



Dynamic Loudspeaker

40×30×7.1 mm

With wires & connector

CR4030C071BN4

Revision

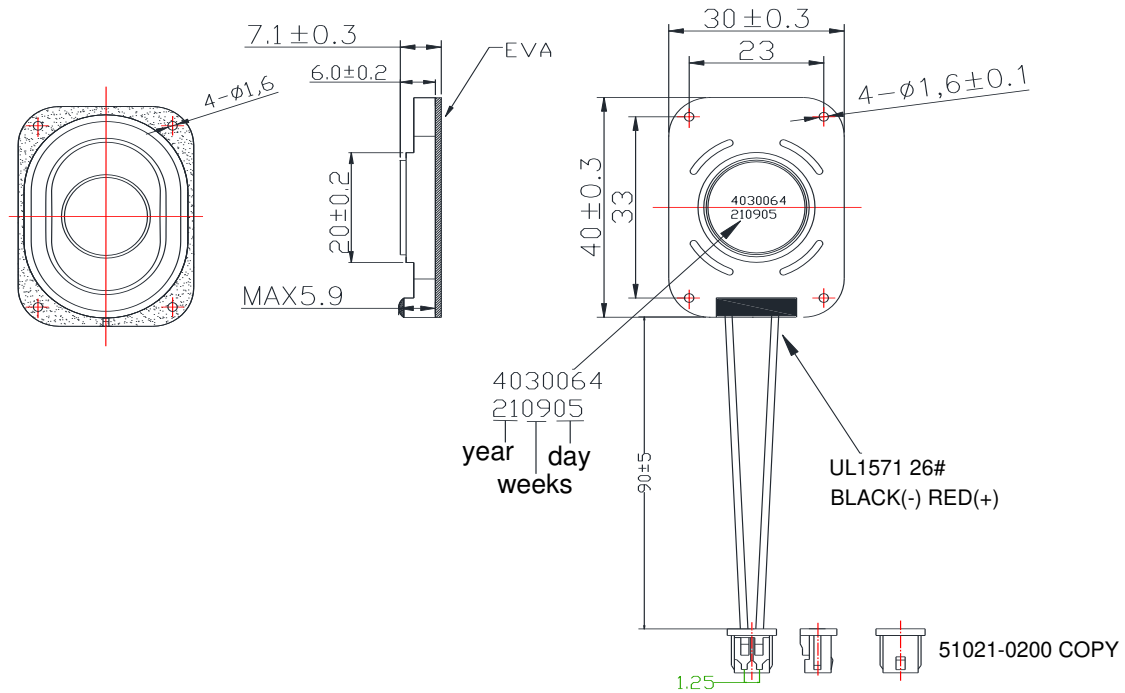
Date	Version	Status	Changes	Approver
2020/12/22	V0.1	Draft	First release	AX
2021/01/14	V0.2	Draft	add statement for gasket material	AX
2021/02/26	V0.3	Draft	add print code	AX
2021/04/12	V0.4	Draft	update F0 testing result	AX

Parameter	Conditions/Description	Values	Units
Rated Input Power		2.0	W
Max Input Power	IEC-60268-5, filter 60s on/120s off, 10 cycles at room temp	2.5	W
Rated Impedance	at 2.0 kHz	4±15%	Ω
Sound Pressure Level (S.P.L.)	at 0.8K 1.0K 1.2K 1.5K Hz in 1.0W/0.5M average (0dB SPL=20μPa)	81±3	dB
Resonant Frequency (Fo)	at 1.0V	480±20%	Hz
Resonant Frequency (Fo)	at 2.83V	400±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~10K	Hz
Distortion	at 1K Hz, input 1.0W,	< 5%	-
Magnet	NdFeB	Φ13.7*1.8	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	°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: $\pm 0.5\text{mm}$ 

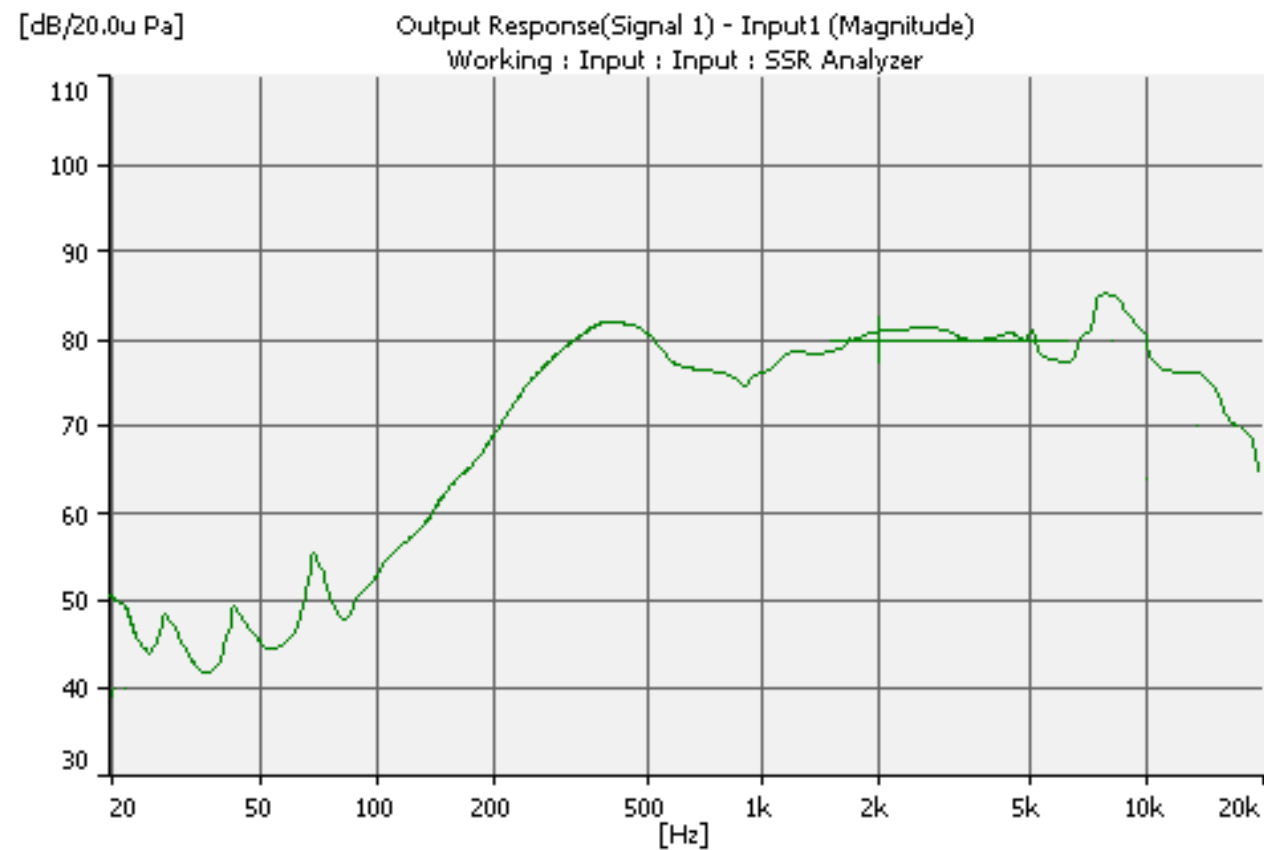
CONSTRUCTION DETAIL

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	Diaphragm	1	Cloth	
2	VOICE COIL	1	Paper Cu	
3	Plate	1	SPCC	
4	Magnet	1	NdFeB	
5	PCB Terminal	1	FR4	
6	Frame	1	ABS	
7	Sponge	1	EVA	sulfur free

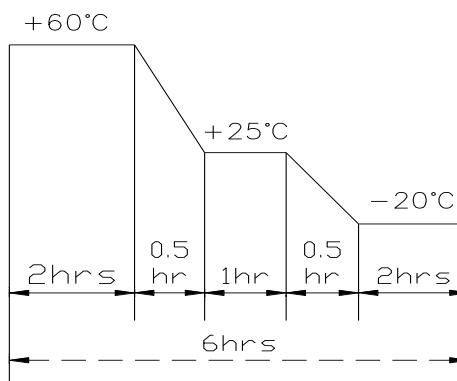
RESPONSE CURVES

Frequency Response Curve

Test condition: 1.0W/0.5M,



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 $+70^{\circ}\text{C} \pm 3^{\circ}\text{C}$
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	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

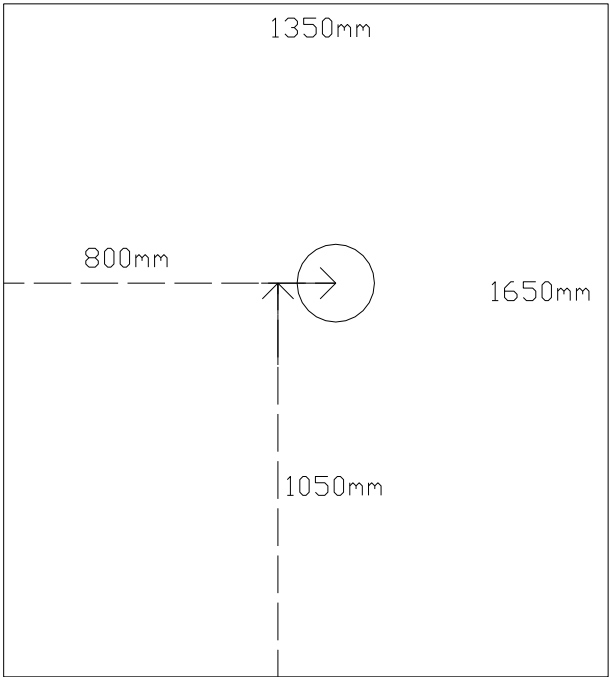
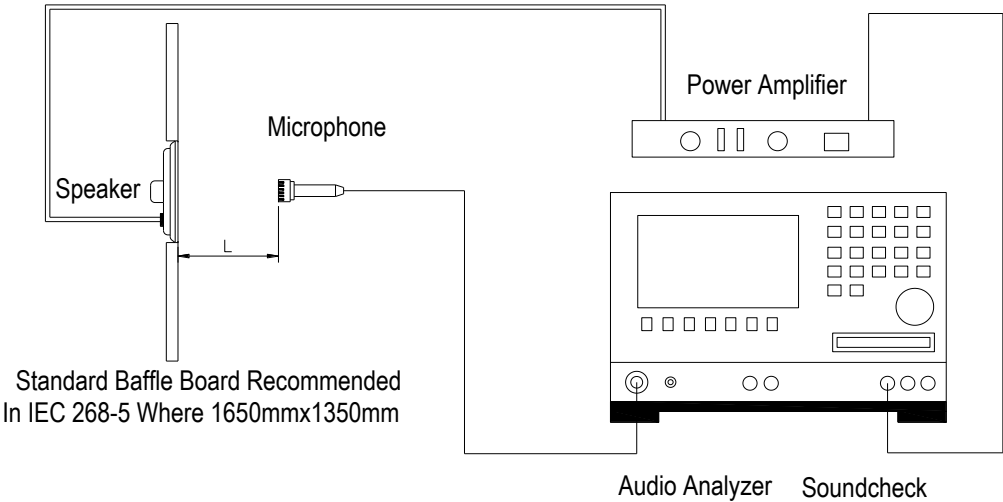


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker



L=50cm

Fig. 2 Speaker Test Condition

PACKAGING

units: cm

Remark:

25 pcs per tray

20 trays for unit, 2 units per carton

Total:1000 pcs per box

Size:51.5*34.5*31cm

