Dynamic loudspeaker

With wire & connector

ϕ28×10.1 mm

CC28C100ZN8

Revision

Date	Version	Status	Changes	Approver
2024/9/9	V0.1	Draft	First release	AX

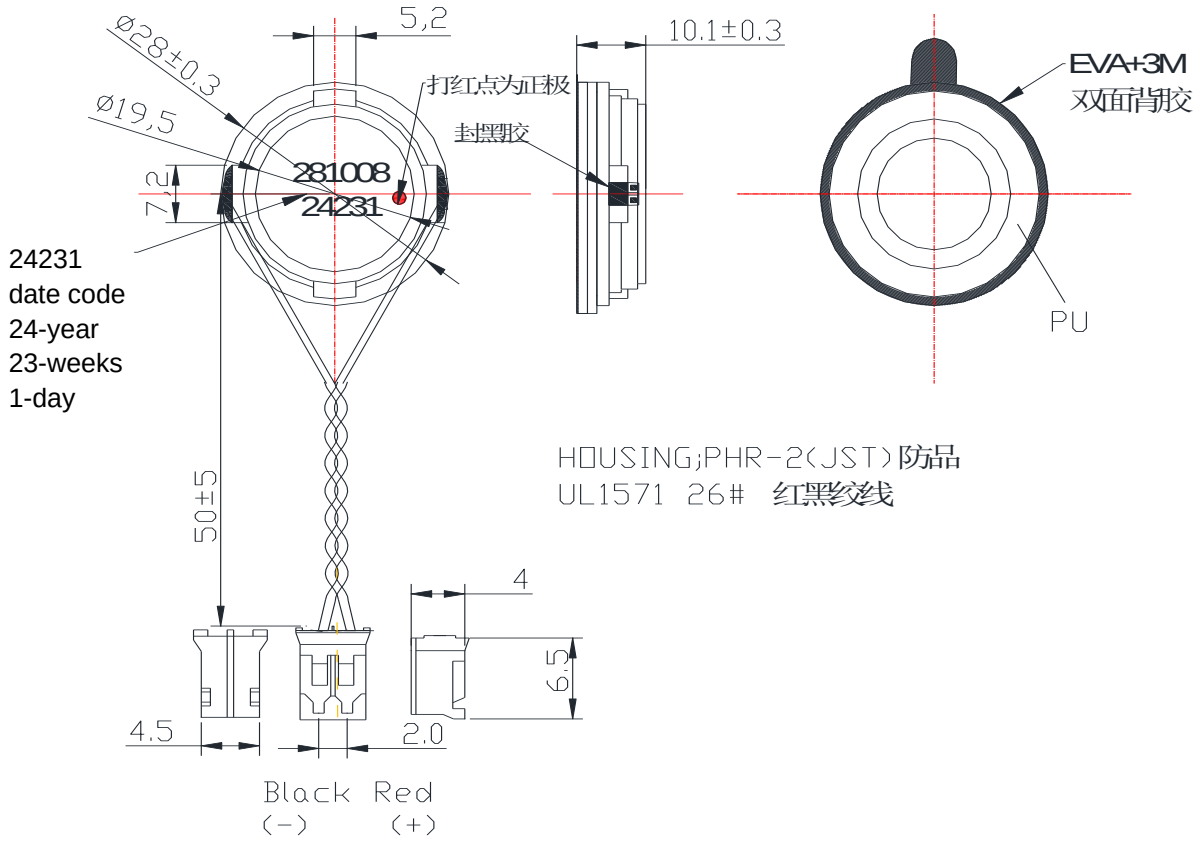
Parameter	Conditions/Description	Values	Units
Rated Input Power		2.0	W
Max Input Power	IEC-60268-5, filter 60s on/120s off, 10 cycles at room temp	3.0	W
Impedance	at 2.0 kHz	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 0.8K 1.0K 1.2K 1.5KHz in1.0W/0.5M average (0dB SPL=20μPa)	80±3	dB
Resonant Frequency (Fo)	at 1.0 V	350±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K Hz, input 1.0W,	< 5%	-
Magnet	NdFeB	Φ15.5*2.2	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	℃
WaterProof		IP55	

Notes: All specifications measured at 15~35°C, humidity at 25~75%, under 86~106 kPa pressure, unless otherwise noted.

MECHANICAL DRAWING

Units: mm

Tolerance: ±0.5mm



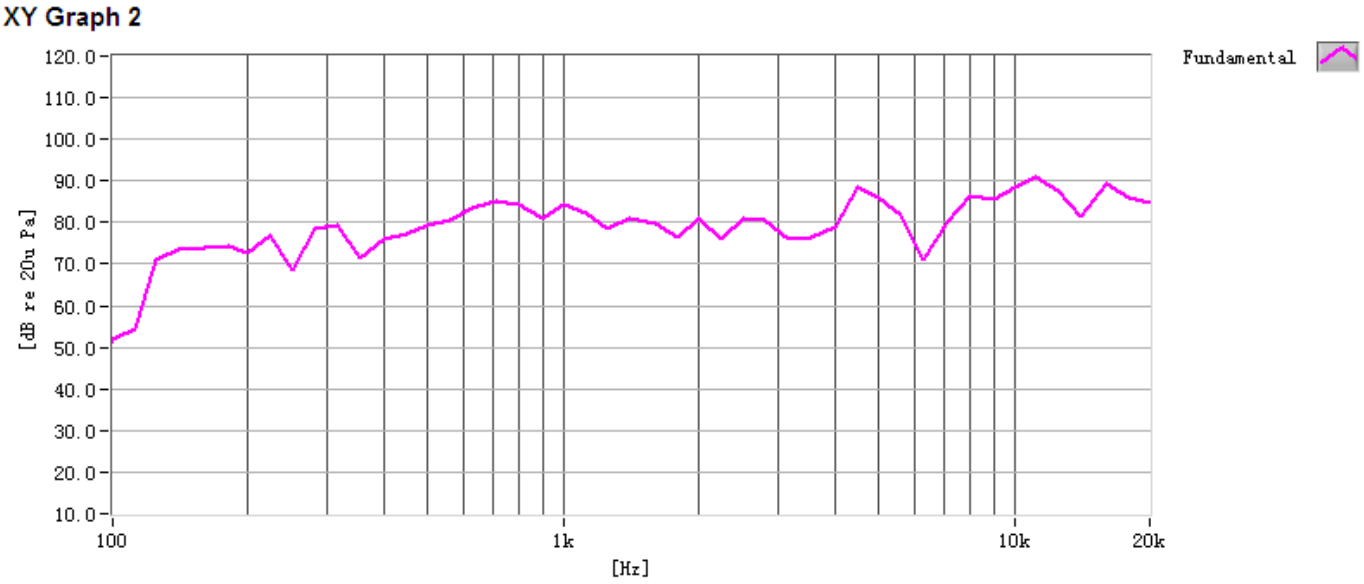
CONSTRUCTION DETAIL

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	Diaphragm	1	PU+paper	
2	VOICE COIL	1	Paper Cu	
3	Plate	1	SPCC	
4	Magnet	1	NdFeB	
5	PCB Terminal	1	FR4	
6	Frame	1	PBT	

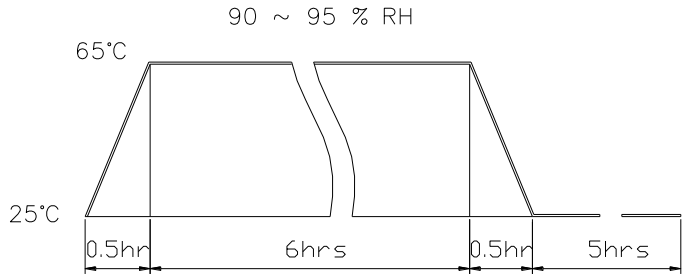
RESPONSE CURVES

Frequency Response Curve

Test condition: 1.0W/0.5M,



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	96 hours at +40℃±3℃, 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

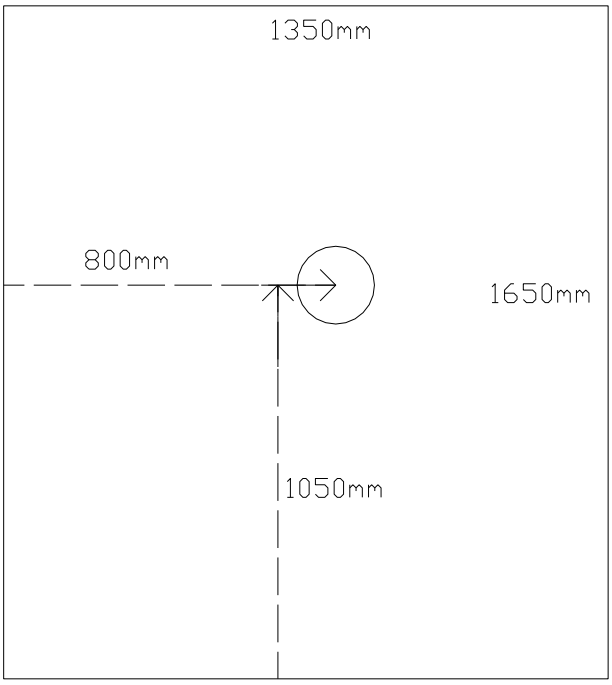
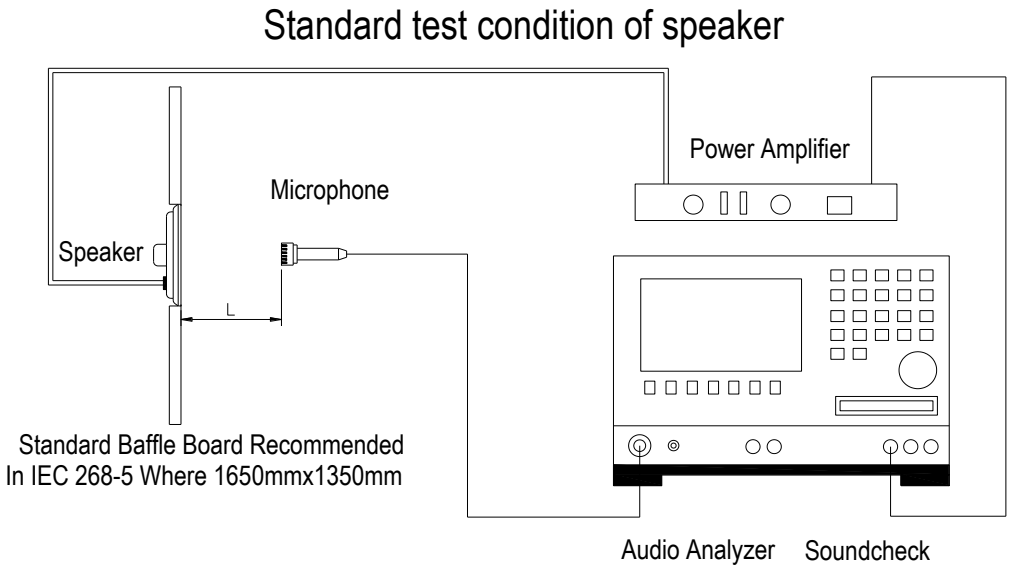


Fig. 1 Block Diagram for Measurement Method



L= 50cm

Fig. 2 Speaker Test Condition

PACKAGING

units: cm
Remark:
50 pcs per tray

5 trays for unit，2 units per carton

Total:500 pcs per box

Size:34.5*26.5*23cm