Dynamic Loudspeaker

17×12×2.3 mm

Guts

CR1712S023YN8Z

Revision

Date	Version	Status	Changes	Approver
2023/10/26	V0.1	Draft	First release	AX

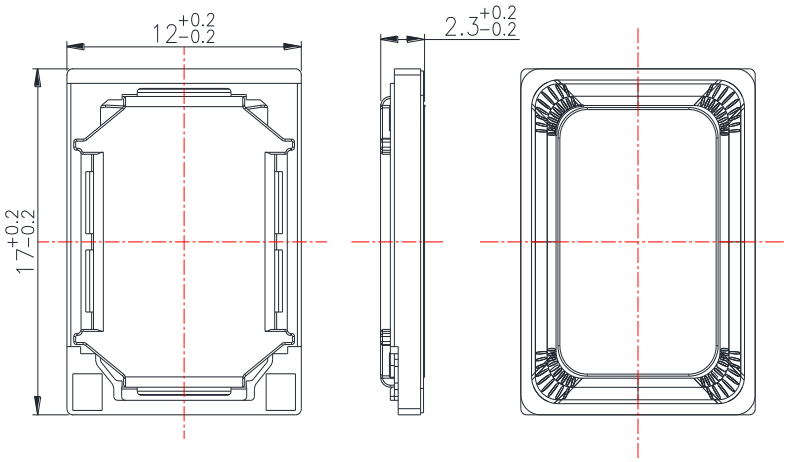
Parameter	Conditions/Description	Values	Units
Rated Input Power	In 1.0cc box	1.0	W
Max Input Power	In 1.0cc box	1.5	W
Impedance	At 1K Hz	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 2.0KHz in1.0W/0.1M (0dB SPL=20μPa)IN 1.0CC BOX	94±3	dB
Resonant Frequency (Fo)	In 1.0cc box	850±20%	Hz
Frequency Range	Output S.P.L. -10dB	500~20K	Hz
Distortion	at 1K Hz, input 1.0W, In 0.7cc box& 0.1W in Free air	< 10%	-
Magnet	NdFeB		mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz IN free air	0.894	V
Polarity	cone will move forward with positive dc current to“+” terminal		
Weight			g
Operating Temperature		-30~+70	℃
Storage Temperature		-40~+80	℃
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

Tolerances: ±0.5mm except specified



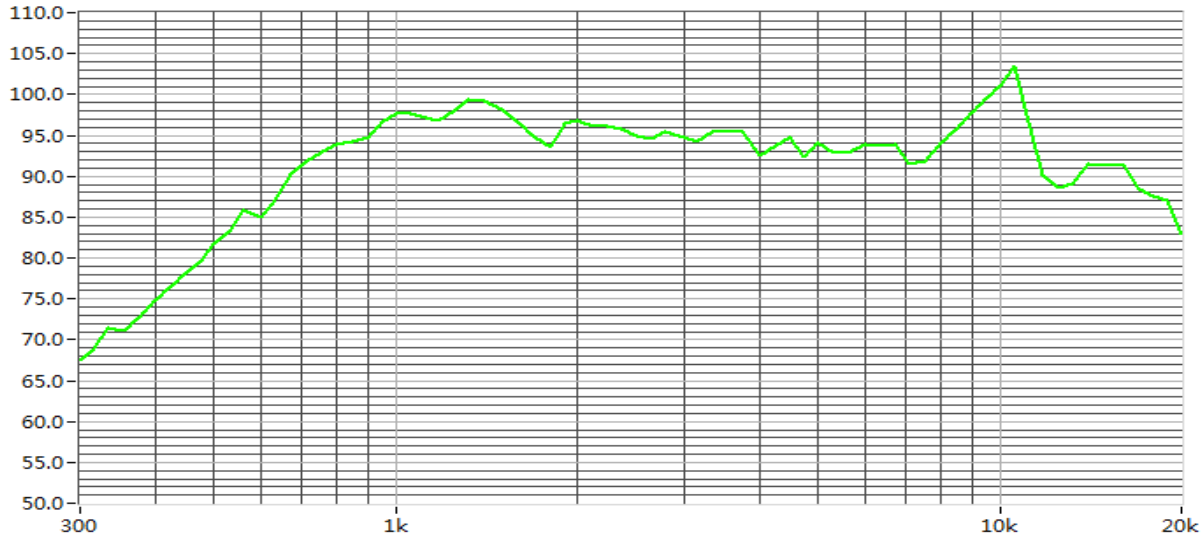
CONSTRUCTION DETAIL

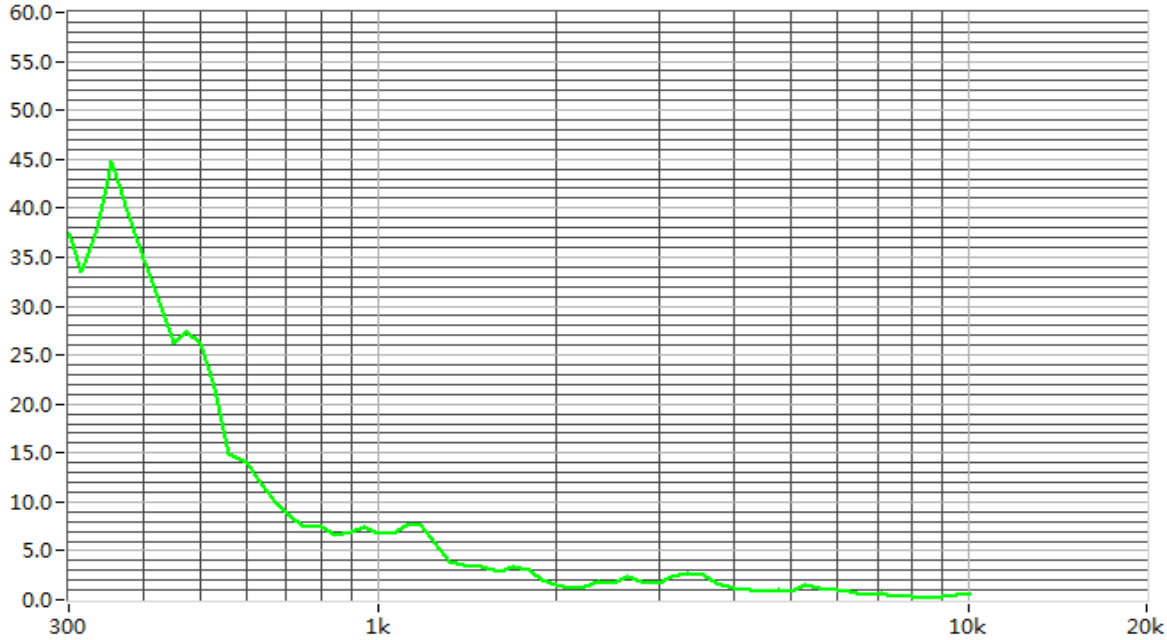
5	Diaphragm	1	PEEK	
4	VOICE COIL	1	COPPER WIRE	
3	Plate	1	SPCC	
2	Magnet	1	NdFeB	
1	Frame	1	PPA	
The material must be meet to GU-001				
PART NO.	PART NAME	Q'TY	MATERIAL	REMARK

RESPONSE CURVES

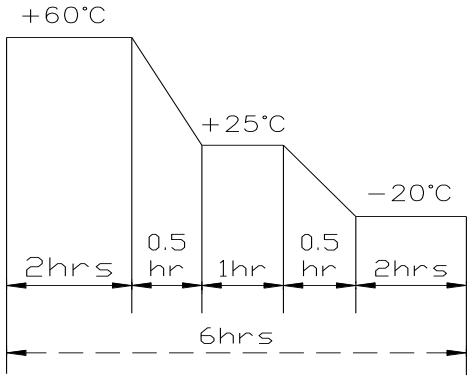
Frequency Response Curve

Test condition: 1.0W/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	+ 70 ± 2 °C Humidity Random for 96 Hours. (GB/T 9397—200X)
3	Low Temperature Operation and Storage	− 30 ± 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

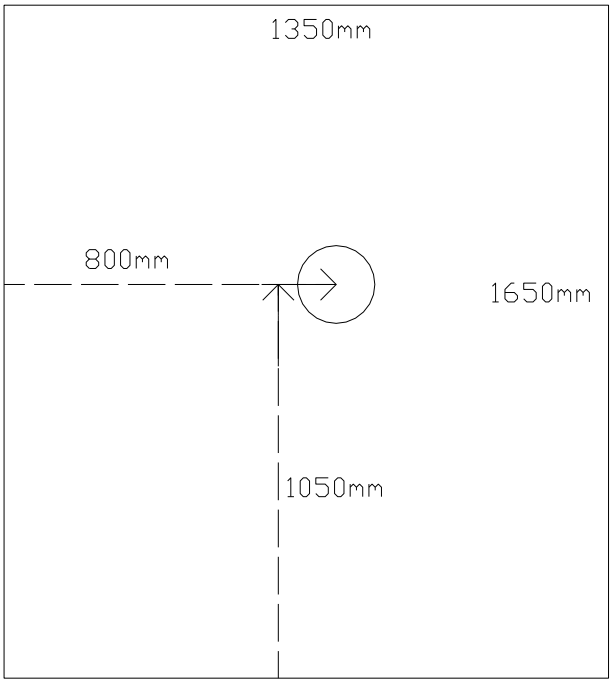
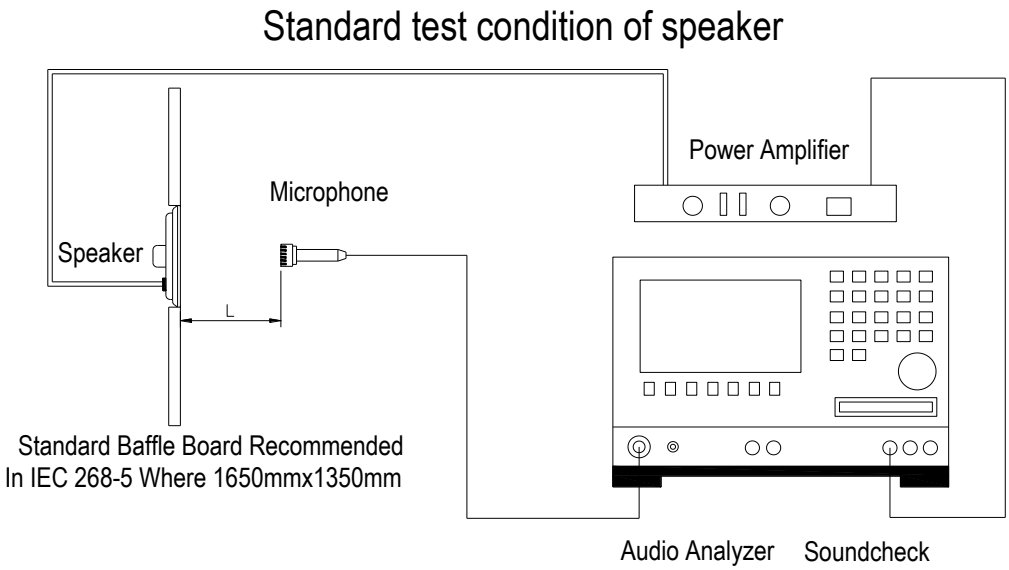


Fig. 1 Block Diagram for Measurement Method



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)