



Dynamic Loudspeaker
50 × 12mm
with flange & waterproof

CC50S120BN8G

Revision

Date	Version	Status	Changes	Approver
2019/1/23	V0.1	Draft	Initial release	AX

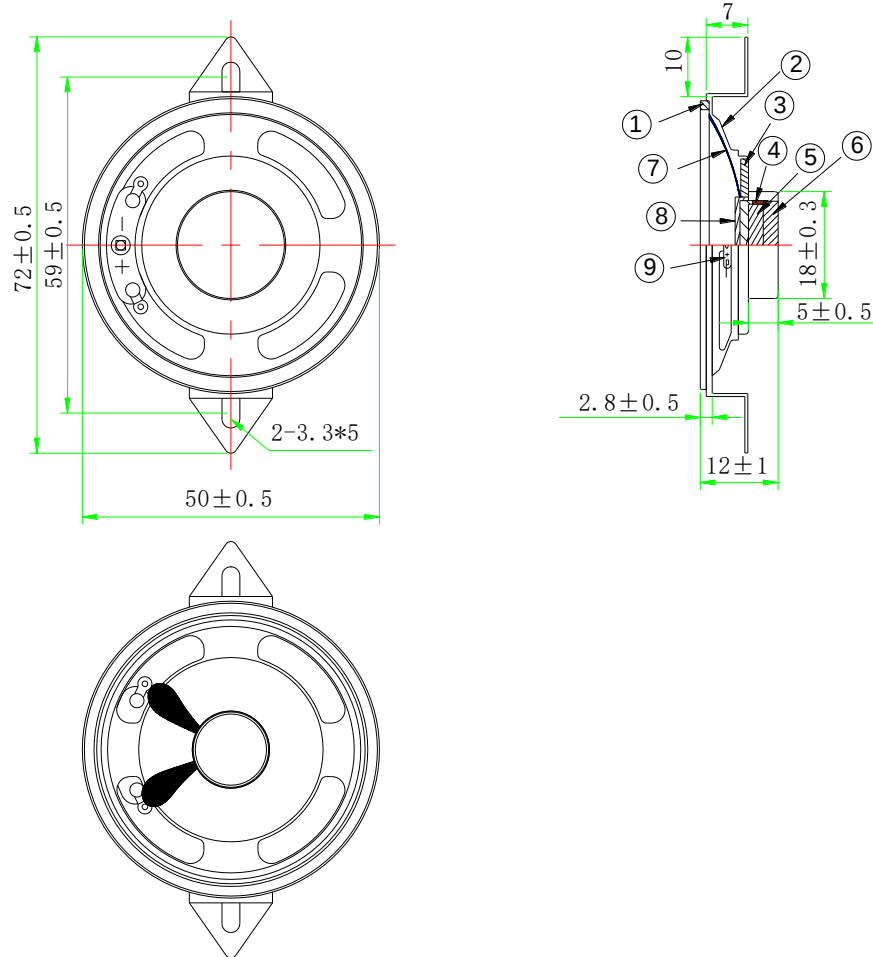
Specifications

Parameter	Conditions/Description	Values	Units
Rated Input Power		2	W
Max Input Power		3	W
Rated Impedance	at 2.0 kHz	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 1.0K 1.2K 1.5K 2.0K Hz in 0.1W/0.1M average (0dB SPL=20μPa)	94±3	dB
Resonant Frequency (Fo)	at 1.0 V	750±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~5K	Hz
Distortion	at 1K Hz, input 0.1W,	< 5%	-
Magnet	NdFeB	Φ12.5*2	mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz	4	V
Polarity	cone will move forward with positive dc current to "+" terminal		
Weight		18±8%	g
Operating Temperature		-20~+60	°C
Storage Temperature		-30~+70	°C
Waterproof		IP65	

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: $\pm 0.5\text{mm}$ 

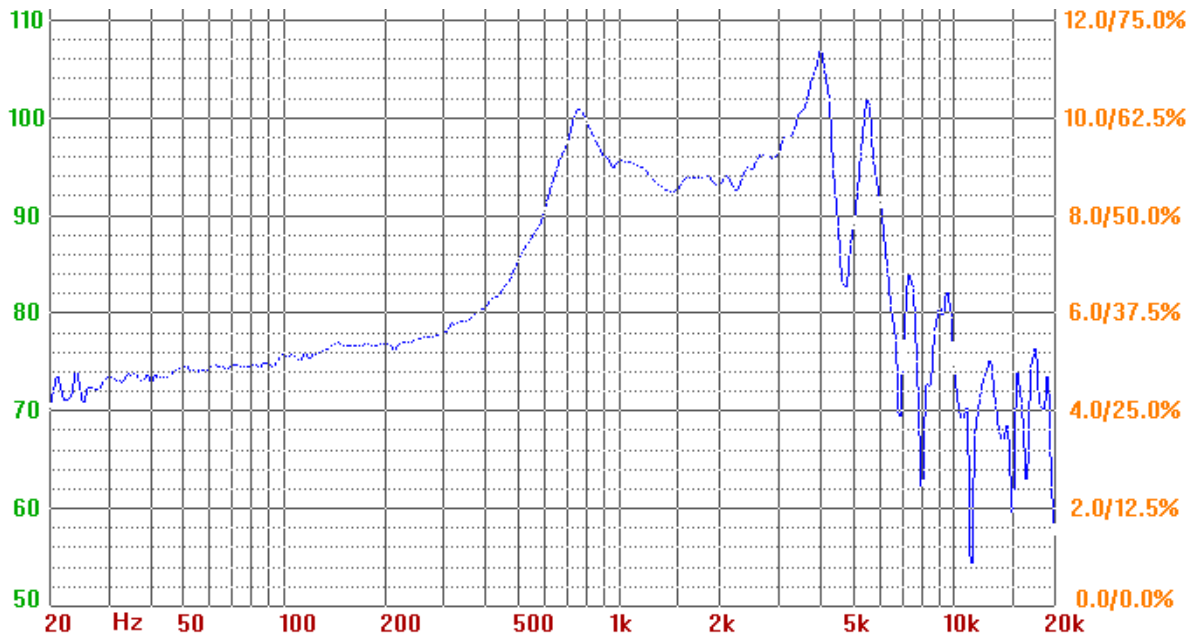
CONSTRUCTION DETAIL

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	压边 Gasket	1	Rubber	
2	盆架 Frame	1	冷轧钢板 SPCC	
3	弹波 Damper	1	布 Cloth	
4	音圈 Voice Coil	1	纸管 PL+Cu	
5	极片 Plate	1	冷轧钢板 SPCC	
6	磁铁 Magnet	1	汝铁硼 NdFeB	
7	鼓纸 Cone	1	防水盆 PET	
8	帽子 Dust cap	1	塑料 PET	
9	接线板	1	Paper+Steel	

RESPONSE CURVES

Frequency Response Curve

Test condition: 0.1W/0.1M,



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	The part shall be subjected 5 cycles. One cycle shall be 6 hours and consist of The graph illustrates a temperature and humidity cycle. The temperature starts at 25°C, ramps up to 65°C over 0.5 hours, stays at 65°C for 6 hours, and then ramps down to 25°C over 0.5 hours. The humidity is 90% to 95% RH during the 6-hour high-temperature plateau. After the cycle, there is a 5-hour recovery period at 25°C.
6	Vibration Test	Frequency: 10~55~10Hz Oct/min Amplitude: 1.5mm Duration: 2 hours each of 3 perpendicular directions
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	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

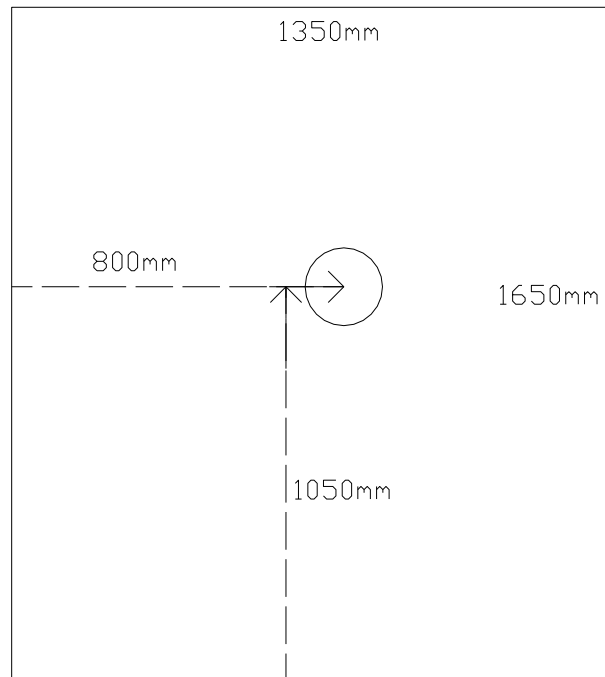
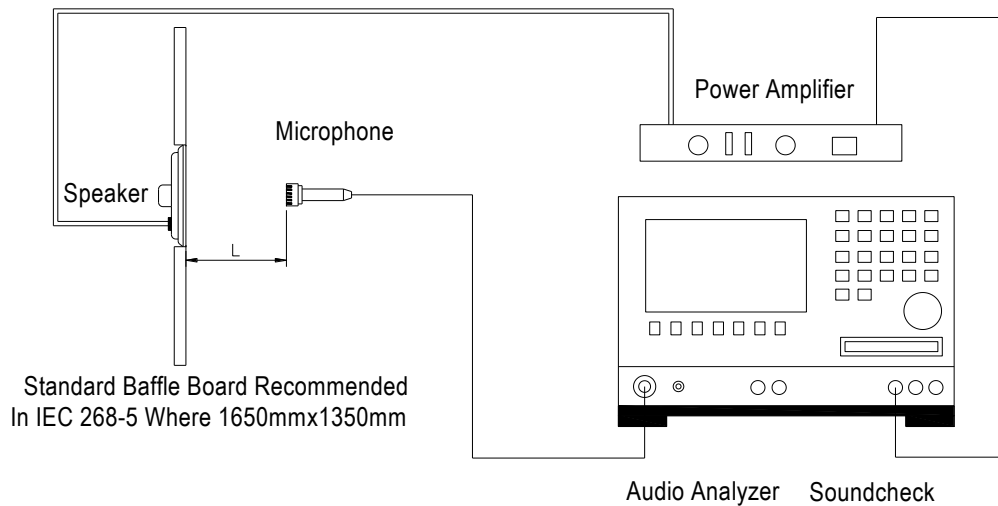


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker

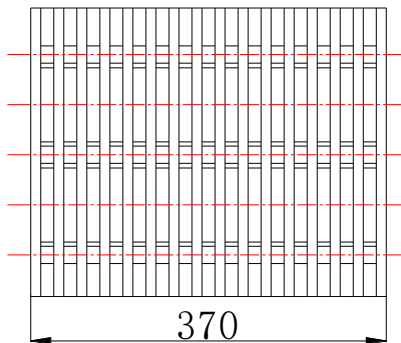
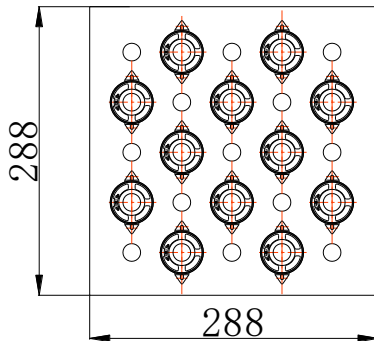


L=10cm

Fig. 2 Speaker Test Condition

PACKAGING

units: mm



1. Each clap board 25pcs
Each carton 17 pcs clap board
425 pcs/carton
2. N.W: 7.7 KG, G.W:9.7 KG
3. Carton size: 390*310*310mm 1PCS

