Dynamic Loudspeaker

ϕ20×4.6 mm

With wire 、 connector &

Rear foam

CC20C046YN8MP

Revision

Date	Version	Status	Changes	Approver
2023/11/6	V0.1	Draft	First release	AX

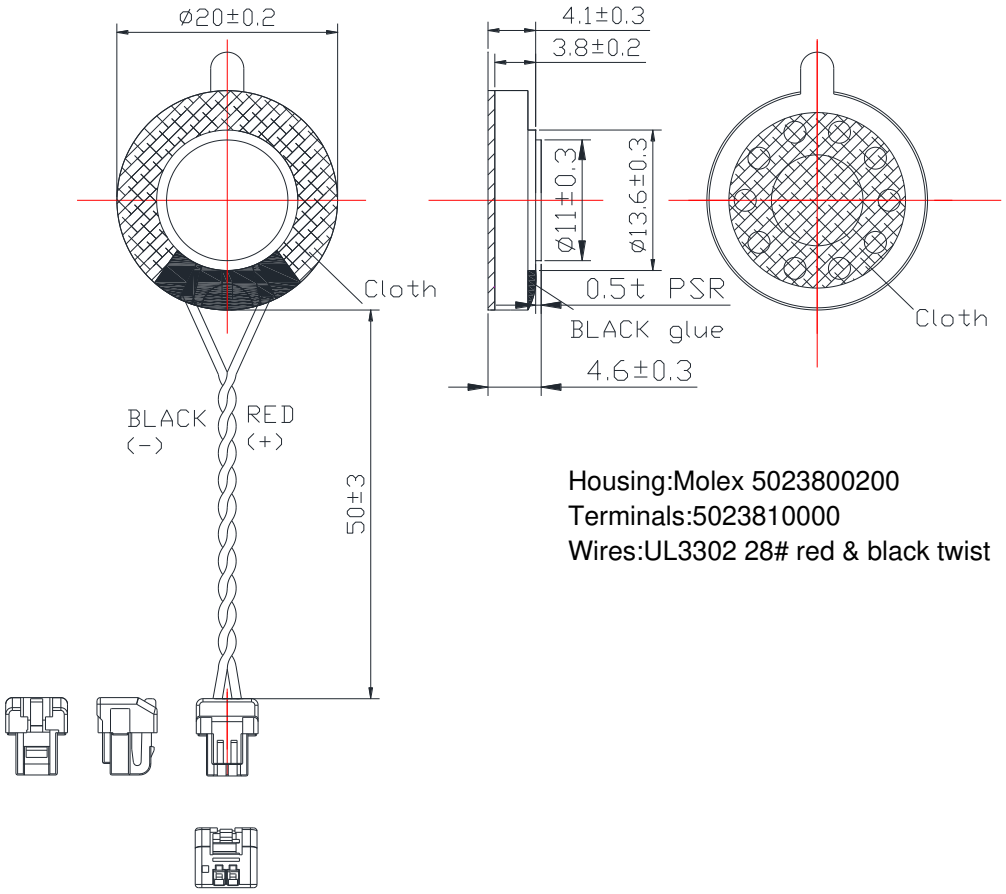
Parameter	Conditions/Description	Values	Units
Rated Input Power		1.0	W
Max Input Power		2.0	W
Impedance		8±15%	Ω
Sound Pressure Level (S.P.L.)	At 0.8K 1.0K 1.2K 1.5K Hz in 0.1W/0.1M average (0dB SPL=20μPa)	90±3	dB
Resonant Frequency (Fo)	at 1.0 V	850±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 2K Hz, input 0.1W,	< 5%	-
Magnet	NdFeB	Φ9.6*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		-40~+85	℃
Storage Temperature		-40~+85	℃
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



Housing:Molex 5023800200
Terminals:5023810000
Wires:UL3302 28# red & black twist

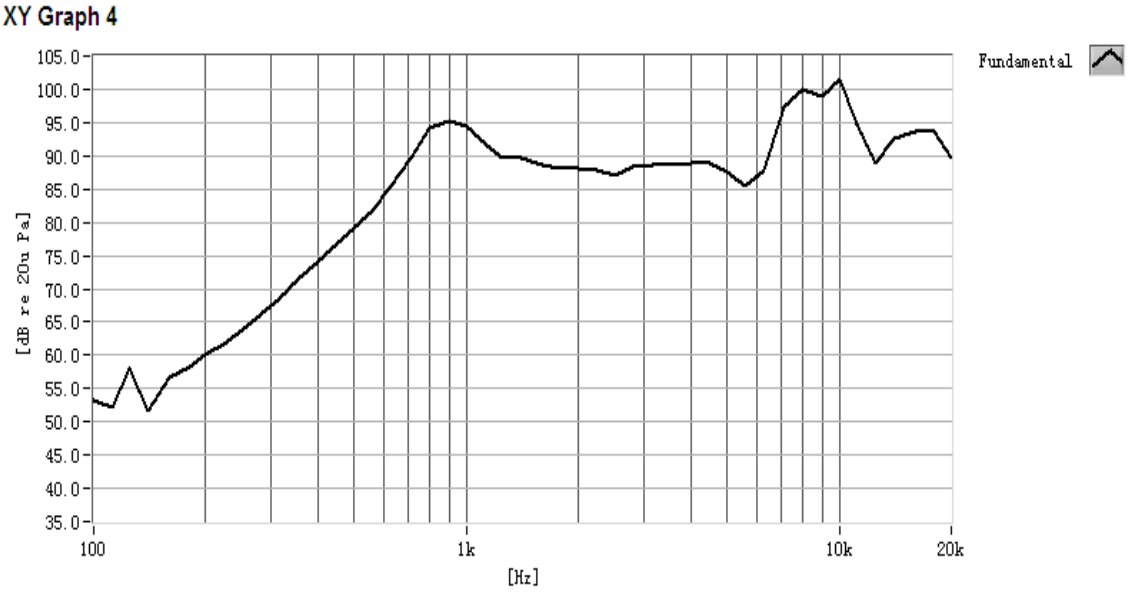
CONSTRUCTION DETAIL

NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	Cap	1	SUS304	
2	Diaphragm	1	PEI	
3	VOICE COIL	1	Cu	
4	Plate	1	SPCC	
5	Magnet	1	NdFeB	
6	PCB Terminal	1	FR4	
7	Frame	1	PBT	
8	EMI Gasket	1	IXPE	

RESPONSE CURVES

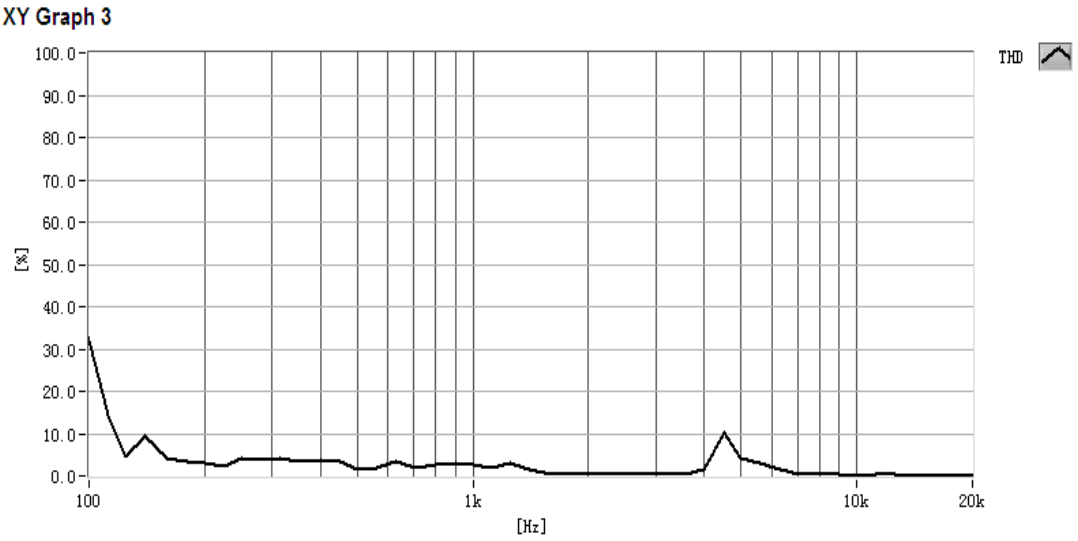
Frequency Response Curve

Test condition: 0.1W/0.1M,

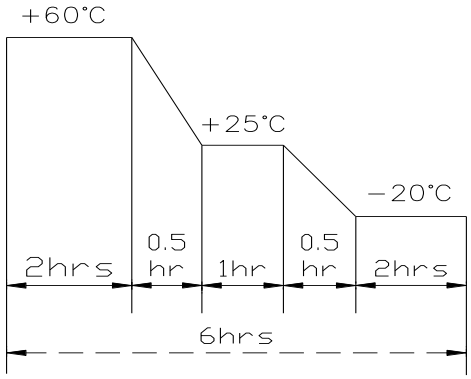


Total Harmonic Distortion Curve

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 Operation and Storage	+ 85 ± 2 °C Humidity Random for 96 Hours. (GB/T 9397—200X)
3	Low Temperature Operation and Storage	− 40 ± 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

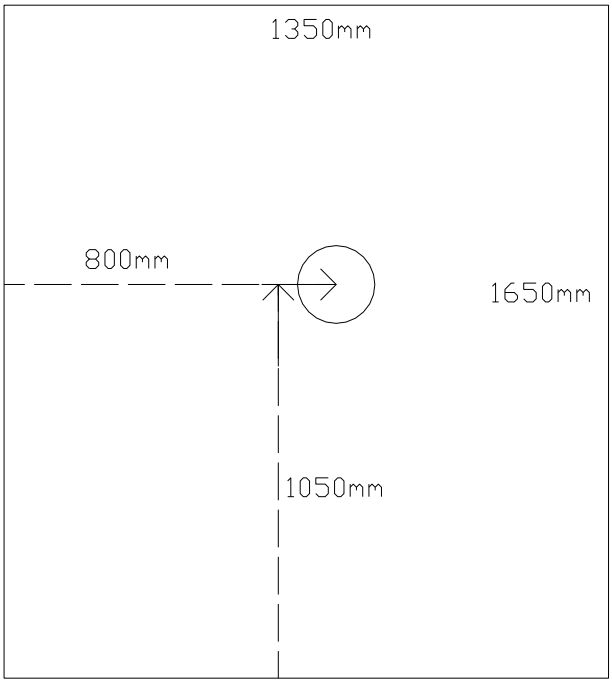
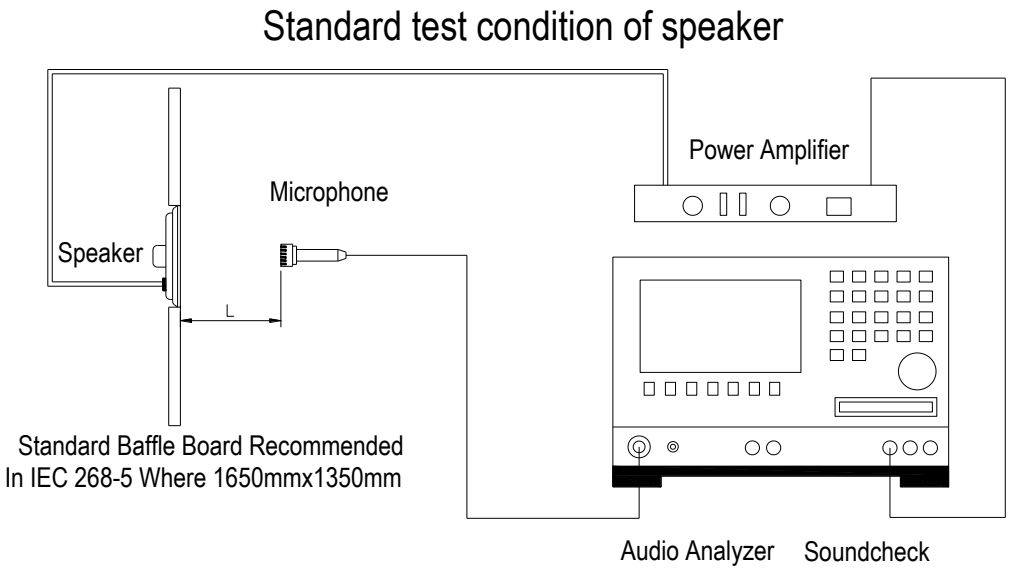


Fig. 1 Block Diagram for Measurement Method

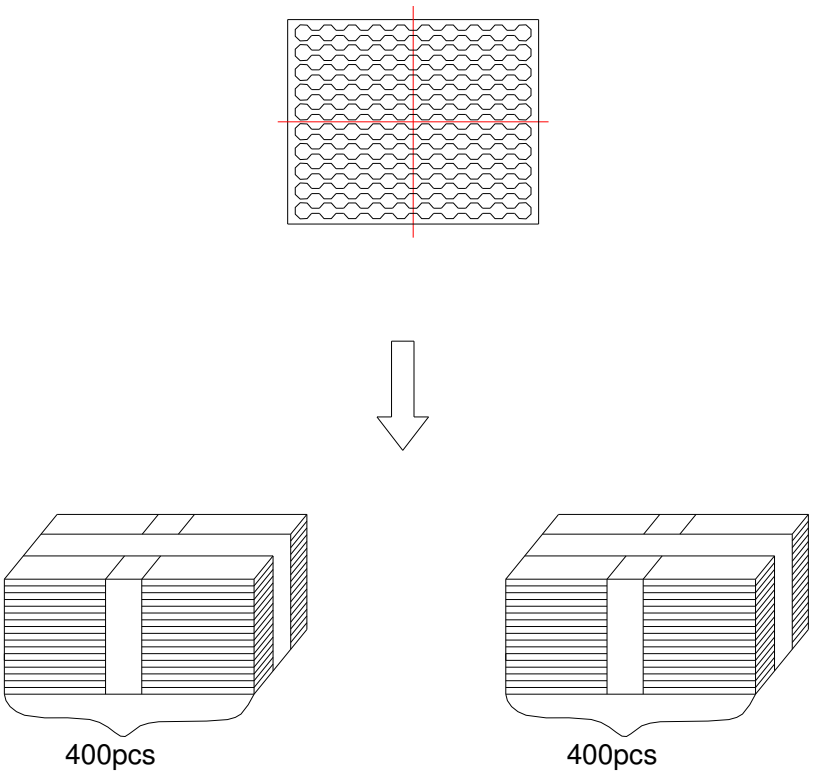


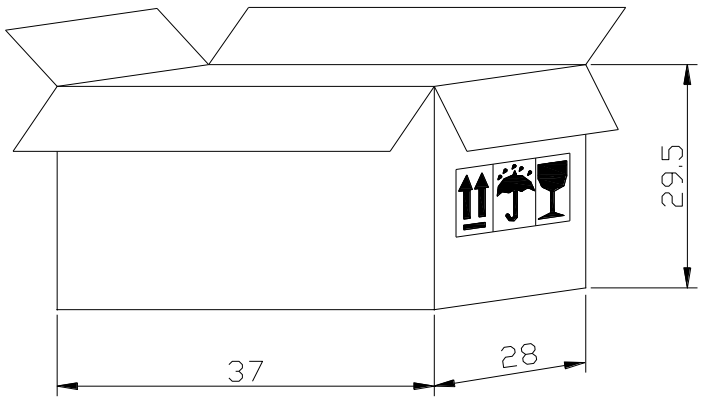
L=10cm

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)





units: cm
Remark:
50pcs per tray
8 trays for unit，2 units per carton
Total:800 pcs per box
Size:37*28*29.5cm