



Dynamic loudspeaker

40 × 13 × 4.0 mm

Guts

CR4013L040YN8

Revision

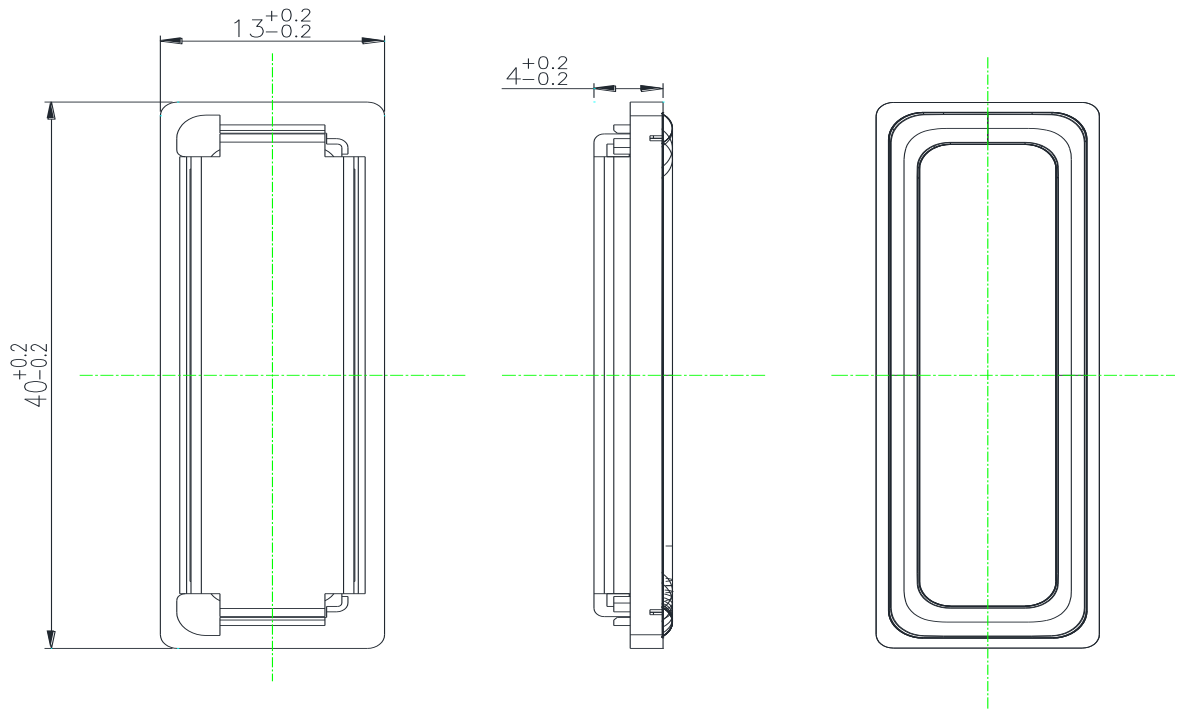
Date	Version	Status	Changes	Approver
2024/7/19	V0.1	Draft	First release	AX

Parameter	Conditions/Description	Values	Units
Rated Input Power	In 5cc box	2.0	W
Max Input Power	In 5cc box	2.2	W
Impedance		8±15%	Ω
Sound Pressure Level (S.P.L.)	at 2.0KHz in 2.0W/0.1M average IN 5CC BOX(0dB SPL=20μPa)	99±3	dB
Resonant Frequency (Fo)	IN 5CC BOX	550±20%	Hz
	IN Free air	240±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K Hz, input 1.0W,	< 10%	-
Magnet	NdFeB		mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz IN 5CC BOX	4.0	V
Polarity	cone will move forward with positive dc current to“+” terminal		
Weight			g
Operating Temperature		-20~+60	°C
Storage Temperature		-30~+70	°C
Waterproof		N/A	

Above Measuring condition under temperature : 15~35°C 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



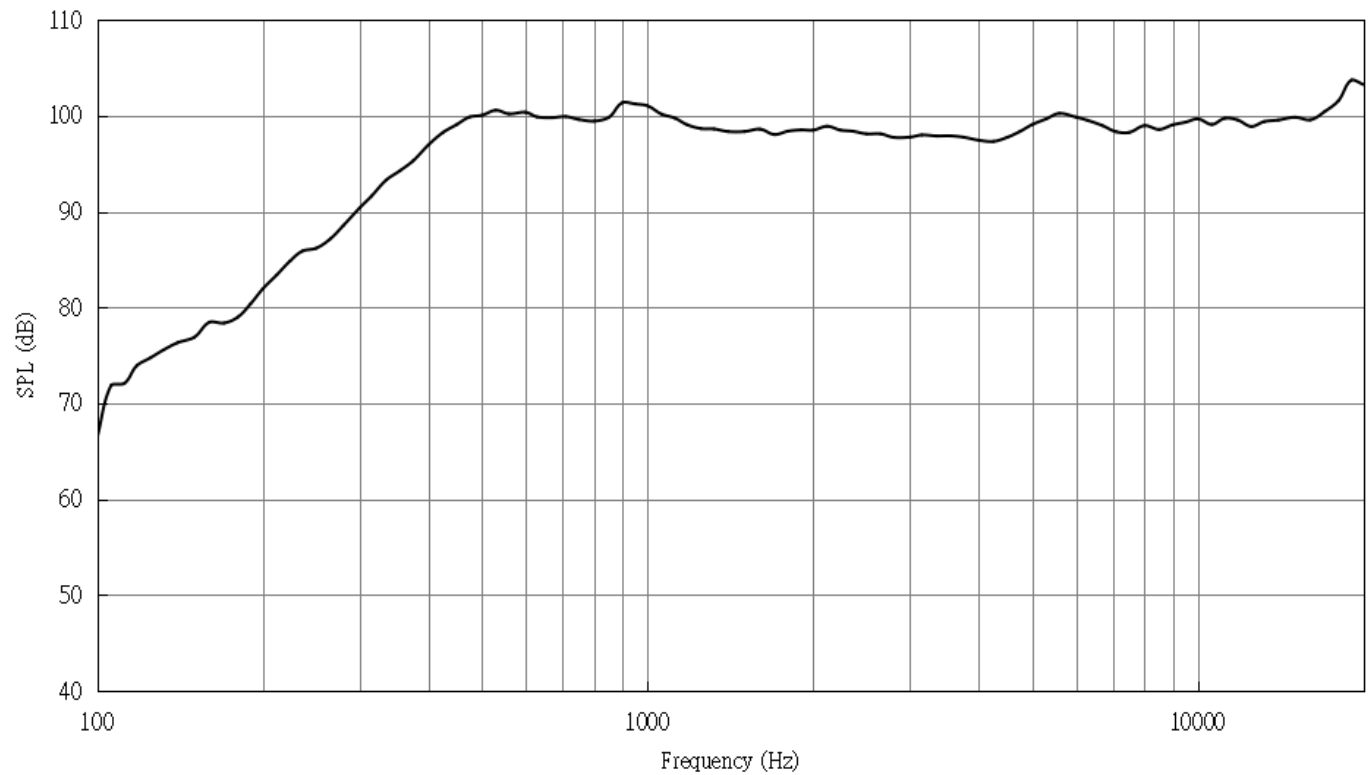
CONSTRUCTION DETAIL

8	焊片	SUS	2	
7	前盖 FRONT CAP	PPA	1	
6	音圈 VOICE COIL	COPPER WIRE	1	
5	膜片 DIAPHRAGM	PEEK	1	
4	U 铁 U YOKE	SPCE	1	
3	极片 POLE PIECE	SPCC	1	
2	磁钢 MAGNET	NdFeB	1	
1	主架 FRAME	PPA	1	
编号 No.	零件名称 PART NAME	材料 MATERIAL	数量 Q'TY	备注 REMARK

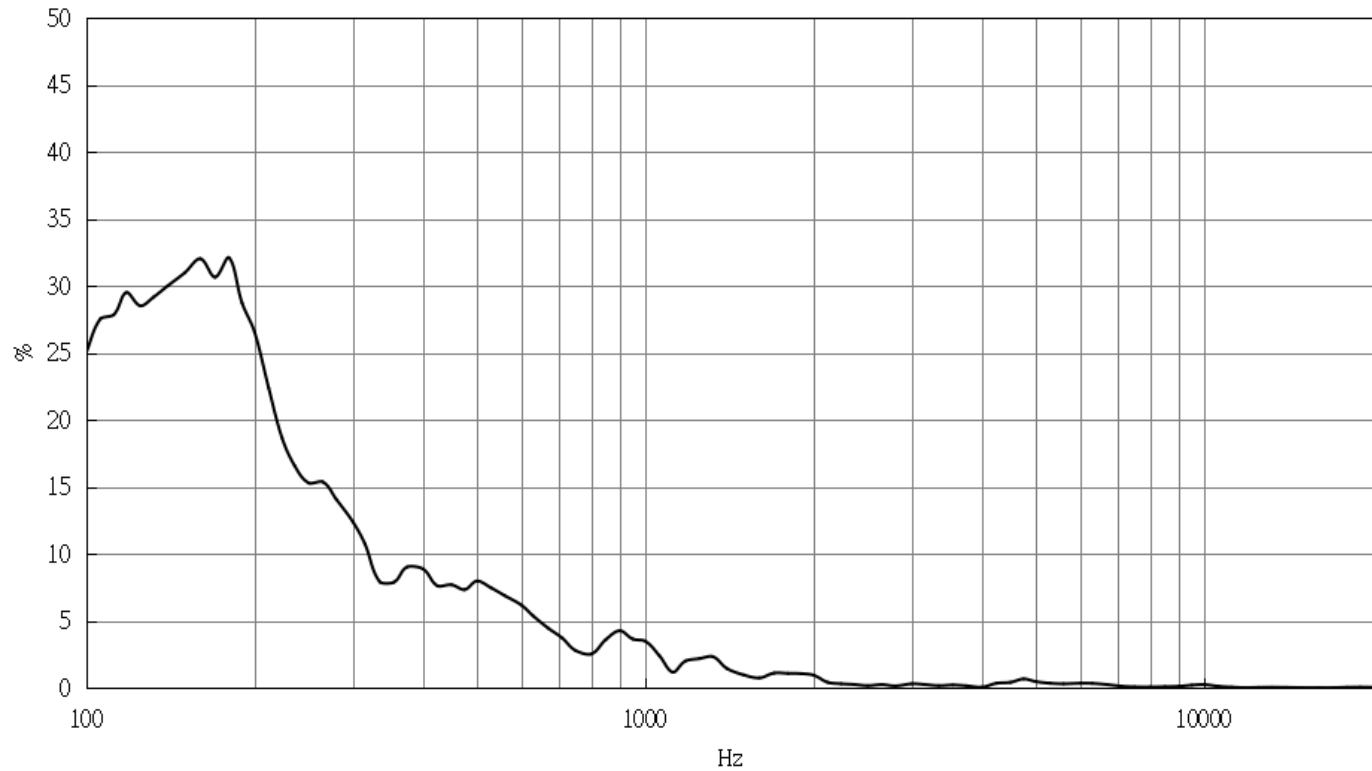
RESPONSE CURVES

Frequency Response Curve

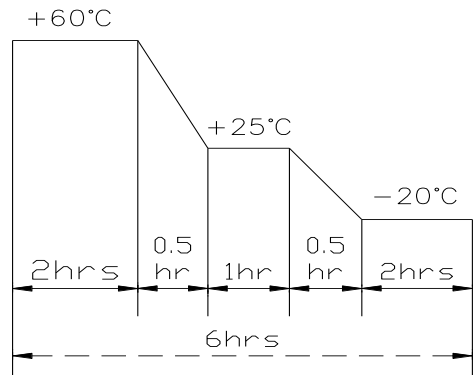
Test condition: 2.0w/0.1M, in 5CCBOX



Total Harmonic Distortion Curv



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 Operation and Storage	$+ 60 \pm 2$ °C Humidity Random for 96 Hours. (GB/T 9397—200X)
3	Low Temperature Operation and Storage	$- 20 \pm 2$ °C Humidity Random for 96 Hours. (GB/T 9397—200X)
4	Humidity Test	$+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 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)  The diagram illustrates a temperature cycle over a 6-hour period. It starts at $+60^{\circ}\text{C}$ for 2 hours, then ramps down to $+25^{\circ}\text{C}$ in 0.5 hours, holds at $+25^{\circ}\text{C}$ for 1 hour, ramps down to -20°C in 0.5 hours, and finally holds at -20°C for 2 hours. The total duration is 6 hours.
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

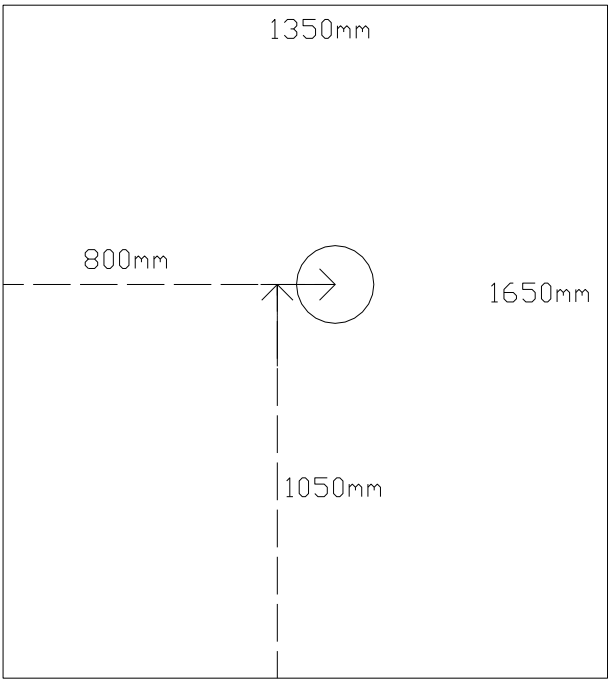


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker

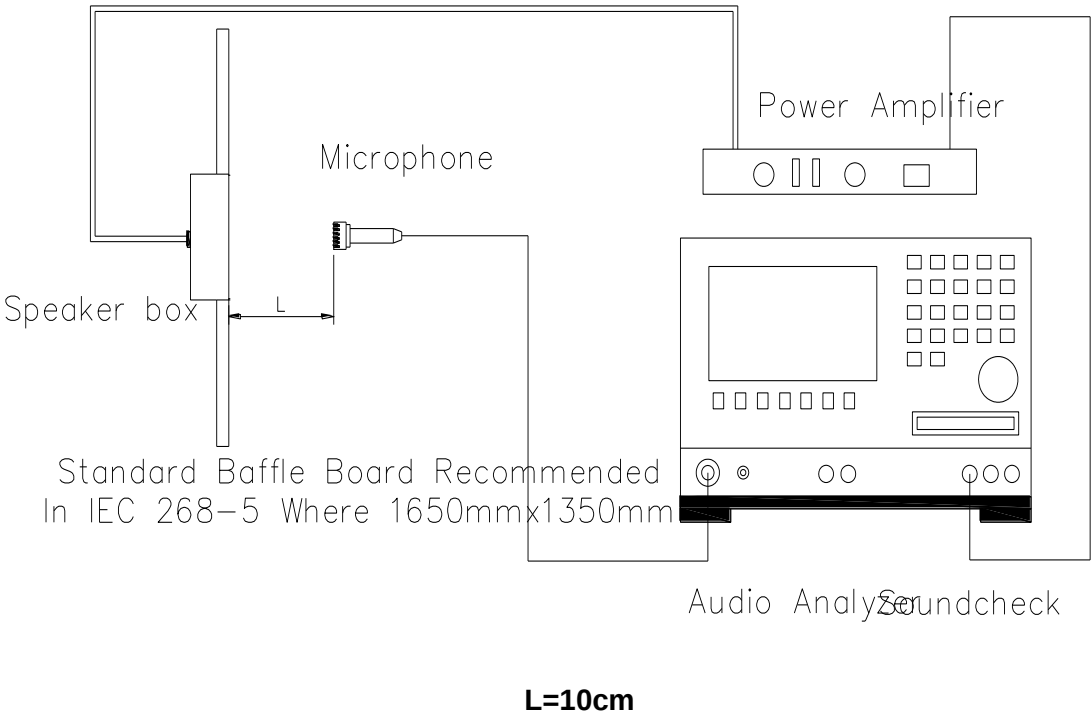


Fig. 2 Speaker Test Condition

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)

每盘 40 个 40pcs of speaker in each tray

每箱 20 盘 20 trays in one carton

总计:800 个 / 1 箱 Total:800 pcs / 1 carton

毛重: 4.5KGS Gross Weight:4.5KGS

净重: 3.0KGS Net Weight: 3.0KGS

