



# **Round Loudspeaker**

**Ø57 × 21 mm**

**CC57S021BN4G**

## **Revision**

<b>Date</b>	<b>Version</b>	<b>Status</b>	<b>Changes</b>	<b>Approver</b>
2019/11/21	V0.1	Draft	First release	AX

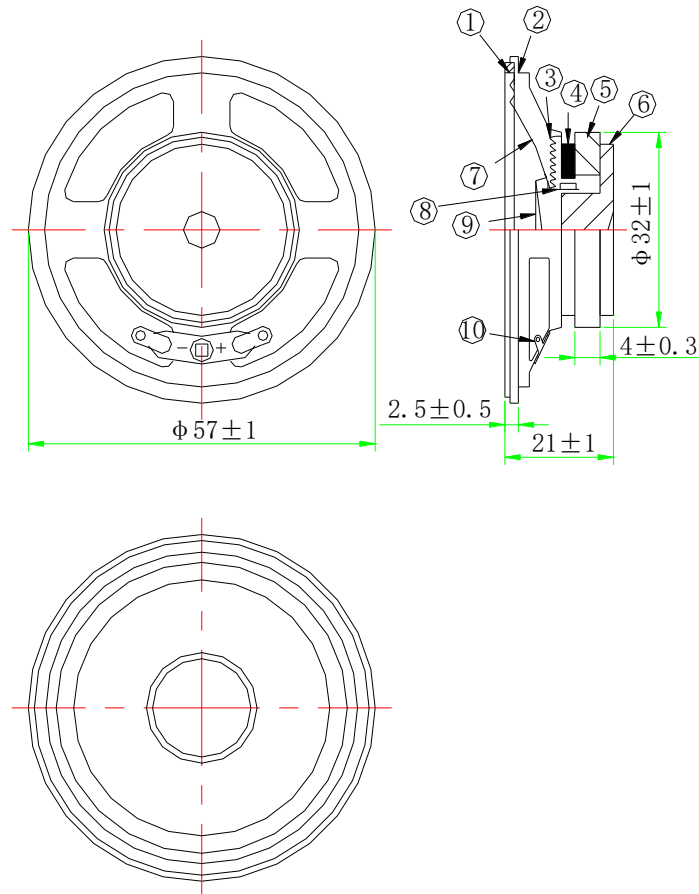
## SPECIFICATIONS

Parameter	Conditions/Description	Values	Units
Rated Input Power		4.0	W
Max Input Power		5.0	W
Rated Impedance	at 2.0 kHz	4±15%	Ω
Sound Pressure Level (S.P.L.)	at 0.6K 0.8K 1.0K 1.2K Hz in 0.1W/0.1M average (0dB SPL=20μPa)	100±3	dB
Resonant Frequency (Fo)	at 1.0 V	550±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K Hz, input 0.1W,	< 5%	-
Magnet	NdFeB	Φ 32*18*4	mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz	4.0	V
Polarity	cone will move forward with positive dc current to "+" terminal		
Weight			g
Operating Temperature		-20~+60	°C
Storage Temperature		-30~+70	°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:  $\pm 0.5\text{mm}$ 

## CONSTRUCTION DETAIL

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

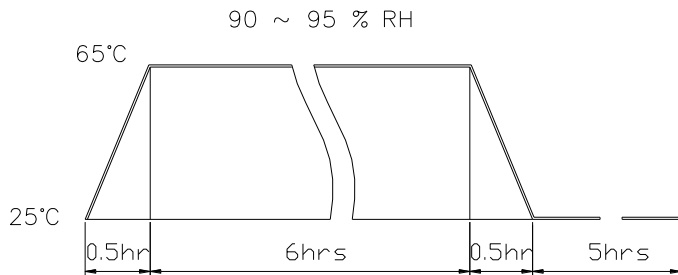
RESPONSE CURVES

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 $\pm 3$ 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 ~ 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 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

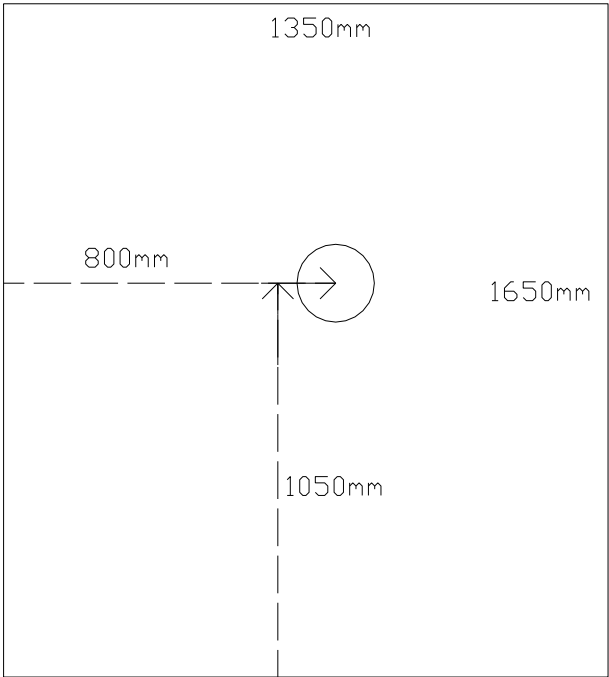
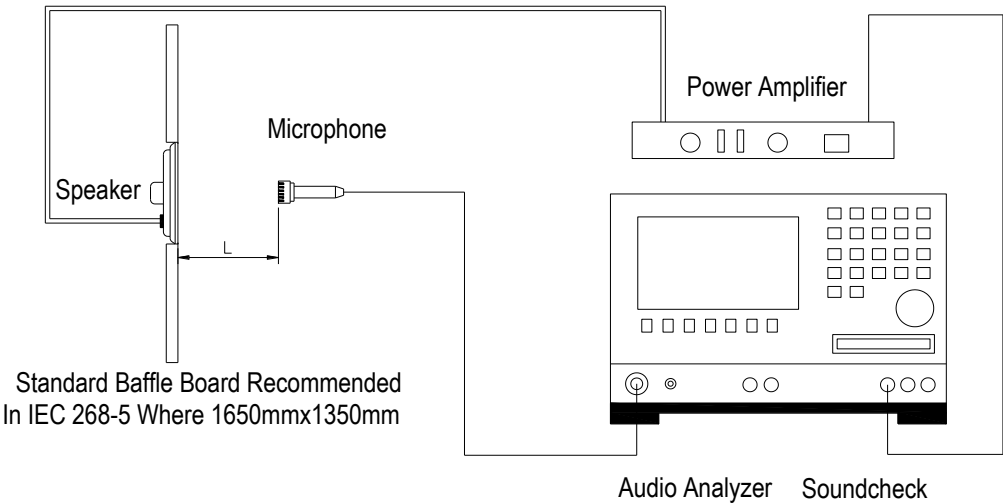


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker

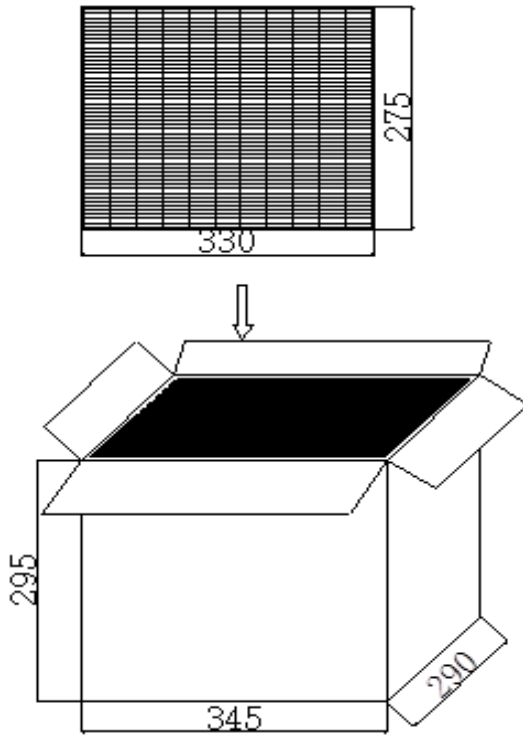


L=10cm

Fig. 2 Speaker Test Condition

## PACKAGING

units: cm



1. Each foam tray 40 pcs,  
Each carton 4 clapboards,  
160 pcs/carton
2. N.W: 9.3 KG, G.W:11.3 KG
3. Foam lid: 330\*275 mm 1pc
4. Carton size: 345\*290\*295 mm 1 pcs