



Dynamic Loudspeaker

Waterproof IP67

$\phi 18 \times 4.0$ mm

CC18S040BN8-1

Revision

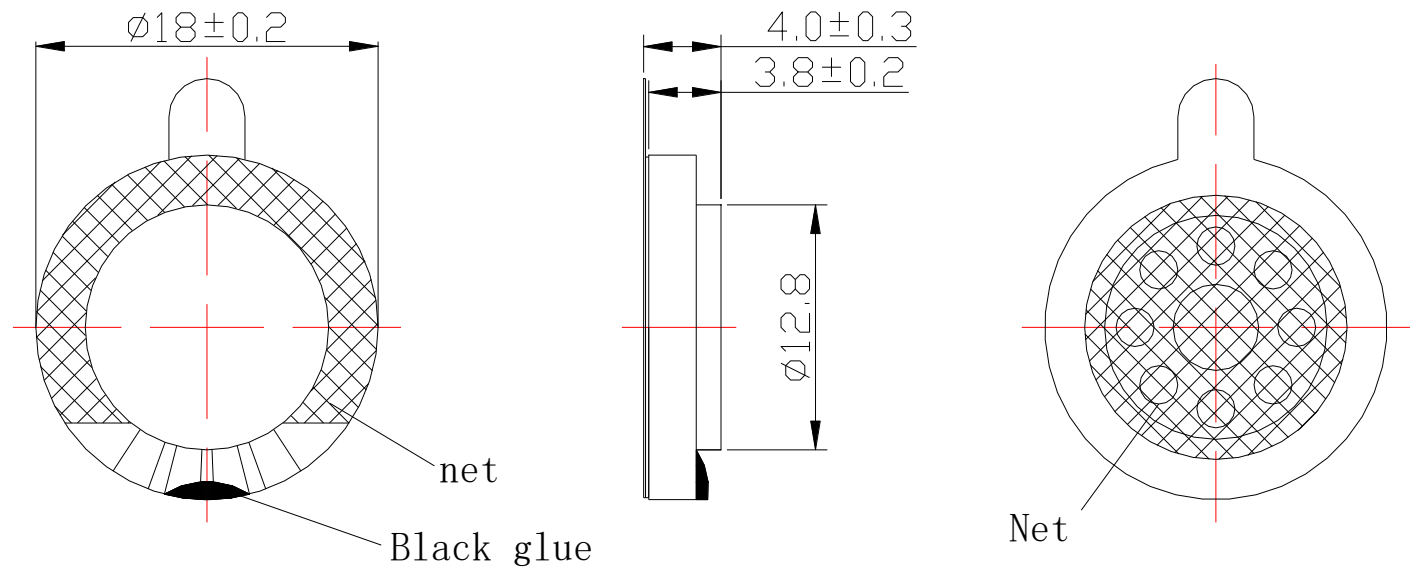
Date	Version	Status	Changes	Approver
2018/10/11	V0.1	Draft	First release	AX
2025/3/21	V0.2	Draft	Update SPL、F0 & curves	AX

Parameter	Conditions/Description	Values	Units
Rated Input Power		1.0	W
Max Input Power		1.2	W
Rated Impedance	at 2.0 kHz	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 0.8K 1.0K 1.2K 1.5KHz in 0.1W/0.1M average (0dB SPL=20μPa)	90±3	dB
Resonant Frequency (Fo)	at 1.0 V	900±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 2K Hz, input 0.1W,	< 10%	-
Magnet	NdFeB	Φ9.5*1.2	mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz	2.83	V
Polarity	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	

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: $\pm 0.5\text{mm}$ 

CONSTRUCTION DETAIL

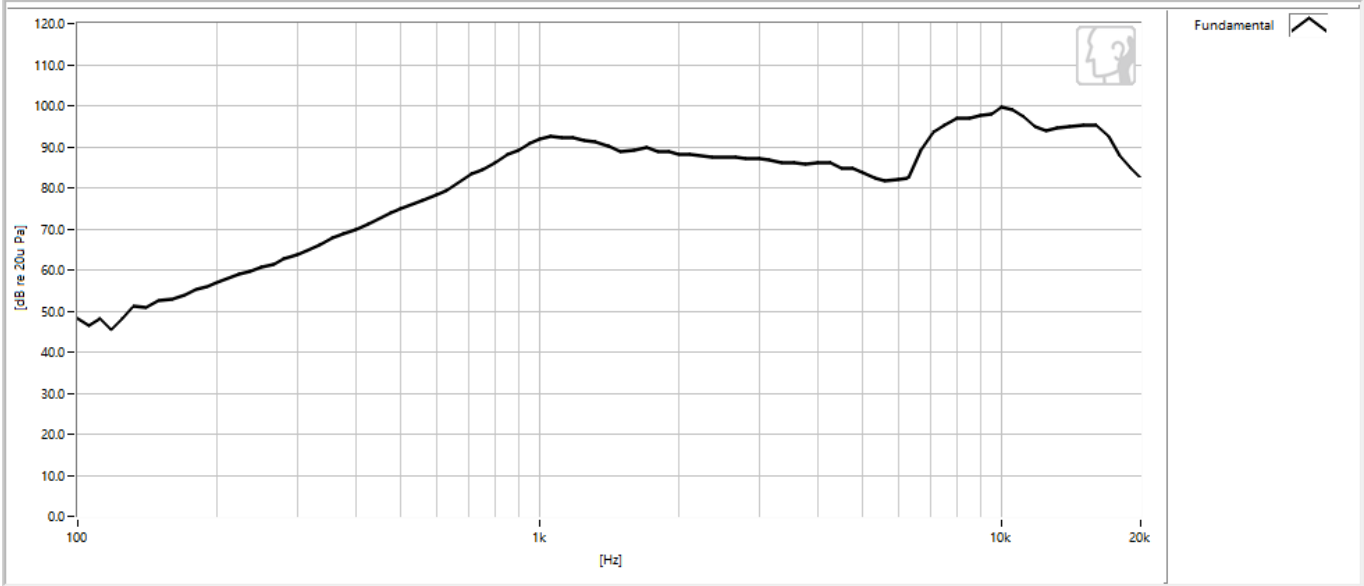
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	Gasket	1	SUS304	
2	Diaphragm	1	PEN	
3	VOICE COIL	1	Cu	
4	Plate	1	SPCC	
5	Magnet	1	NdFeB	
6	PCB Terminal	1	FR4	
7	Frame	1	PBT	

RESPONSE CURVES

Frequency Response Curve

Test condition: 0.1W/0.1M,

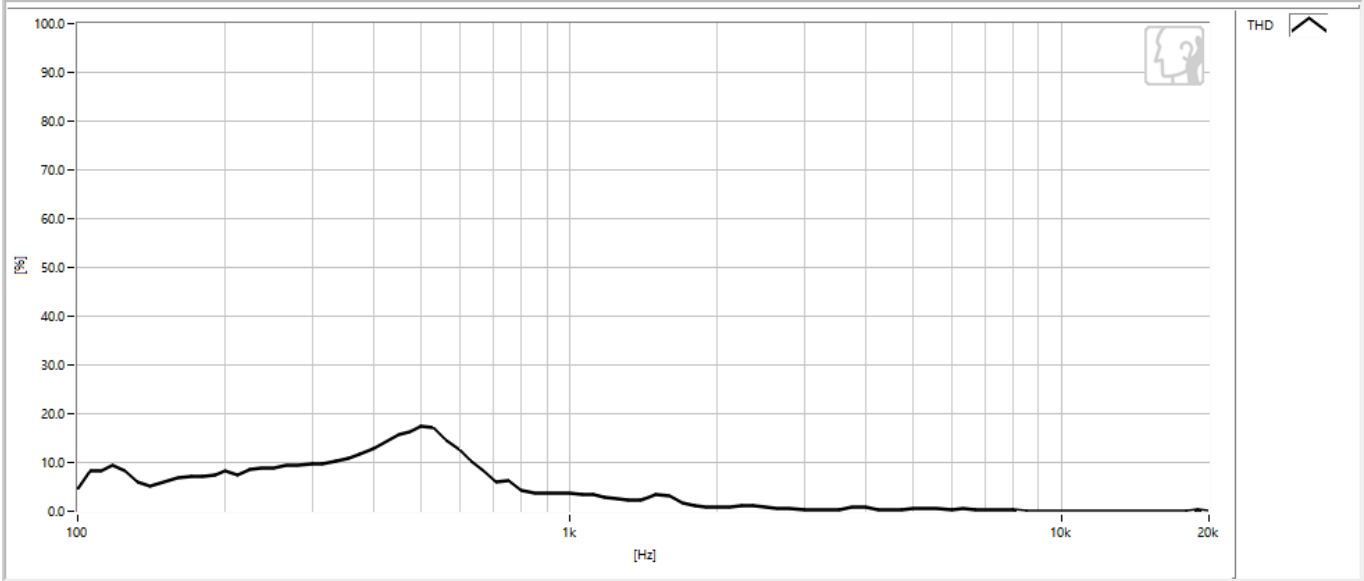
XY Graph 1



Total Harmonic Distortion Curve

Test condition:0.1W/0.1M,

XY Graph 2



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 $+70^{\circ}\text{C} \pm 3^{\circ}\text{C}$
3	Low Temperature Test	96 hours at $-30^{\circ}\text{C} \pm 3^{\circ}\text{C}$
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;"> $90 \sim 95 \% \text{ RH}$ 65°C 25°C 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 White-Noise source at Rated Power for 96 Hours
9	Termination Strength	<p>Apply 3.0N(0.306kg) to each terminal in horizontal direction for 30 seconds;</p> <p>Apply 2.0N(0.204kg) to each terminal in vertical direction for 30 seconds;</p>

MEASURING METHOD

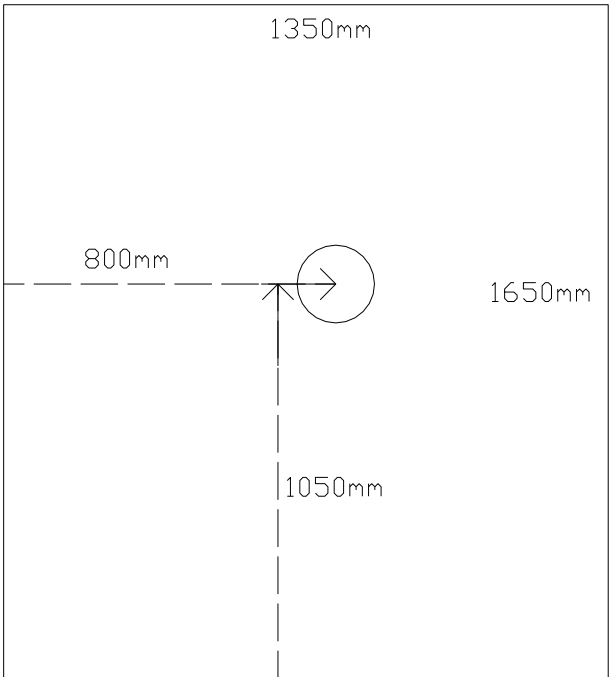


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker

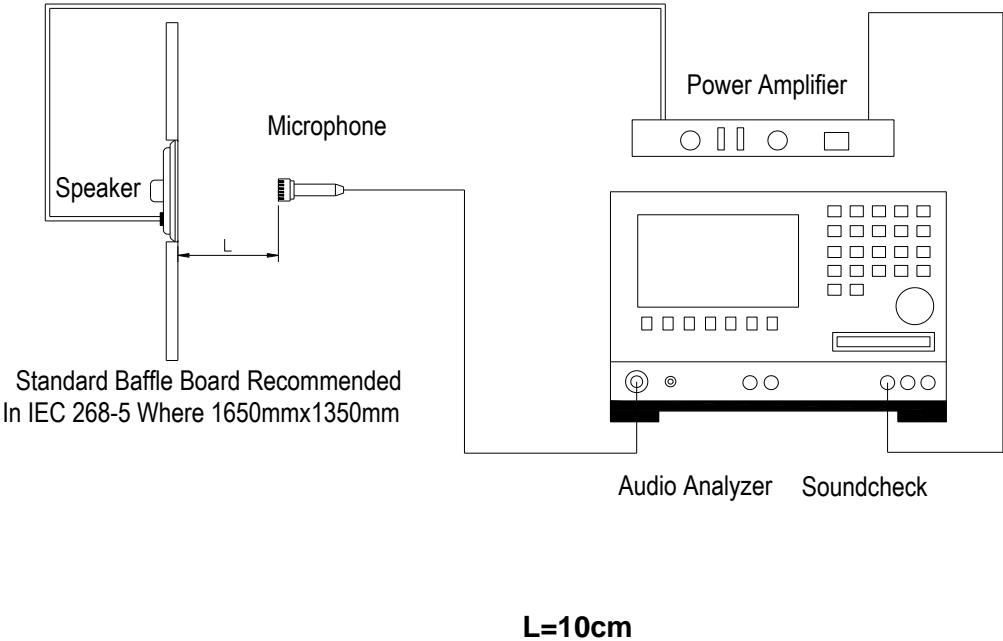


Fig. 2 Speaker Test Condition

PACKAGING

units: cm

Remark:

100pcs per tray

10 trays for unit, 2 units per carton

Total:2000 pcs per box

Size:34.5*26.5*30.5cm

