



**Round Loudspeaker**  
**Ø31.2×10.5 mm**  
**With wires &connector**

**CC31C09UN4**

**Revision**

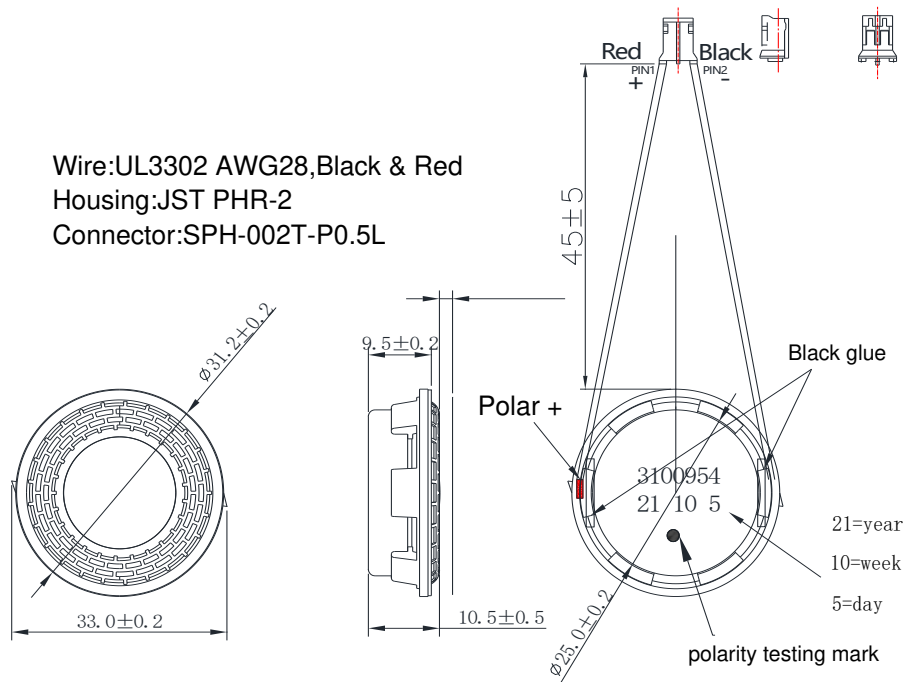
<b>Date</b>	<b>Version</b>	<b>Status</b>	<b>Changes</b>	<b>Approver</b>
2023/12/26	V0.6	Draft	First release	AX

Parameter	Conditions/Description	Values	Units
Rated Input Power		3.5	W
Max Input Power		5.0	W
Impedance	at 700 Hz	4±15%	Ω
Sound Pressure Level (S.P.L.)	at 0.8K 1.0K 1.2K 1.5KHz in 1.0W/0.05M average (0dB SPL=20μPa)	103±3	dB
Resonant Frequency (Fo)	at 1.0 V	300±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K Hz, input 1.0W,	< 10%	-
Magnet	NdFeB		mm
Buzz, Rattle, etc.	must be normal at sine wave between 100 ~ 5K Hz	3.74	V
Polarity	cone will move forward with positive dc current to “+” terminal		
Weight			g
Operating Temperature		-25~+60	°C
Storage Temperature		-25~+60	°C
Waterproof		N/A	

Above Measuring condition under temperature : 15~35°C R.H. 25 ~75%.86 kPa to 106 kPa (860 mbar to 1 060 mbar According to standard GB/T 9397—200X and IEC 60268-1

## MECHANICAL DRAWING

Units: mm

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

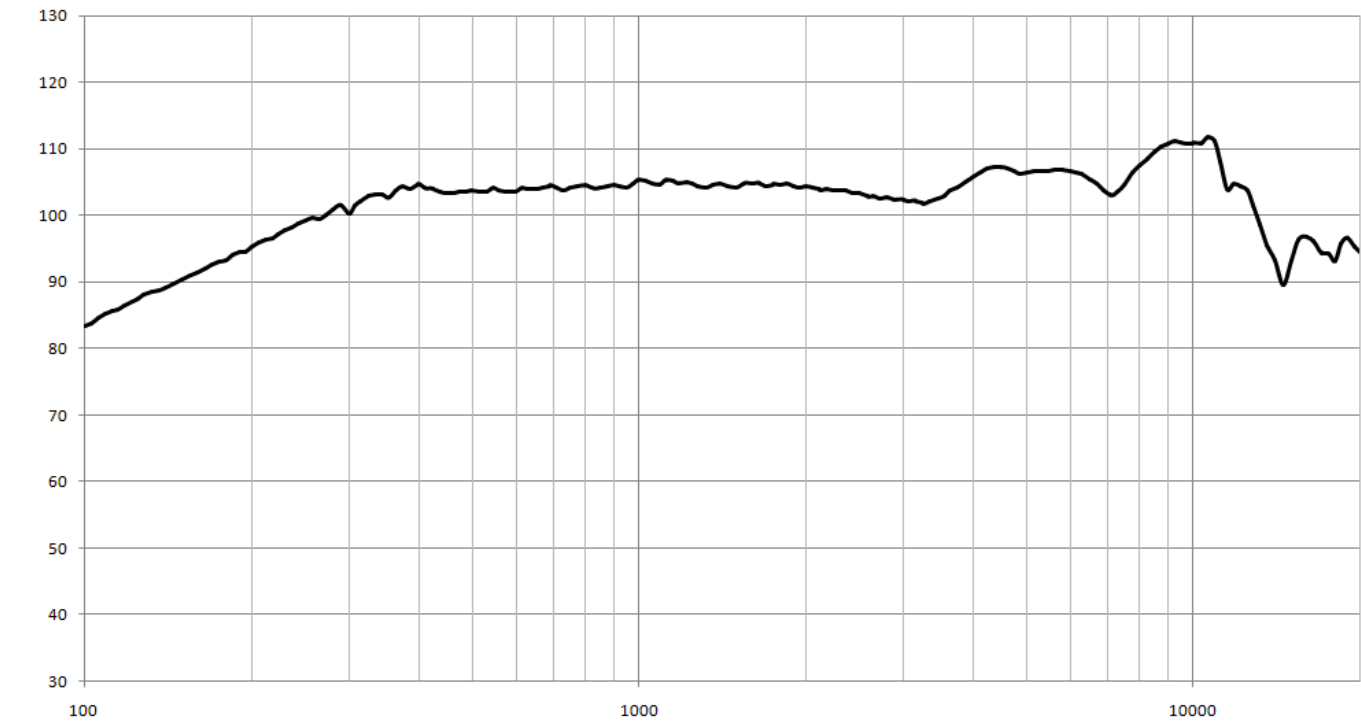
## CONSTRUCTION DETAIL

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
7	CAP	1	LV	
6	Diaphragm	1	Foam-edge	
5	VOICE COIL	1	AL+CCAW	
4	Plate	1	SPCC	
3	Magnet	1	NdFeB	
2	PCB Terminal	1	PAPER+CU	
1	Frame	1	ABS	

# RESPONSE CURVES

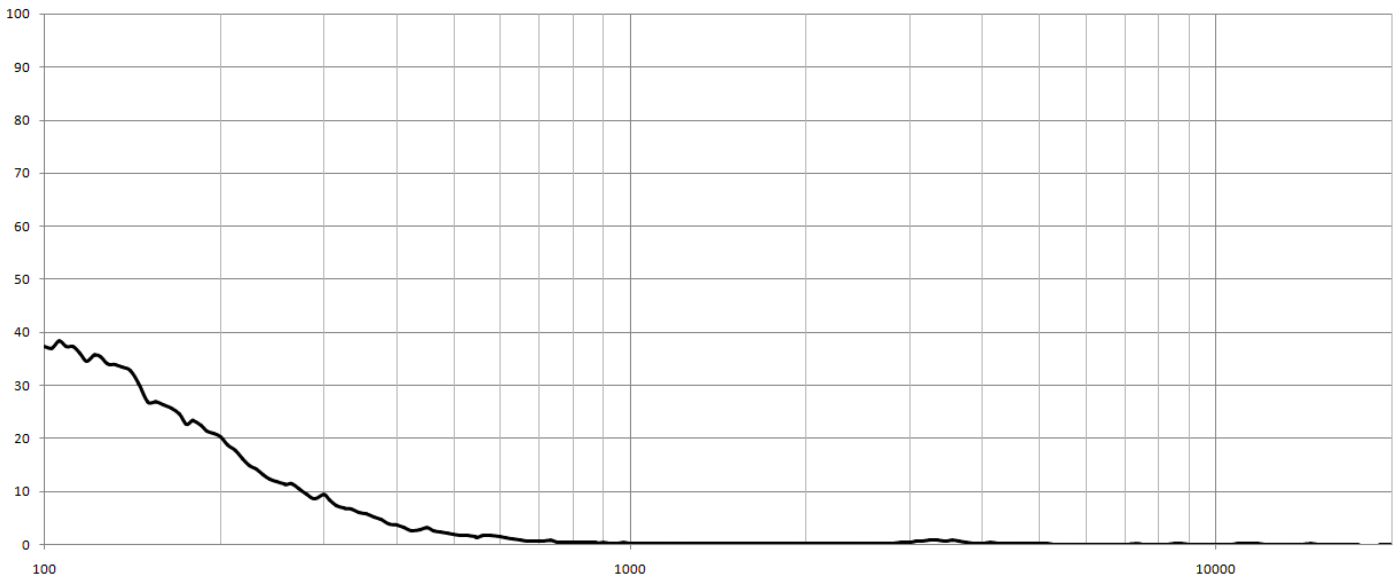
## Frequency Response Curve

Test condition: 1.0W/0.05M,

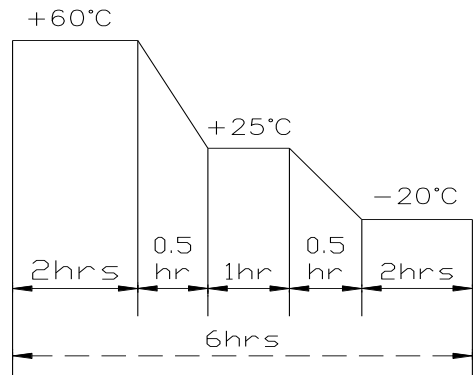


## Total Harmonic Distortion Curve

Test condition: 1.0W/0.05M,



## 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 Operation and Storage	$+ 60 \pm 2$ °C Humidity Random for 96 Hours. (GB/T 9397—200X)
3	Low Temperature Operation and Storage	$- 25 \pm 2$ °C Humidity Random for 96 Hours. (GB/T 9397—200X)
4	Humidity Test	$+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Relative Humidity(RH)90~95% 48 Hours
5	Temp Cycle	<p>The part shall be subjected 4cycles. One cycle shall be 6 hours and consist of (GB5170.18-87)</p>  <p>The diagram illustrates a temperature cycle profile over a 6-hour period. It starts at <math>+60^{\circ}\text{C}</math> for 2 hours, then ramps down to <math>+25^{\circ}\text{C}</math> in 0.5 hours, holds at <math>+25^{\circ}\text{C}</math> for 1 hour, ramps down to <math>-20^{\circ}\text{C}</math> in 0.5 hours, and finally holds at <math>-20^{\circ}\text{C}</math> for 2 hours. The total duration is 6 hours.</p>
6	Vibration Test	Frequency $30 \pm 15$ 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

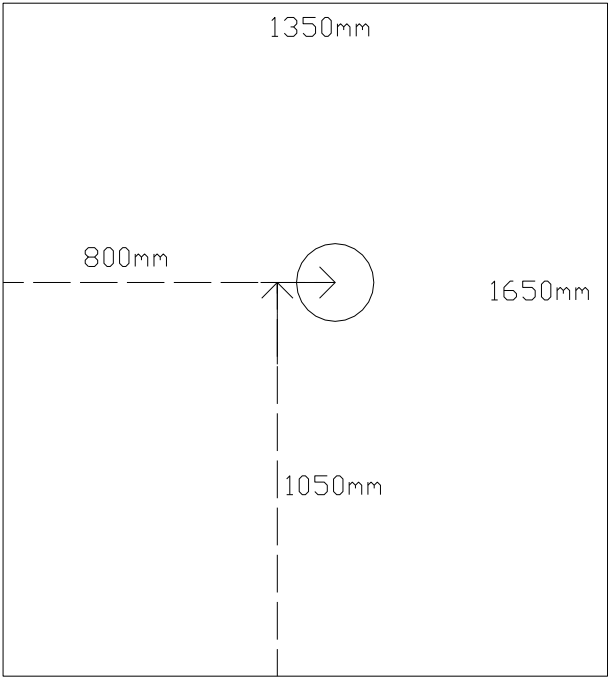
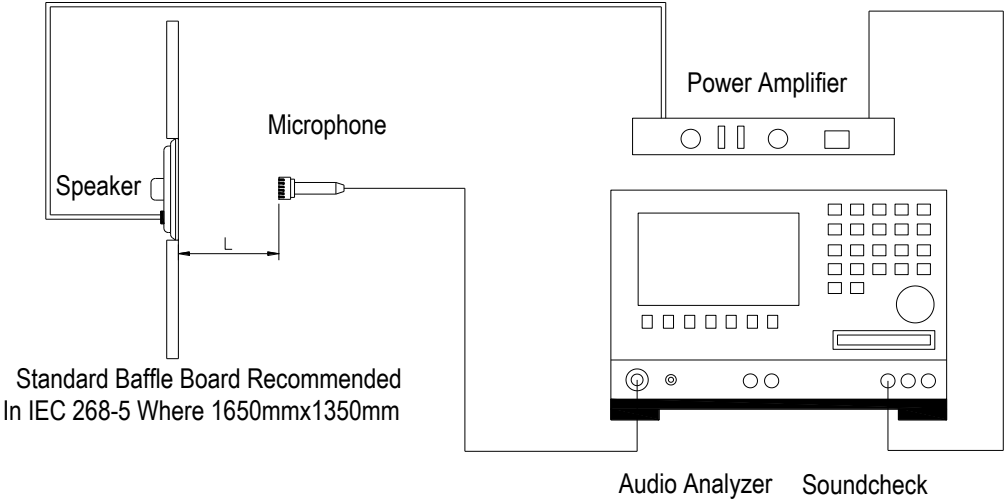


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker



L=5cm

Fig. 2 Speaker Test Condition

## PACKAGING

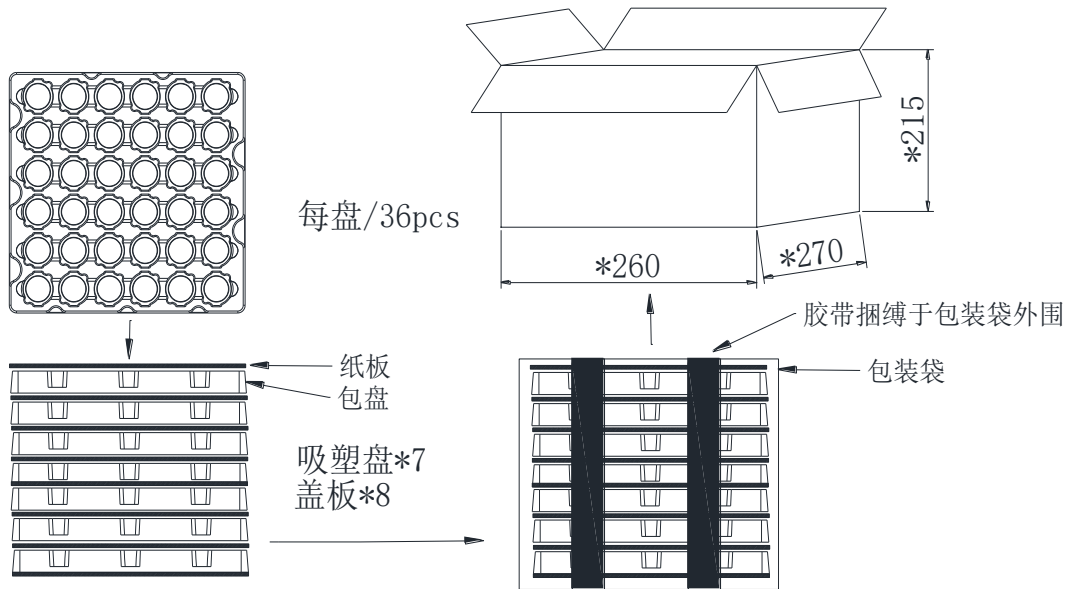
Storage conditions:

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)



Remark:

36pcs per tray

252PCS per carton

Total:252 pcs per box

Size:260\*270\*215mm