Round Loudspeaker

Ø20×3.2 mm

CC20S032UN8W

Revision

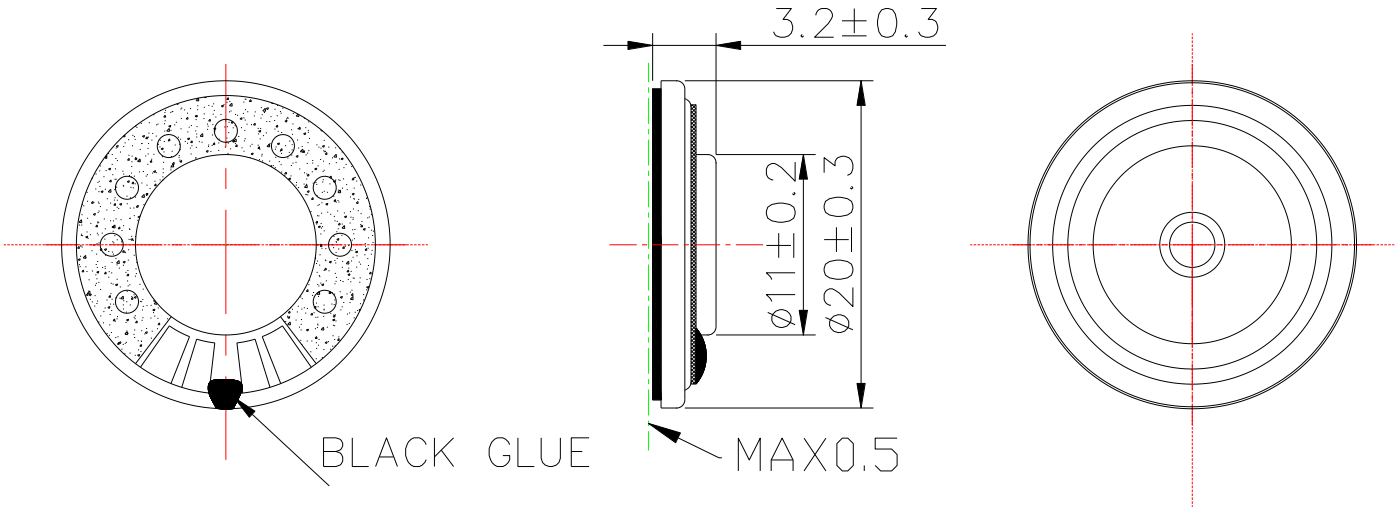
Date	Version	Status	Changes	Approver
2019/4/3	V0.1	Draft	First release	AX

Parameter	Conditions/Description	Values	Units
Rated Input Power		1.0	W
Max Input Power		1.2	W
Rated Impedance	at 2.0 kHz	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 1.0K 1.2K 1.5K 1.8KHz in0.1W/0.1M average (0dB SPL=20μPa)	87±3	dB
Resonant Frequency (Fo)	at 1.0 V	1100±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~5K	Hz
Distortion	at 1K Hz, input 0.1W,	< 5%	-
Magnet	NdFeB	Φ8.0*1.0	mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz	2.83	V
Polarity	cone will move forward with positive dc current to“+” terminal		
Weight			g
Operating Temperature		-20~+60	℃
Waterproof Rating		IP54	

MECHANICAL DRAWING

Units: mm

Tolerance: ±0.5mm



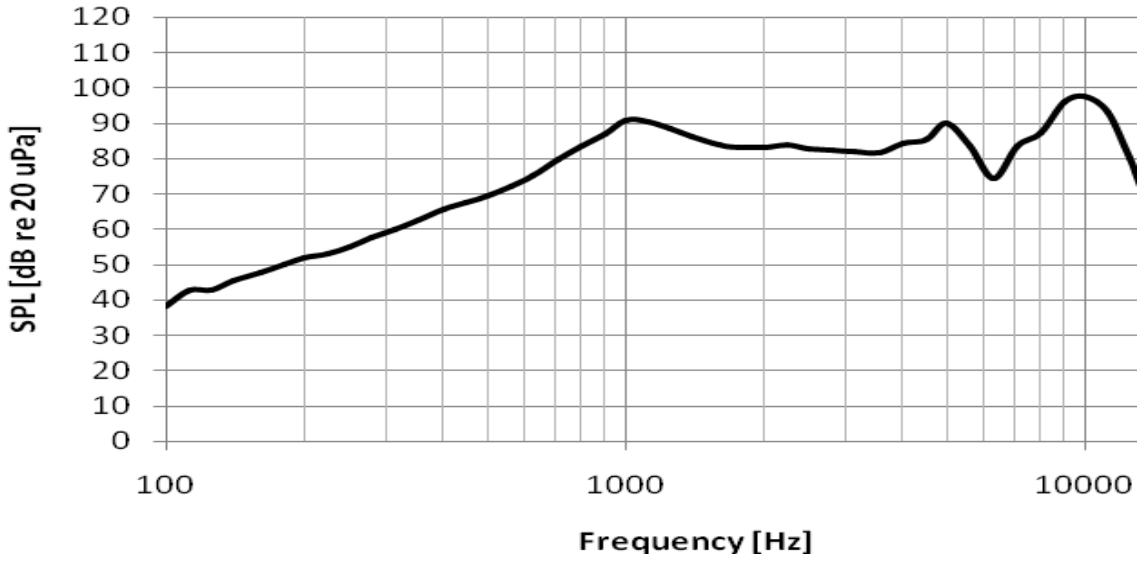
CONSTRUCTION DETAIL

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	Gasket	1	ABS	
2	Diaphragm	1	PET	
3	VOICE COIL	1	Cu	
4	Plate	1	SPCC	
5	Magnet	1	NdFeB	
6	PCB Terminal	1	FR4	
7	Frame	1	SPCC	

RESPONSE CURVES

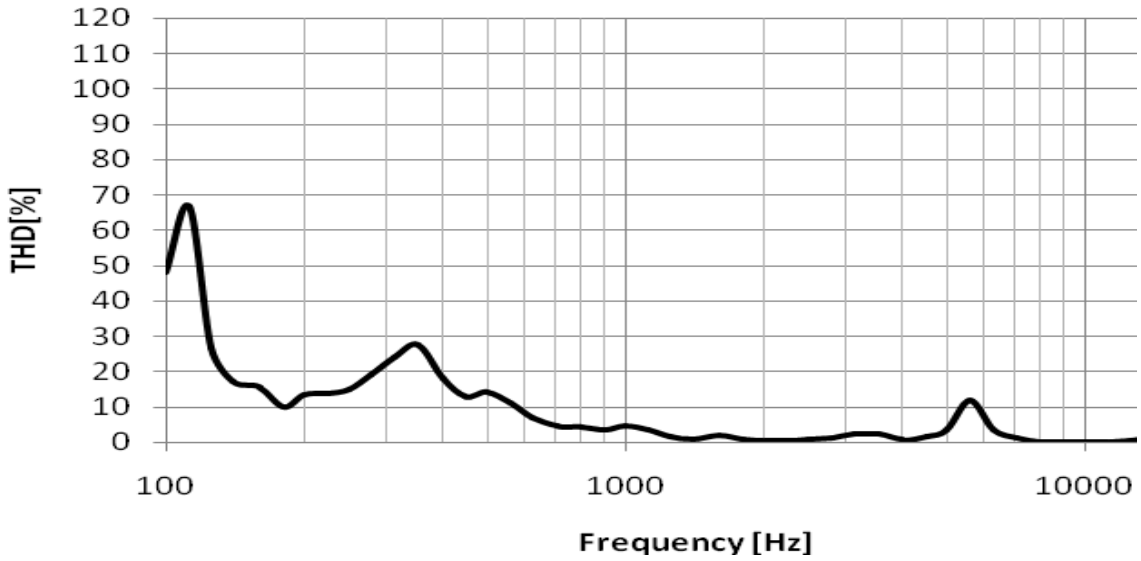
Frequency Response Curve

Test condition: 0.1W/0.1M,

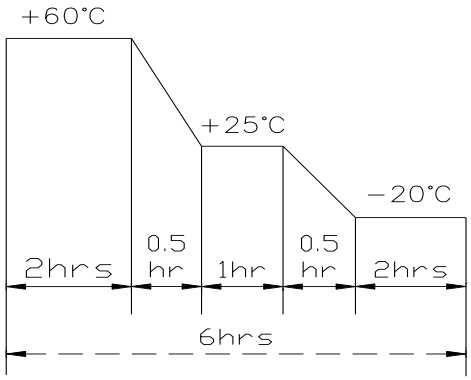


Total Harmonic Distortion Curve

Test condition: 0.1W/0.1M,



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 Test	96 hours at +60℃±3℃
3	Low Temperature Test	96 hours at -20℃±3℃
4	Humidity Test	+40℃±2℃ 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 
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

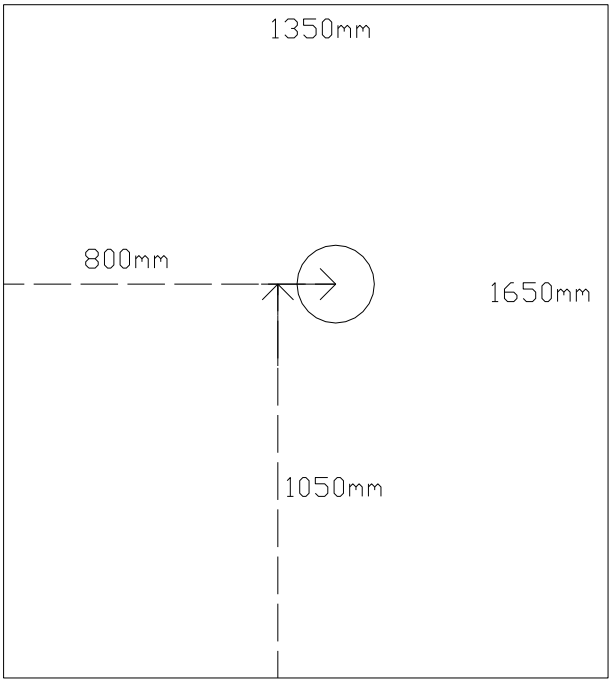
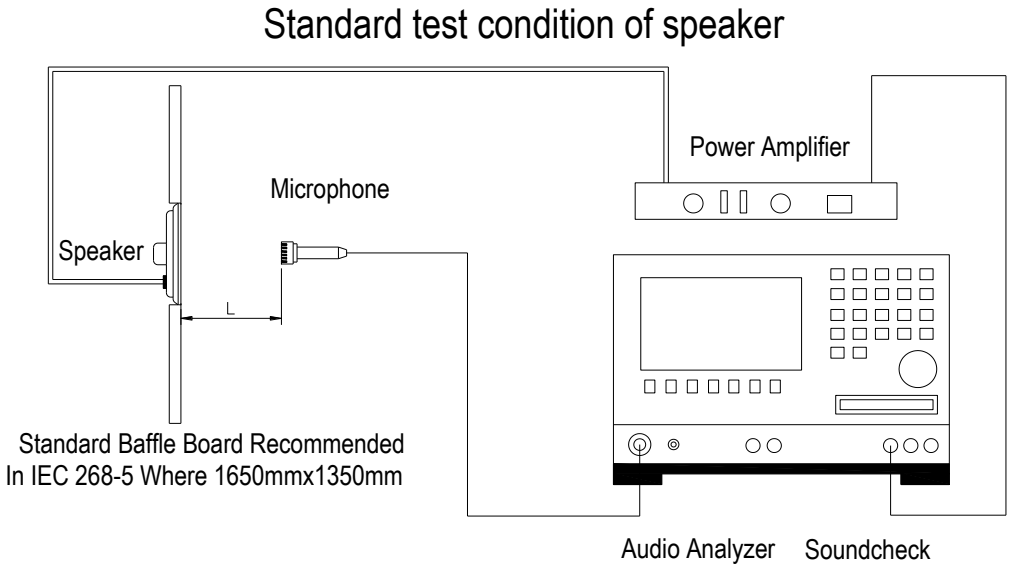


Fig. 1 Block Diagram for Measurement Method



L=10cm

Fig. 2 Speaker Test Condition

PACKAGING

units: cm
Remark:

100pcs per tray

8 trays for unit，2 units per carton

Total:1600 pcs per box

Size:37*28*29.5cm