Dynamic Speaker

25×14×4.5 mm

CR2514S045YN4

Revision

Date	Version	Status	Changes	Approver
2024/3/25	V0.1	Draft	Initial release	AX

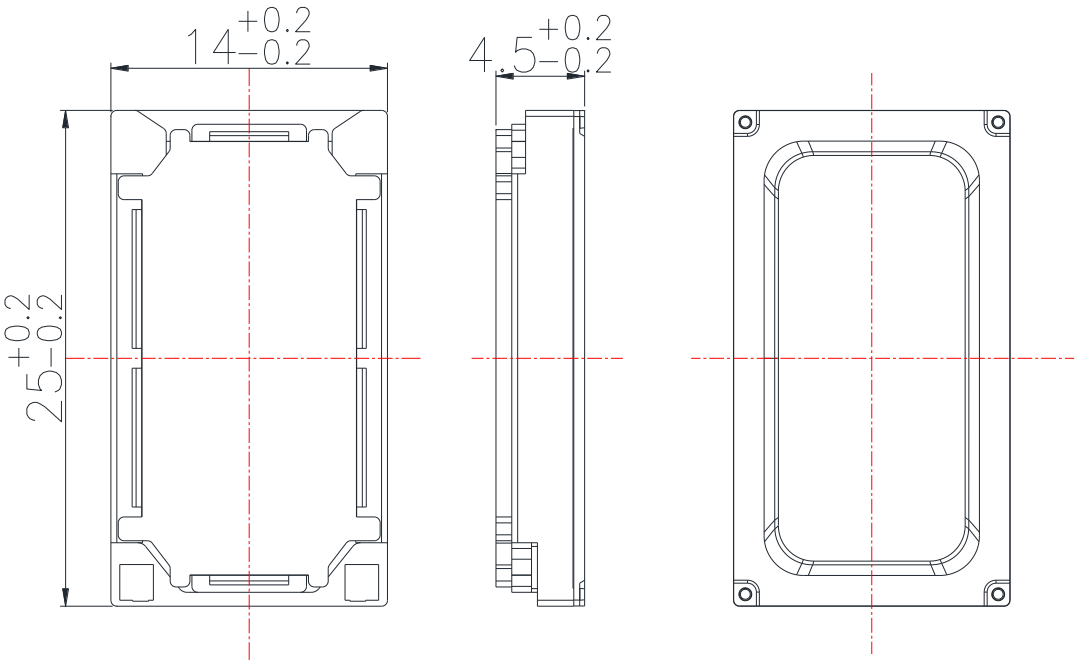
Parameter	Conditions/Description	Values	Units
Rated Input Power	in 2cc closed box	2.0	W
Max Input Power	IEC-60268-5, filter 60s on/120s off, 10 cycles at room temp in 2cc closed box	2.2	W
Impedance		4±15%	Ω
Sound Pressure Level (S.P.L.)	at 1.0KHz in2.0W/0.1M average (0dB SPL=20μPa) in 2cc closed box with baffle	103±3	dB
Sound Pressure Level (S.P.L.)	at 1.0KHz in1.0W/0.5M average (0dB SPL=20μPa) Free air	83±3	dB
Resonant Frequency (Fo)	at 1.0 V in Free air	400±20%	Hz
Resonant Frequency (Fo)	at 1.0 V in 2cc closed box	850±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K-20K Hz, input 2.0W, in 2cc closed box	≤10%	-
Magnet	NdFeB		mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz in 1cc closed box	2.83	V
Polarity	cone will move forward with positive dc current to"+" terminal		
Weight			g
Operating Temperature		-20~+70	℃
Storage Temperature		-30~+85	℃
Waterproof		IP65	

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



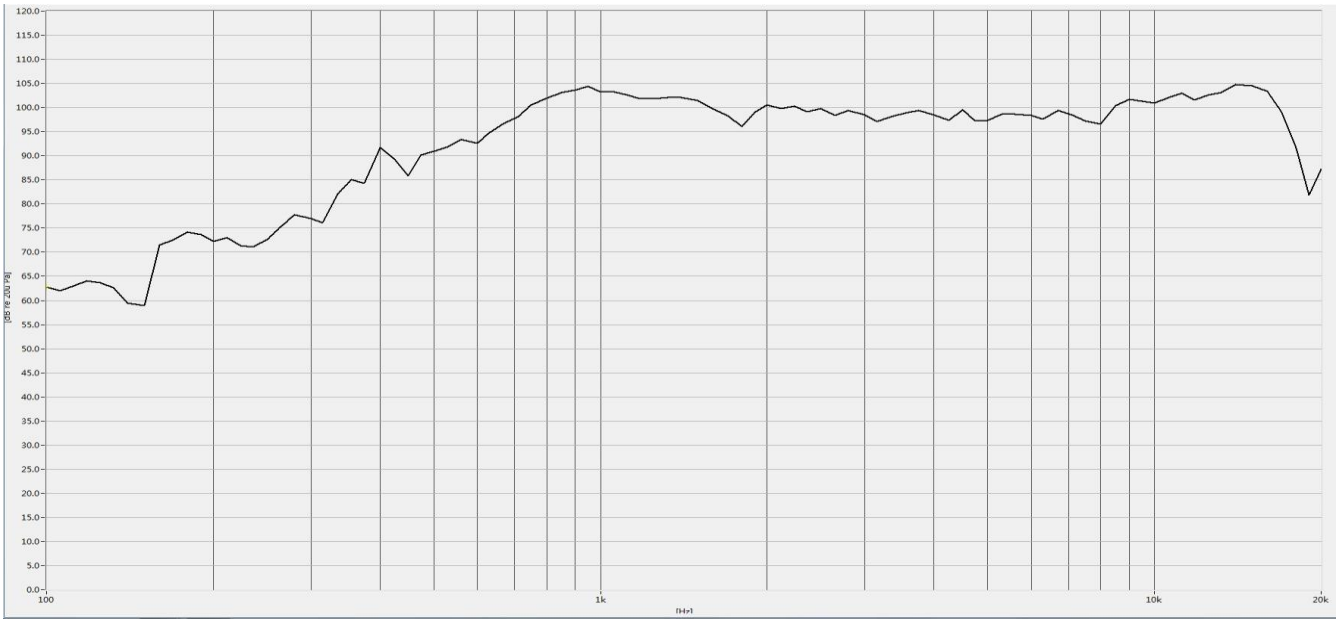
CONSTRUCTION DETAIL

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	焊片 SPRING TERMINAL	2	SUS	
2	前盖 FRONT CAP	1	SPCC	
3	音圈 VOICE COIL	1	COPPER WIRE	
4	膜片 DIAPHRAGM	1	PEEK	
5	U 铁 U YOKE	1	SPCC	
6	极片 POLE PIECE	1	SPCC	
7	磁钢 MAGNET	1	NdFeB	
8	主架 FRAME	1	PPA	

RESPONSE CURVES

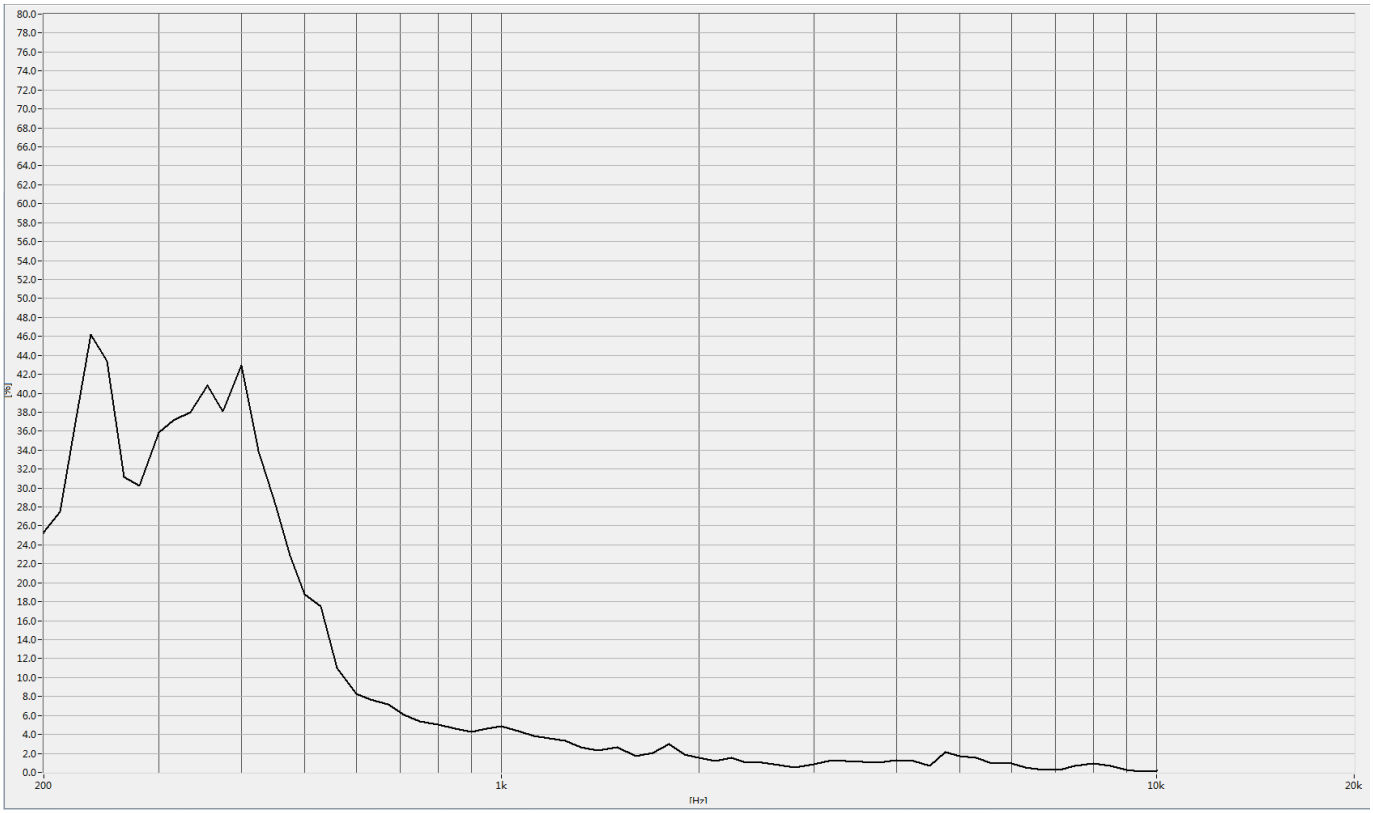
Frequency Response Curve

Test condition: 2.0W/0.1M(in 2cc closed box with baffle**)**

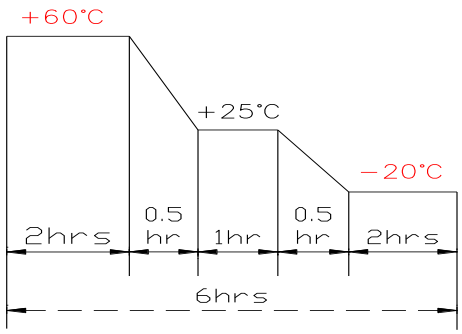


Total Harmonic Distortion Curve

Test condition:2.0W/0.1M(in 2cc closed box with baffle**)**



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 +70℃±3℃
3	Low Temperature Test	96 hours at -20℃±3℃
4	Humidity Test	+40℃±2℃ Relative Humidity(RH)90~95% 96 Hours
5	Temp. Cycle Test	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

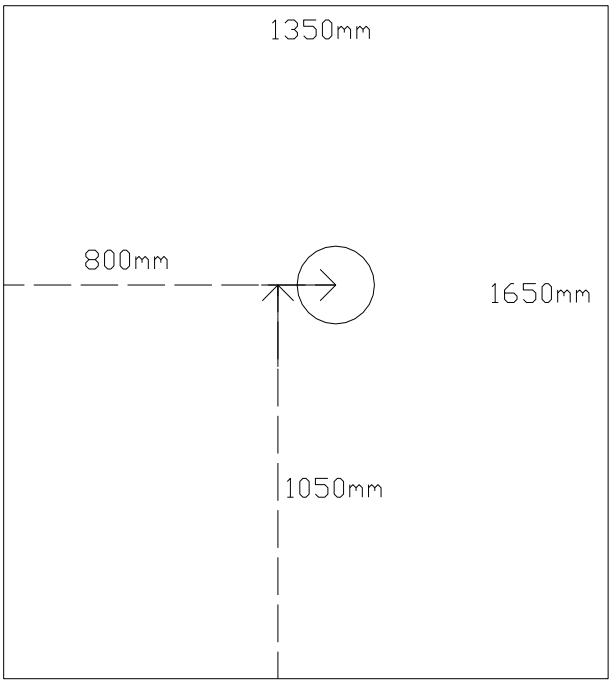
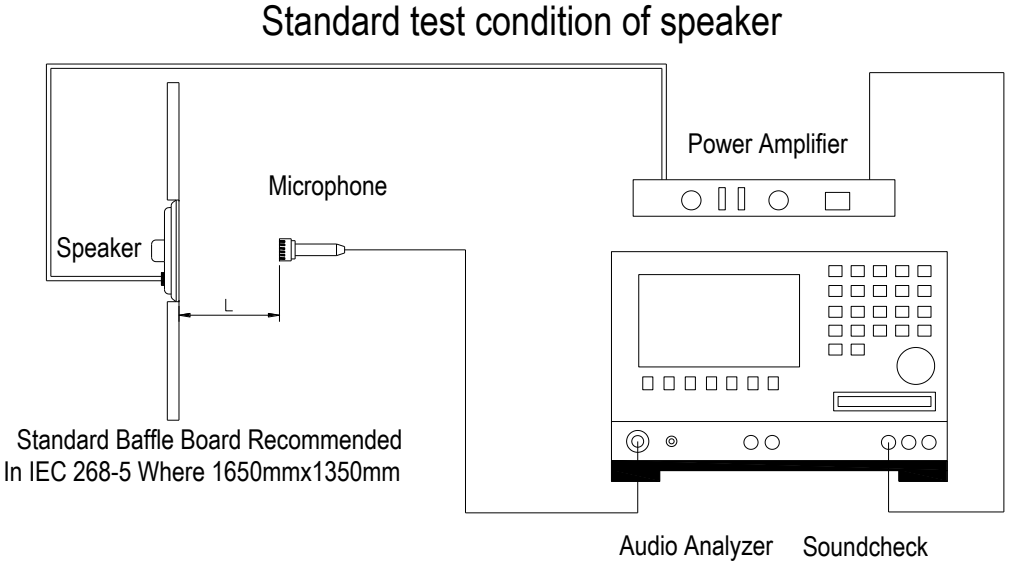


Fig. 1 Block Diagram for Measurement Method



L=10cm

Fig. 2 Speaker Test Condition

PACKAGING

每盘 80 个 80pcs of speaker in each tray

每箱 20 盘 20 trays in one carton

总计:1600 个 / 1 箱 Total:1600 pcs / 1 carton

毛重: 4.5KGS Gross Weight:4.5KGS

净重: 3.0KGS Net Weight: 3.0KGS