



Loudspeaker With waterproof 50×11.5 mm

CC50S12BN4A

Revision

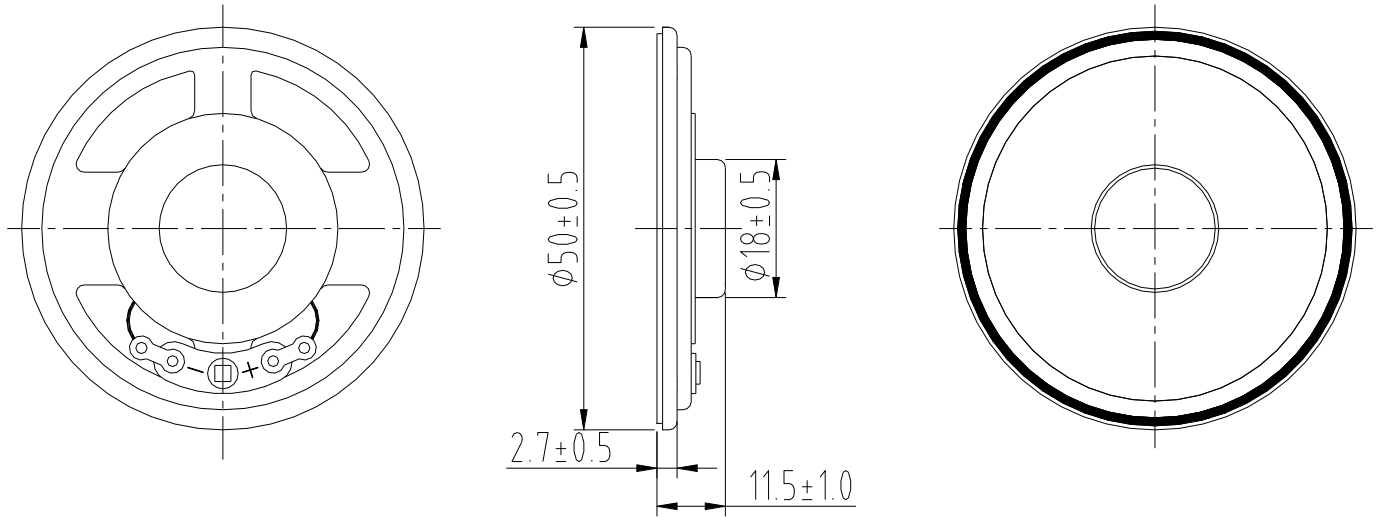
Date	Version	Status	Changes	Approver
2019/3/29	V0.1	Draft	First release	AX

Parameter	Conditions/Description	Values	Units
Rated Input Power		2.0	W
Max Input Power		3.0	W
Impedance		4±15%	Ω
Sound Pressure Level (S.P.L.)	At 0.8K 1.0K 1.2K 1.5KHz in 2.0W/0.1M average (0dB SPL=20μPa)	105±3	dB
Resonant Frequency (Fo)	at 1.0 V	550±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~4K	Hz
Distortion	at 1K Hz, input 2.0W,	< 5%	-
Magnet	NdFeB	Φ12.5*1.5	mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 4K Hz	2.83	V
Polarity	cone will move forward with positive dc current to “+” terminal		
Weight		16±8%	g
Operating Temperature		-40~+85	°C
Waterproof		IP67	

Notes: Above Measuring condition under temperature :15~35°C R.H. 25~75%. Accordig to standard GB/T9396-1996

MECHANICAL DRAWING

Units: mm

Tolerance: $\pm 0.5\text{mm}$ 

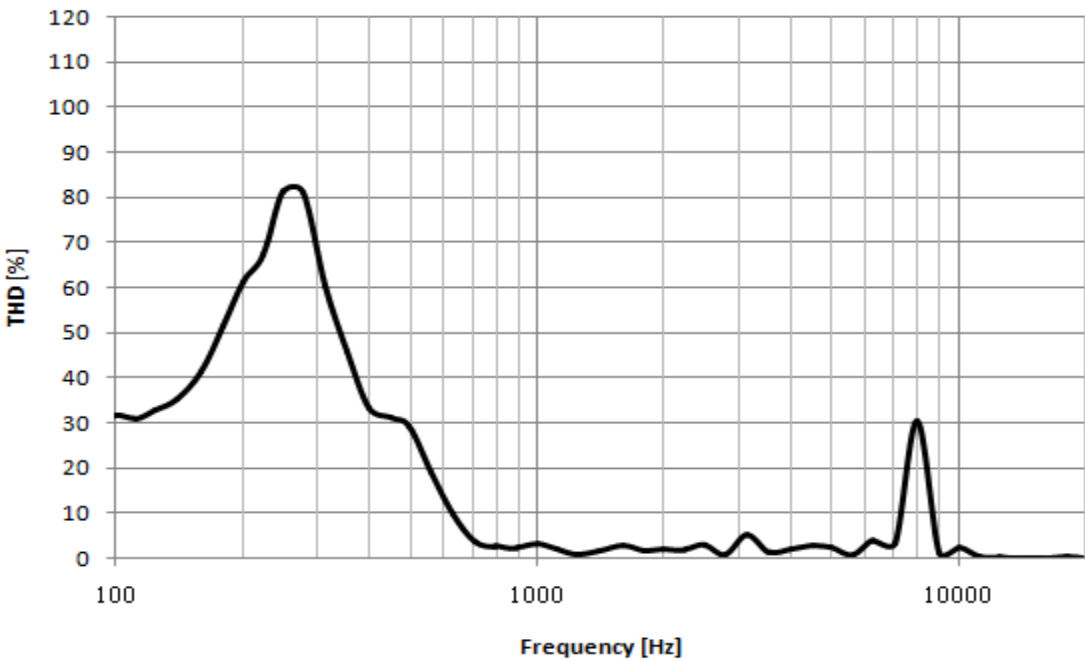
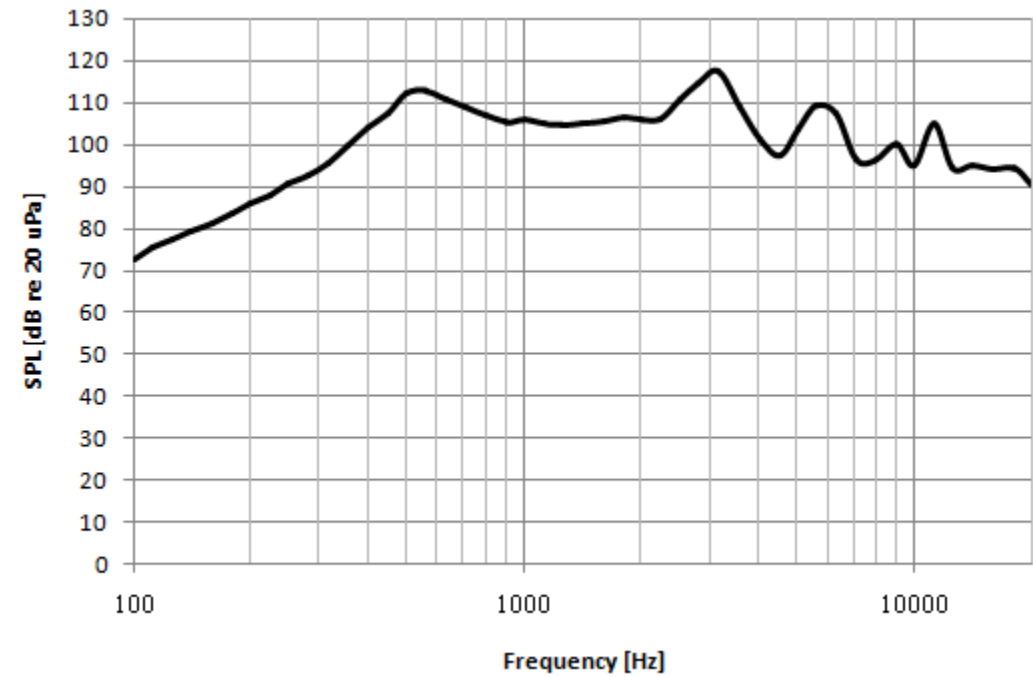
CONSTRUCTION DETAIL

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	Gasket	1	rubber	
2	Diaphragm	1	PEI	
3	VOICE COIL	1	Cu+Paper	
4	Plate	1	SPCC	
5	Magnet	1	NdFeB	
6	PCB Terminal	1	Paper+Cu	
7	Frame	1	SPCC	
8	Cap	1	PEI	

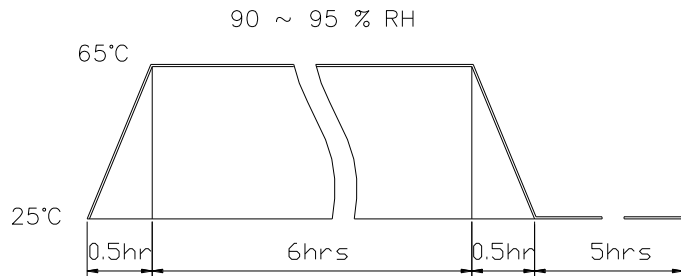
RESPONSE CURVES

Frequency Response Curve

Test condition: 2.0W/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 $+85^{\circ}\text{C} \pm 3^{\circ}\text{C}$
3	Low Temperature Test	96 hours at $-40^{\circ}\text{C} \pm 3^{\circ}\text{C}$
4	Humidity Test	$+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Relative Humidity(RH)90~95% 96 Hours
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 maintained at 90~95% RH during the 6-hour temperature hold. After the 0.5-hour ramp down, there is a 5-hour dwell 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

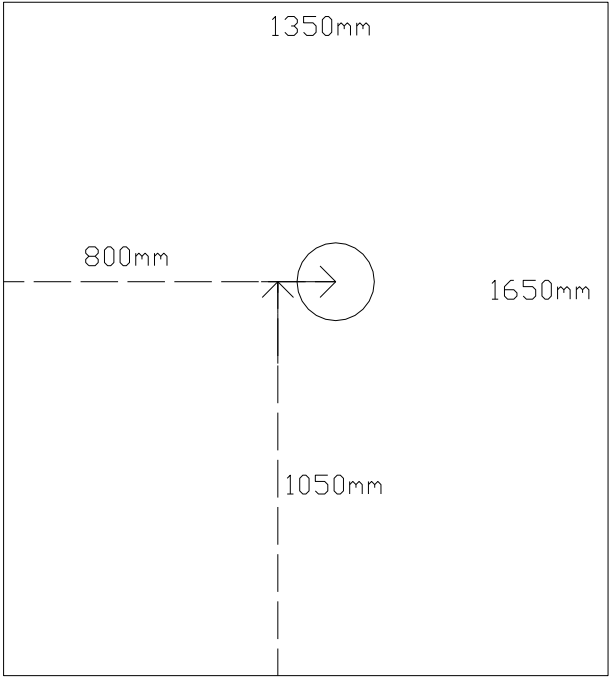
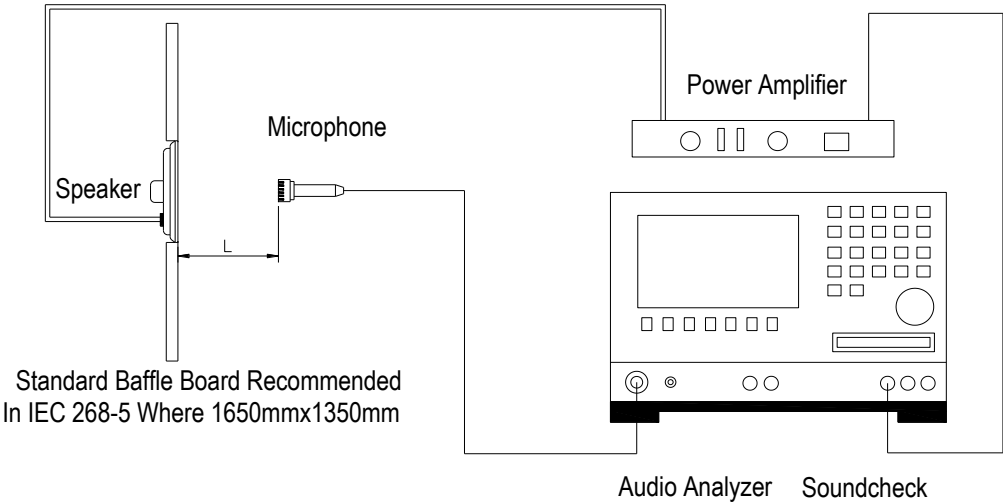


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker

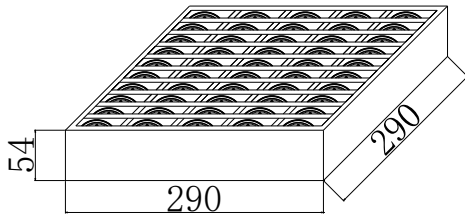


L=10cm

Fig. 2 Speaker Test Condition

PACKAGING

units: mm



1. Each clapboard 100pcs,
Each carton 5 clapboards,
500pcs/carton
N.W: 8 KG, G.W:11 KG
2. Corrugated paper: 290*290mm 1 pcs
3. Inner Carton size: 305*305*305mm 1 pcs
4. Outer Carton size: 325*325*335mm 1 pcs

