



# Dynamic Loudspeaker

**15 × 11 × 3.0 mm**

**CR1511L030UN8-2**

## Revision

<b>Date</b>	<b>Version</b>	<b>Status</b>	<b>Changes</b>	<b>Approver</b>
2018/08/06	V0.1	Draft	Initial release	AX
2018/8/14	V0.2		Add mechanical dimension	AX
2018/8/28	V0.3		Add tray size	AX
2018/9/6	V0.4		Change SPL testing condition	AX
2018/9/11	V0.5		Chang Frequency range	AX
2018/9/14	V0.6		Add THD curve	AX

## Specifications

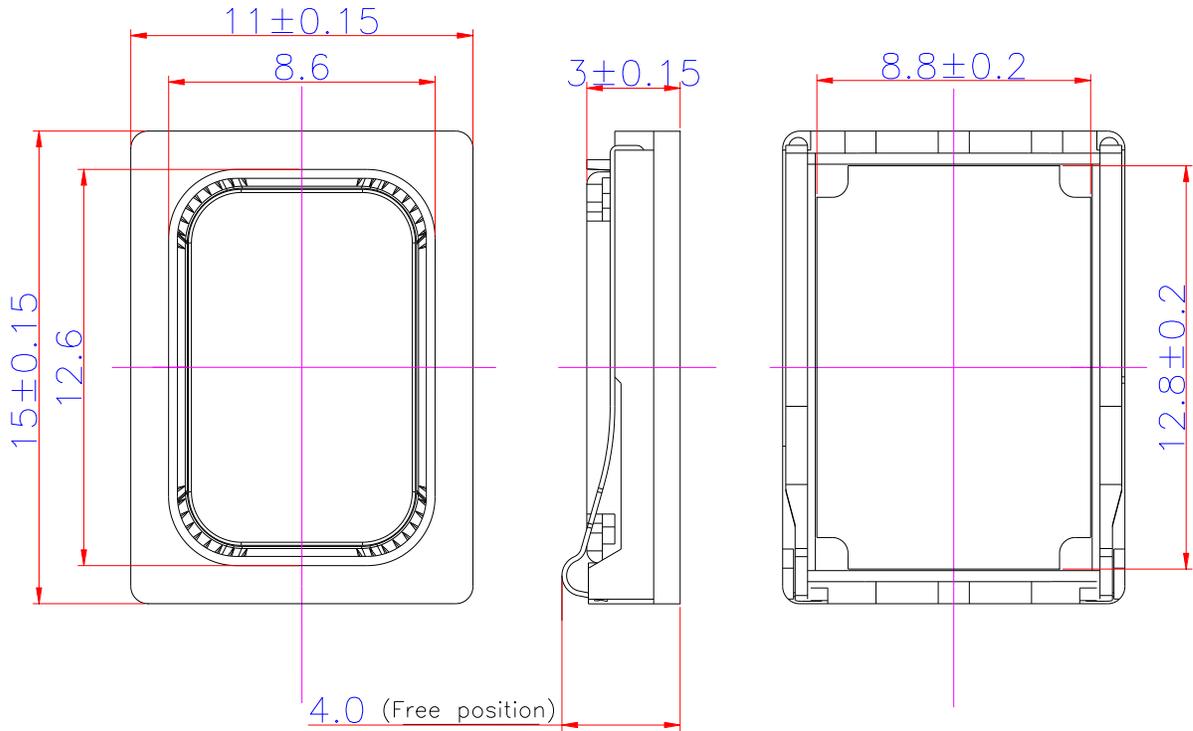
Parameter	Conditions/Description	Values	Units
Rated Input Power	in 1cc closed box	0.8	W
Max Input Power	in 1cc closed box	1.0	W
Rated Impedance	1V input	8±15%	Ω
Sound Pressure Level	2.53/0.1M at 2.0K Hz, in 1cc closed box	92±3	dB
Resonant Frequency (Fo)	In Free air in 1.0cc closed box	600±20% 900±20%	Hz
Frequency Range		F0-10k	Hz
Distortion	at 1K Hz, input 1.0V, in 1cc box	< 10%	-
Magnet	NdFeB		
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 20 kHz, in 1cc box	2.53	V
Polarity	cone will move forward with positive dc current to "+" terminal		
Weight		1.5	g
Operating		-30~+70	°C
Storage Temperature		-40-+80	°C
WaterProof		NA	

Notes: All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

**MECHANICAL DRAWING**

Units: mm

Tolerance: ±0.15mm



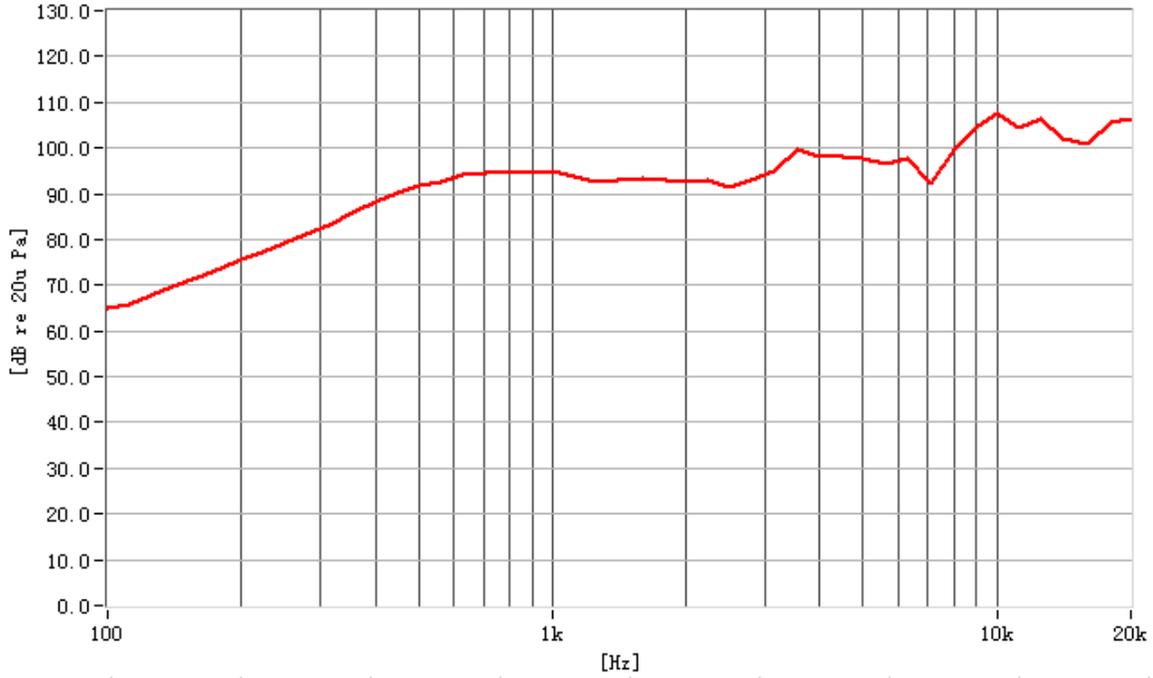
**CONSTRUCTION DETAIL**

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

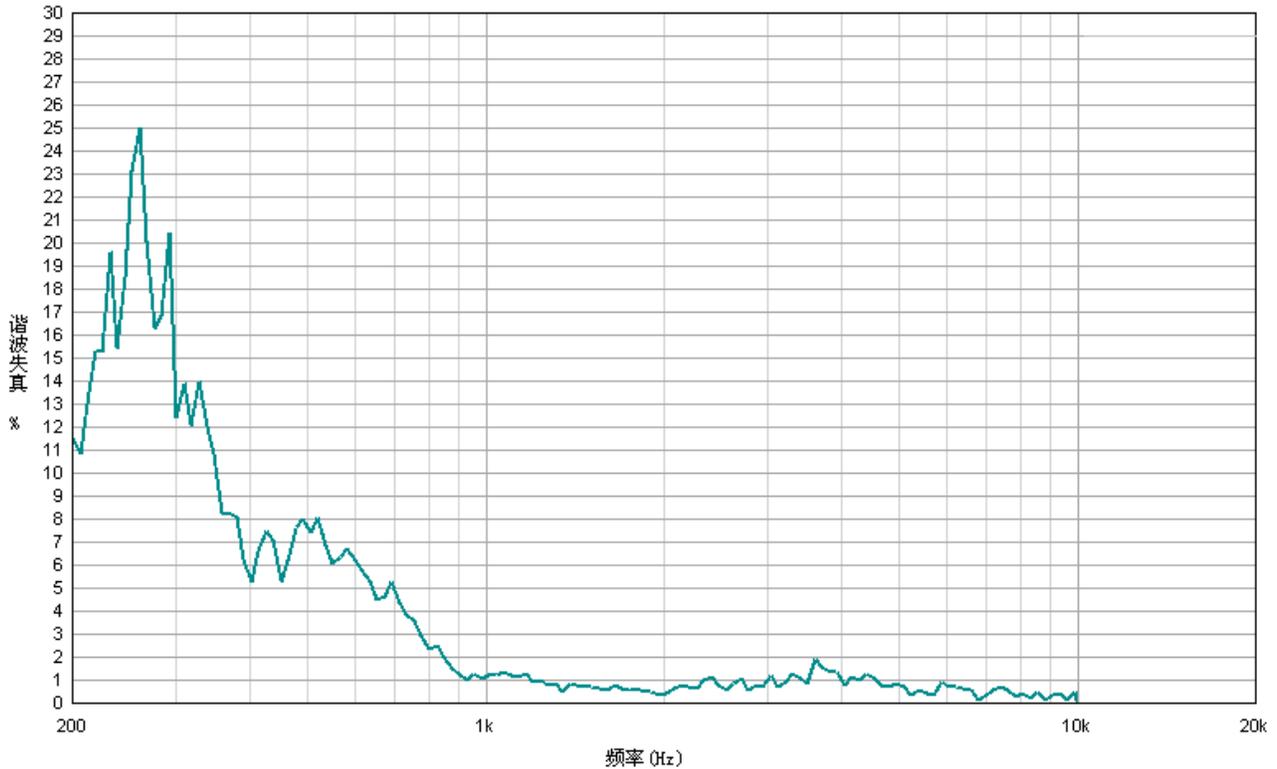
# RESPONSE CURVES

## Frequency Response Curve

XY Graph 6



## Total Harmonic Distortion Curve



**RELIABILITY TEST**

1	Reliability Test Performance	After any following test, parts should conform to original performance within $\pm 3$ dB tested with Rated Power, after 6 hours of recovery period.
2	High Temperature Test	96 hours at $+80^{\circ}\text{C}$
3	Low Temperature Test	96 hours at $-40^{\circ}\text{C}$
4	Humidity Test	96 hours at $+30^{\circ}\text{C} \pm 3^{\circ}\text{C}$ , 92-95% RH
5	Temp./Humidity Cycle	<p>The part shall be subjected 5 cycles. One cycle shall be 6 hours and consist of</p> <p style="text-align: center;">90 ~ 95 % RH</p> <p style="text-align: center;">65°C</p> <p style="text-align: center;">25°C</p> <p style="text-align: center;">0.5hr      6hrs      0.5hr      5hrs</p>
6	Vibration Test	<p>Frequency: 10~55~10Hz Oct/min      Amplitude: 1.5mm</p> <p>Duration: 2 hours each of 3 perpendicular directions</p>
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 Pink-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;

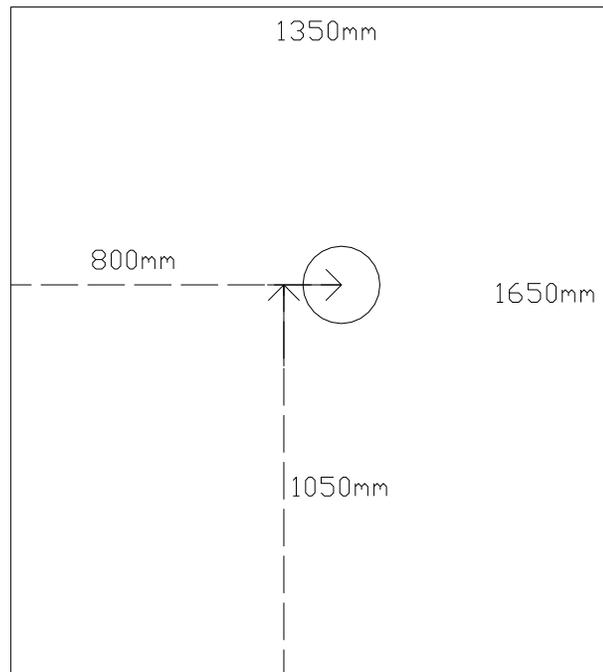


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker

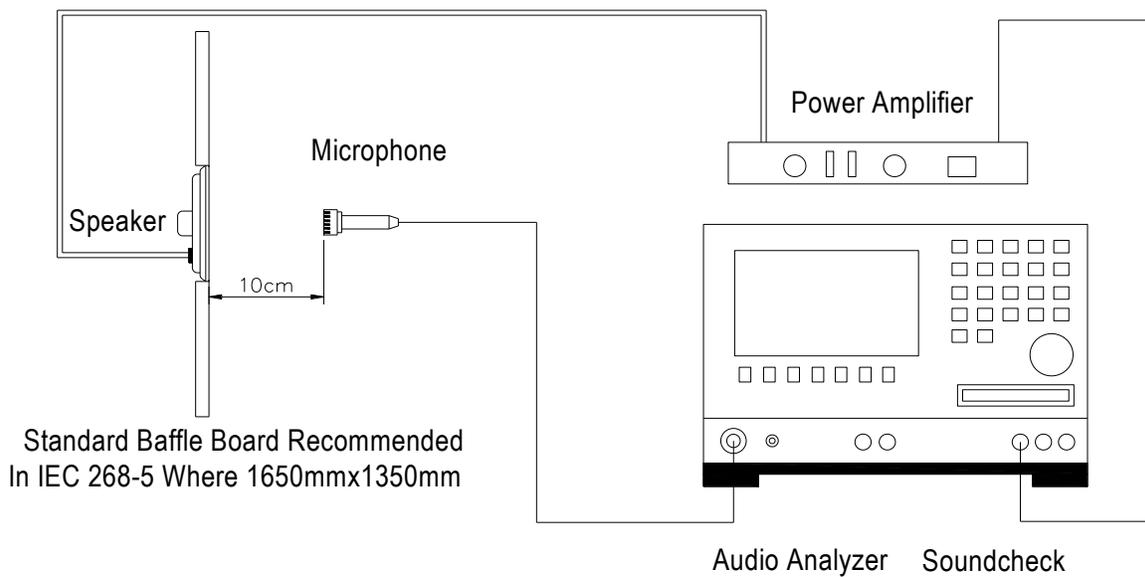


Fig. 2 Speaker Test Condition

# PACKAGING

units: mm

**每盘 100 个** 100pcs of speaker in each tray

**每箱 20 盘** 20 trays in one carton

**总计:2000 个 / 1 箱** Total:2000 pcs / 1 carton

**毛重: 4.5KGS** Gross Weight:4.5KGS

**净重: 3.0KGS** Net Weight: 3.0KGS

