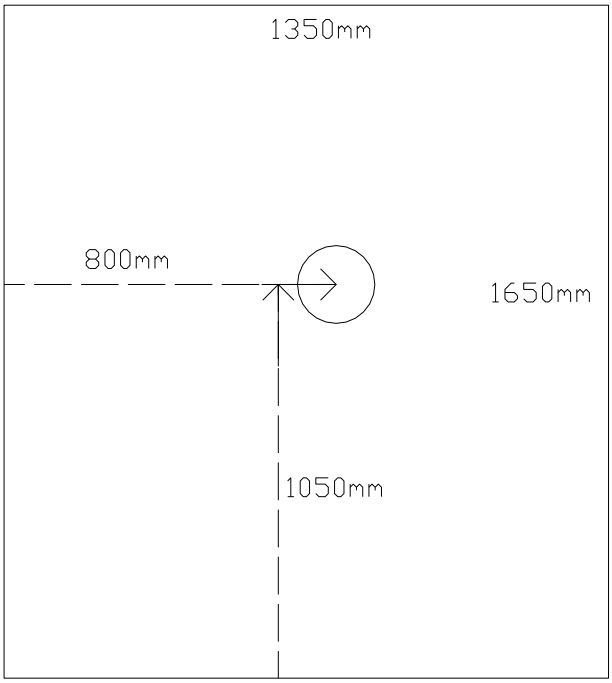
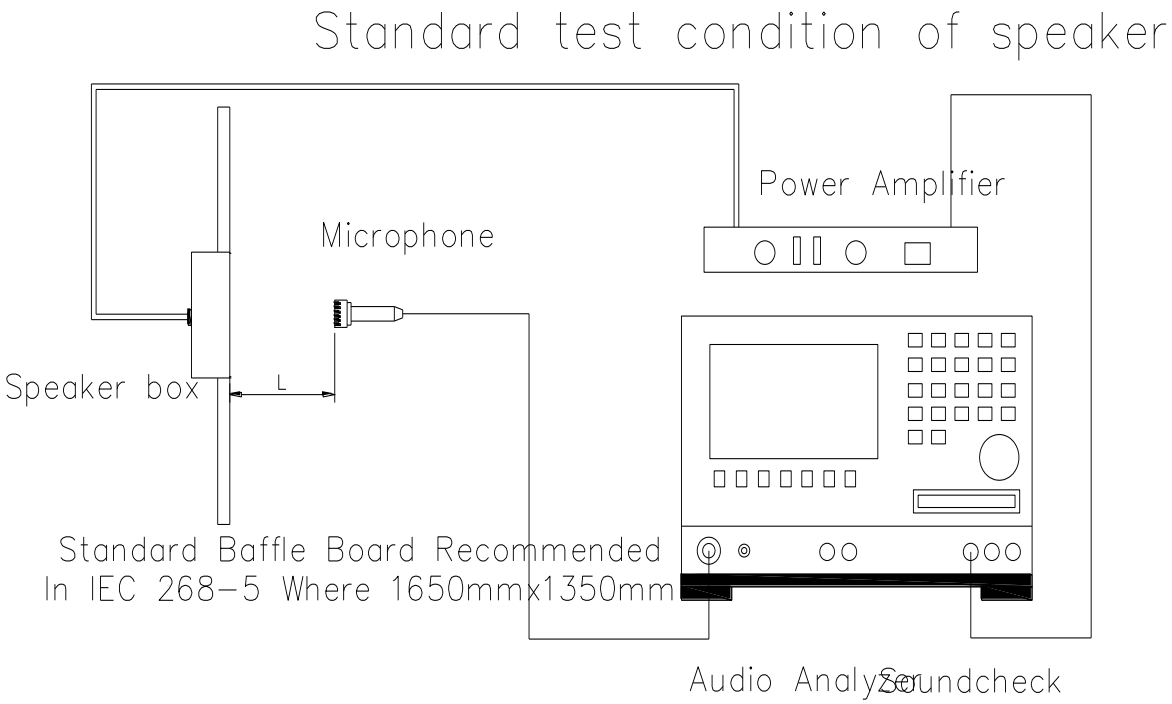


Fig. 1 Block Diagram for Measurement Method



L=10cm

Fig. 2 Speaker Test Condition

PACKAGING

Storage conditions:
Speakers should be well packed.
The temperature should be as stable as possible and between -10° C and +40° C.
The relative humidity should be below 90%.
There should be no acid or other harmful gases in the surrounding air (GB/T 9397—200X)

60pcs of speaker in each tray

18 trays in one carton

Total:1080 pcs / 1 carton

Gross Weight:6.5KGS

Net Weight: 5.0KGS