Round Loudspeaker

Ø31.2×10.5 mm

CC31S09UN4

Revision

Date	Version	Status	Changes	Approver
2019/6/14	V0.1	Draft	First release	AX
2019/8/28	V0.2	Draft	Change F0 and Curves	AX
2019/12/9	V0.3	Draft	Update curves	AX
2020/7/9	V0.4	Draft	Update diameter & testing condition、testing result、curves，add IMP curves	AX
2020/11/9	V0.5	Draft	Update heigh of speaker	AX
2021/4/12	V0.6	Draft	Add print code information	AX
2024/1/3	V0.7	Draft	Add polarity testing mark	AX

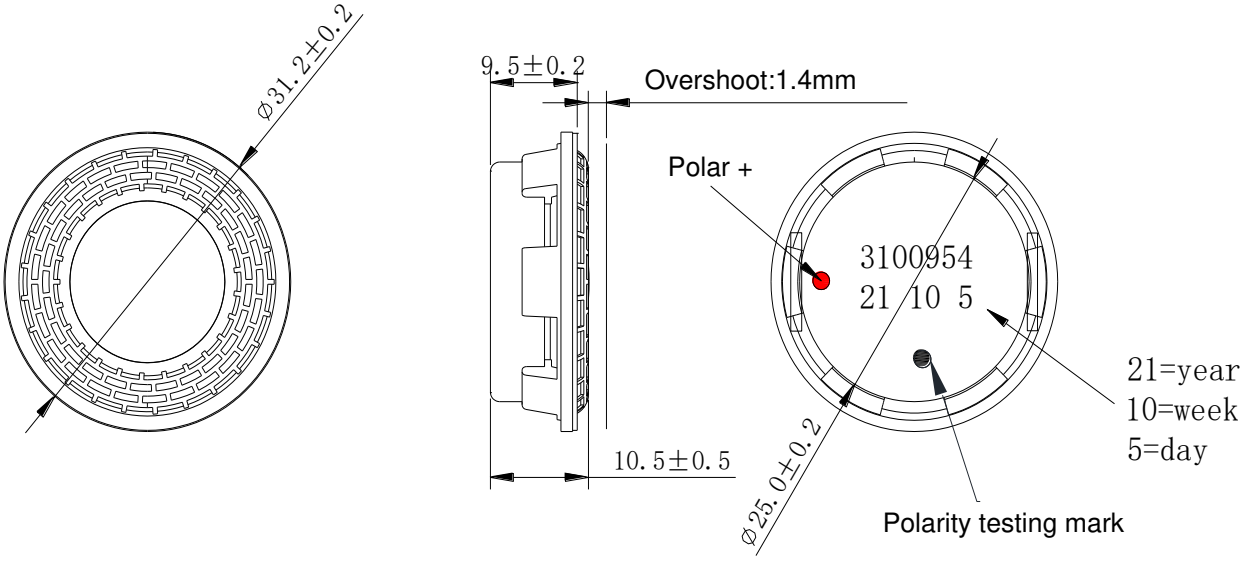
Parameter	Conditions/Description	Values	Units
Rated Input Power		3.5	W
Max Input Power		5.0	W
Impedance		4±15%	Ω
Sound Pressure Level (S.P.L.)	at 0.8K 1.0K 1.2K 1.5KHz in1.0W/0.05M average (0dB SPL=20μPa)	103±3	dB
Resonant Frequency (Fo)	at 1.0 V	300±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K Hz, input 1.0W,	< 10%	-
Magnet	NdFeB		mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz	3.74	V
Polarity	cone will move forward with positive dc current to"+" terminal		
Weight			g
Operating Temperature		-25~+60	℃
Storage Temperature		-25~+60	℃
Waterproof		N/A	

Above Measuring condition under temperature : 15~35℃ 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: ±0.5mm



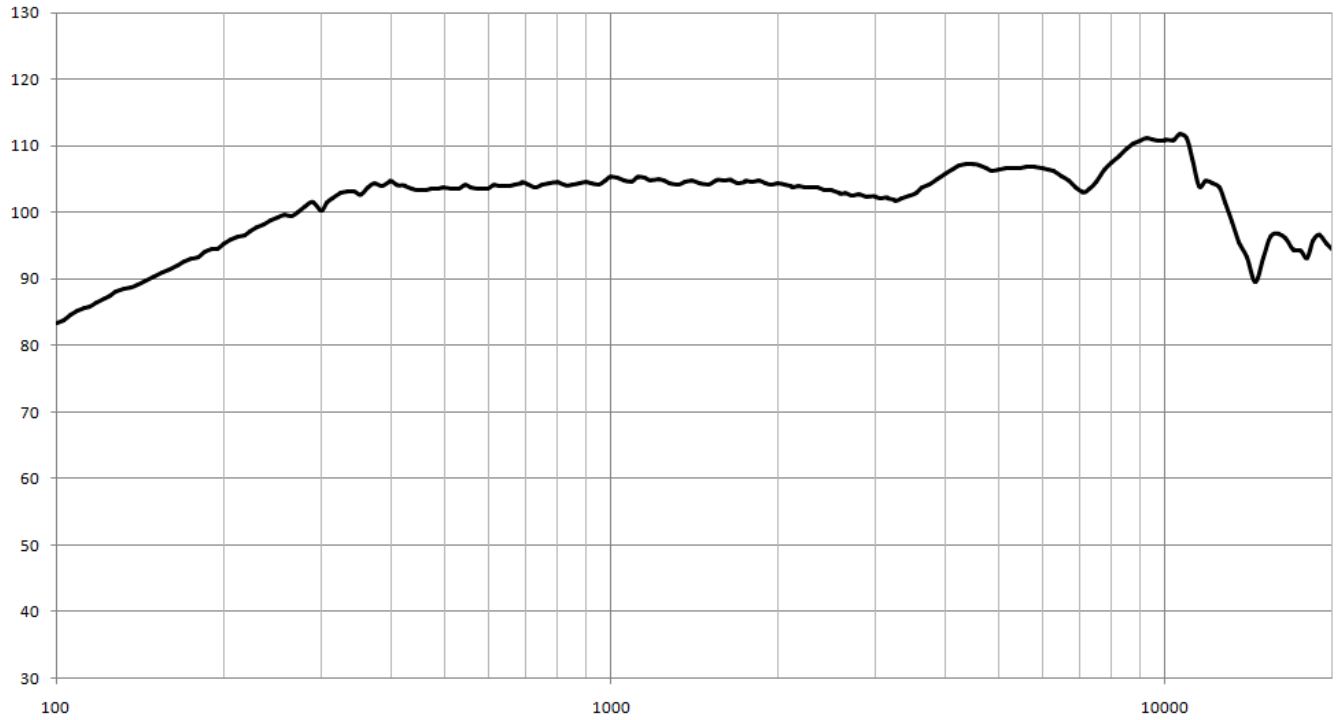
CONSTRUCTION DETAIL

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

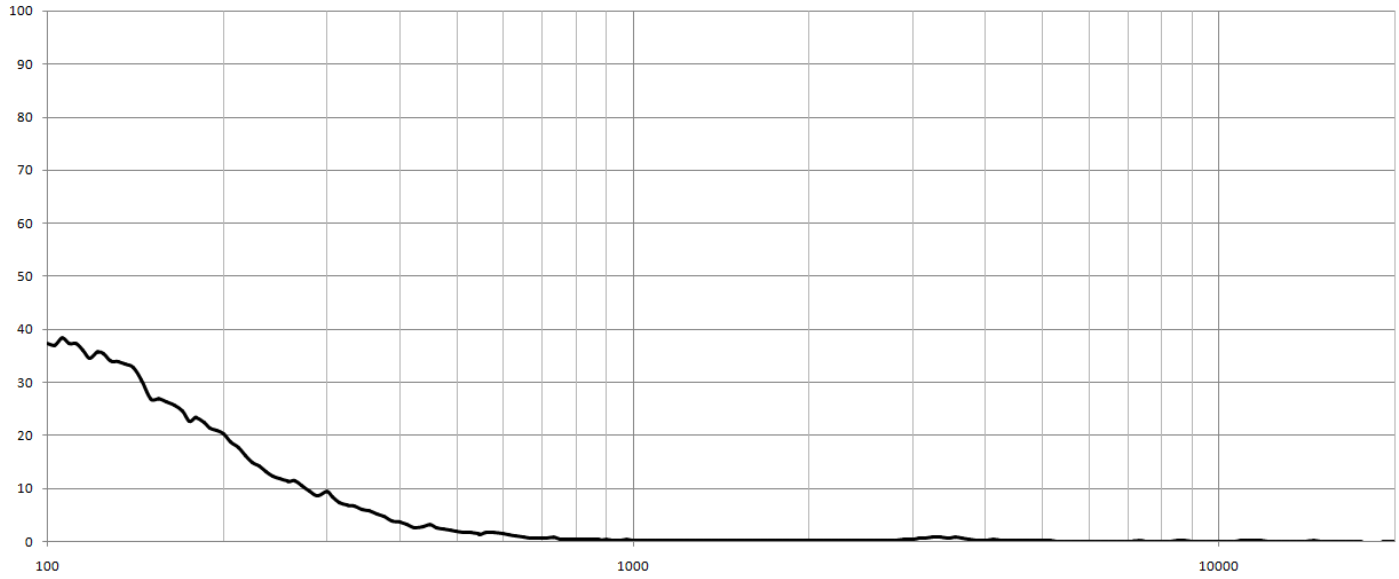
Frequency Response Curve

Test condition: 1.0W/0.05M,

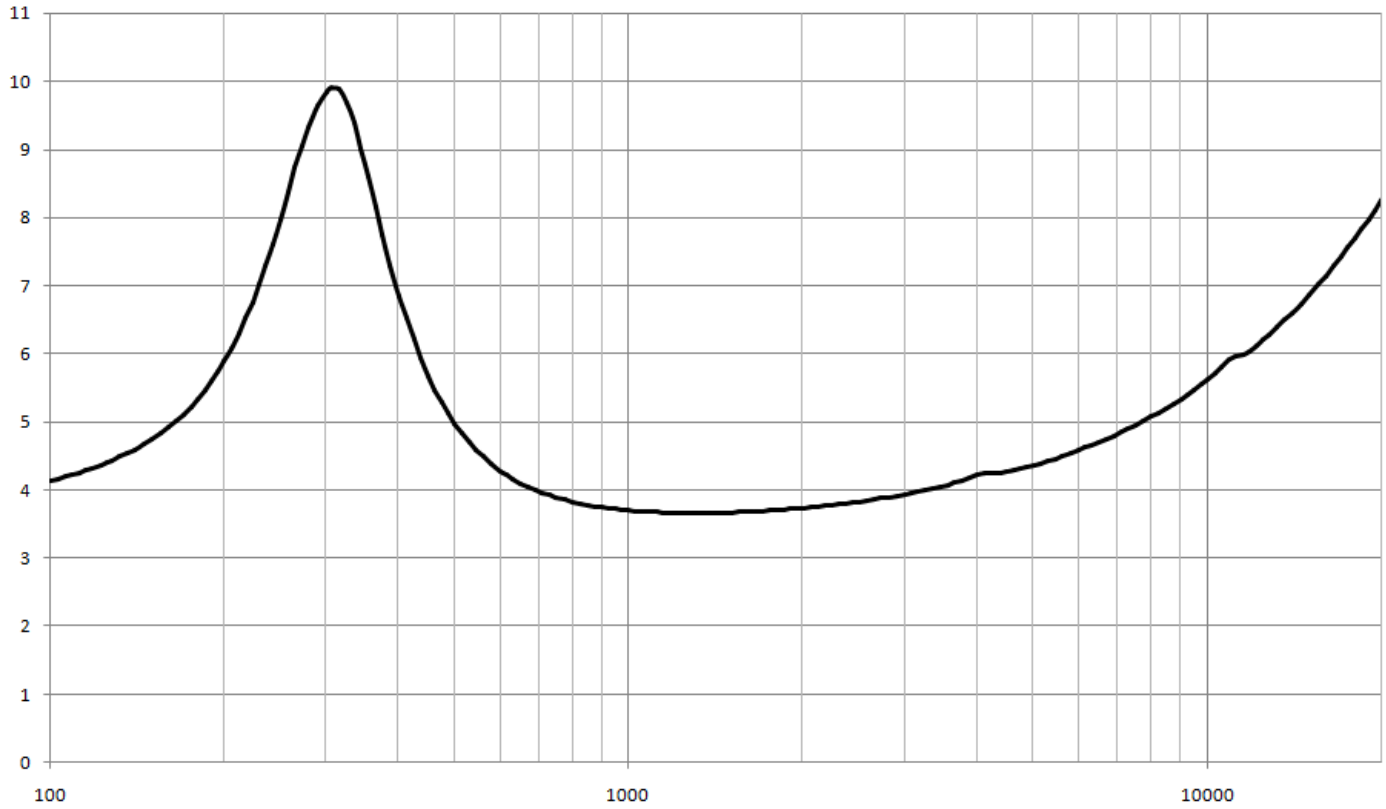


Total Harmonic Distortion Curve

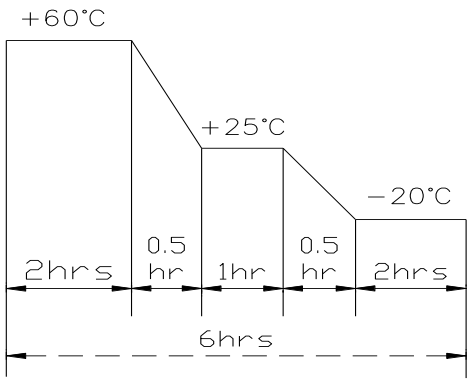
Test condition: 1.0W/0.05M,



IMP



RELIABLITY 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 Operation and Storage	+ 60 ± 2 °C Humidity Random for 96 Hours. (GB/T 9397—200X)
3	Low Temperature Operation and Storage	− 25 ± 2 °C Humidity Random for 96 Hours. (GB/T 9397—200X)
4	Humidity Test	+40℃±2℃ Relative Humidity(RH)90~95% 48 Hours
5	Temp Cycle	The part shall be subjected 4cycles. One cycle shall be 6 hours and consist of (GB5170.18-87) 
6	Vibration Test	Frequency 30 ± 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

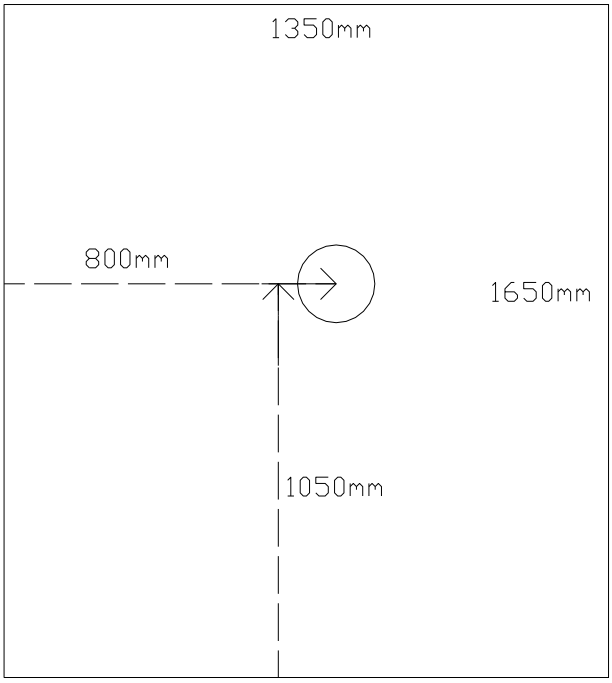
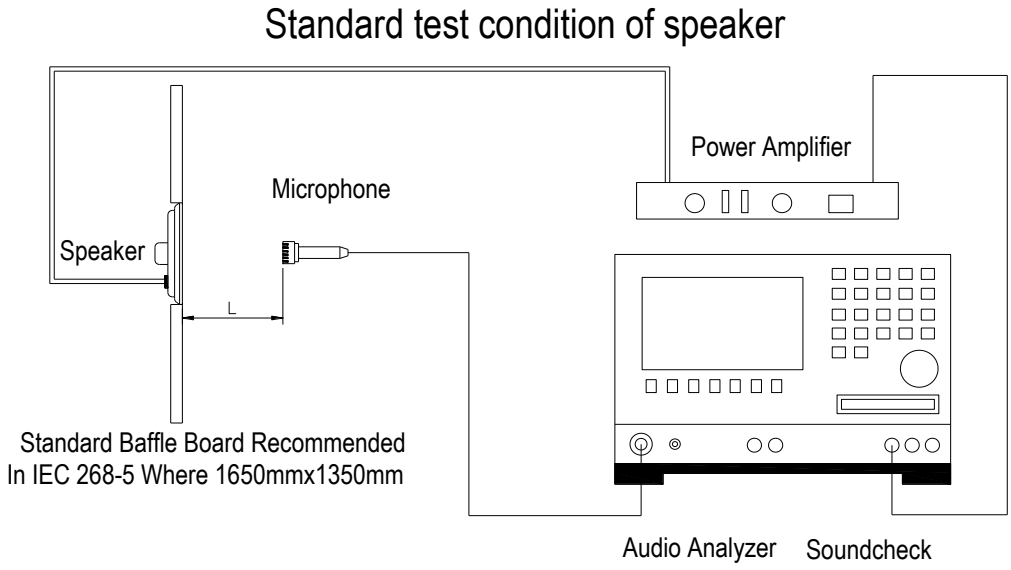


Fig. 1 Block Diagram for Measurement Method



L=5cm

Fig. 2 Speaker Test Condition

PACKAGING

TBD

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)