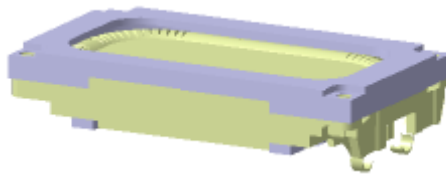


# Dynamic loudspeaker

**16 × 9 × 3 mm**

**CR1609L030BN8**



## Revision

Date	Version	Status	Changes	Approver
2016/09/30	V0.1	Draft	First release	NN
2016/10/18	V0.2		Drawings (frequency curve, speaker)	NN
2017/03/29	V1	Final	Update layout	LC
2017/08/01	V1		New logo	LD
2018/12/20	V1.1		Add THD curve	AX
2019/3/27	V1.2		Add print code	AX

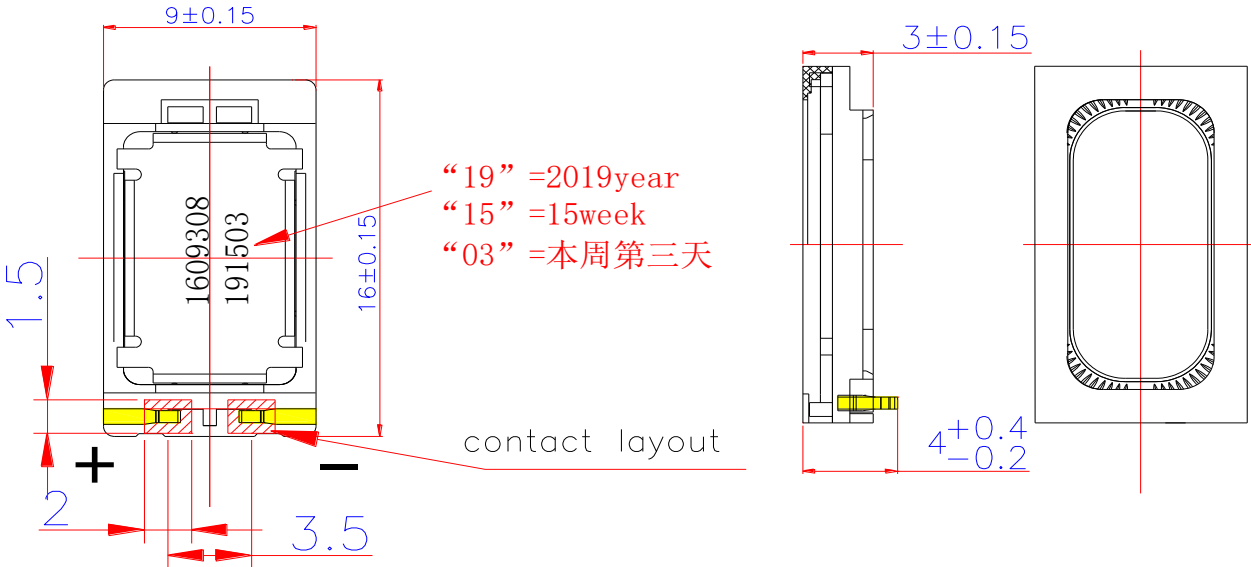
## Specifications

Parameter	Conditions/Description	Values	Units
Rated Input Power	IN 1CC BOX	0.5	W
Max Input Power	IN 1CC BOX	0.8	W
Impedance		8±15%	Ω
Sound Pressure Level (S.P.L.)	0.5W/10CM at 2000Hz, in 1cc box (0dB SPL=20μPa)	87±3	dB
Resonant Frequency (Fo)	IN Free air	700±20%	Hz
	In 1cc box	900±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K Hz, input 0.1W,	< 10%	-
Magnet	NdFeB		mm
Buzz, Rattle, etc.	must be normal at sine wave between 300~ 5K Hzin 1cc box	2.0	V
Polarity	cone will move forward with positive dc current to "+" terminal		
Weight		1.5	g
Operating Temperature		-20~+60	°C
Waterproof Rating		N/A	

Notes: Above Measuring condition under temperature :15~35°C R.H. 25~75%. Accordig to standard GB/T9396-1996

**MECHANICAL DRAWING**

Units: mm  
Tolerance: ±0.5mm



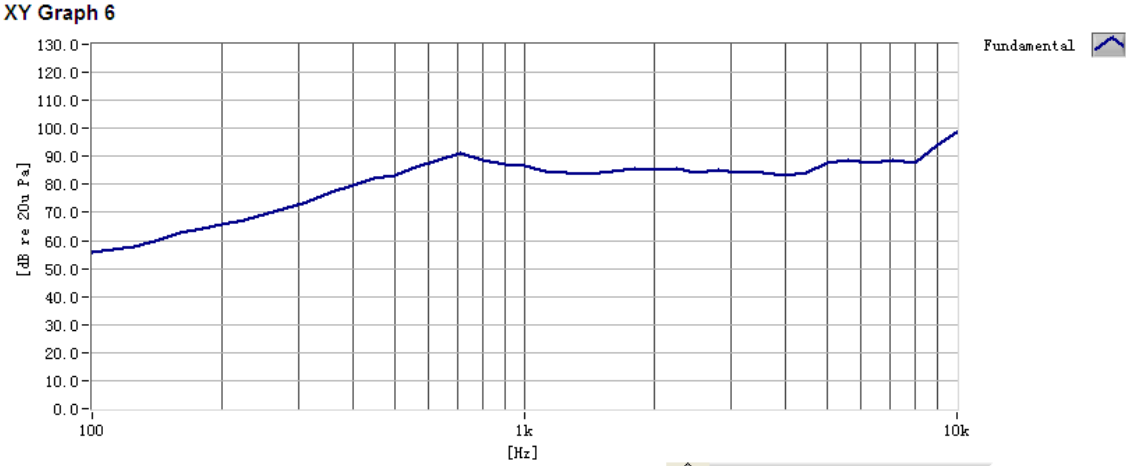
**CONSTRUCTION DETAIL**

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

# RESPONSE CURVES

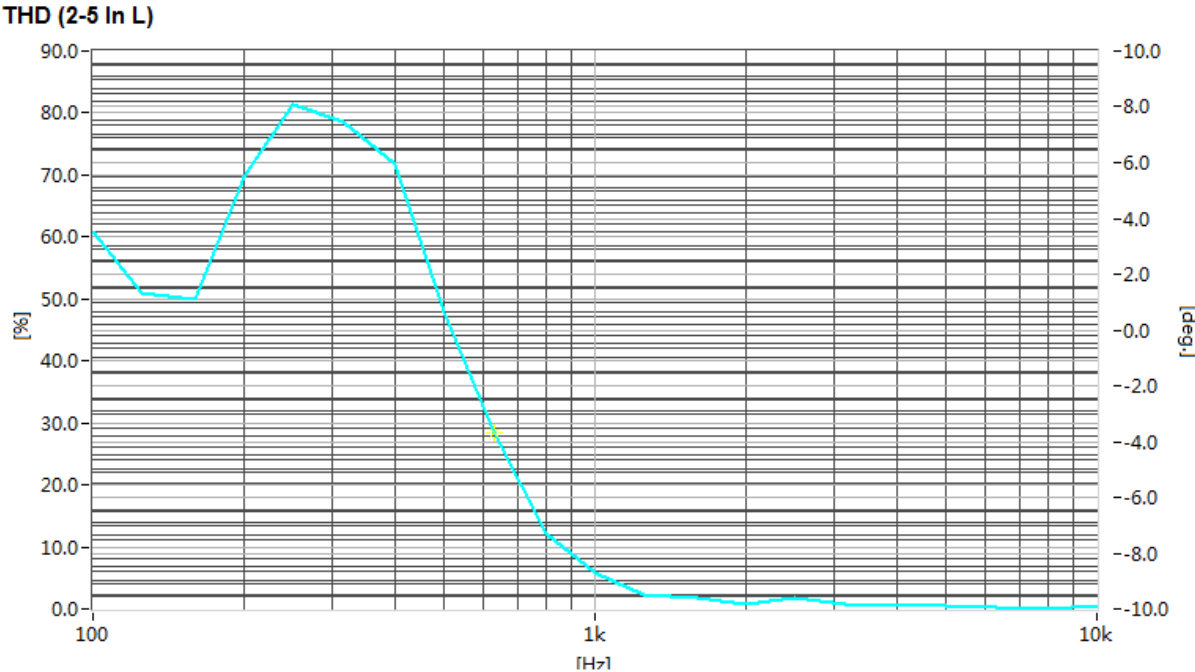
## Frequency Response Curve

Test condition: 0.1W/0.1M,



## Total Harmonic Distortion Curve

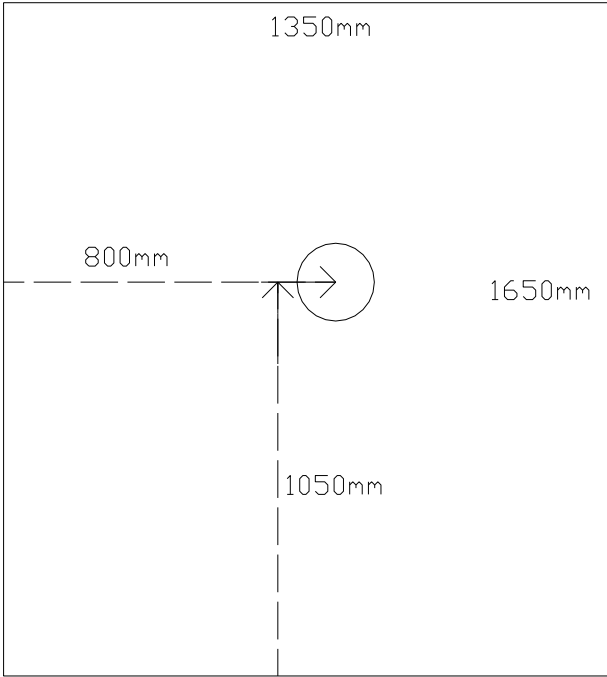
Test condition: 0.1W/0.1M,



**RELIABILITY TEST**

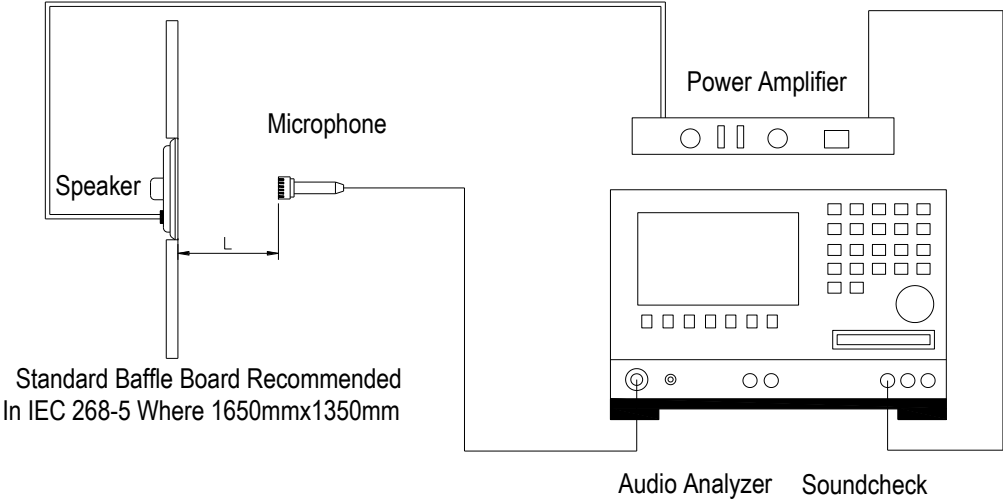
1	Reliability Test Performance	After any following test, parts should conform to original performance within $\pm 3$ dB tested with Rated Power, after 6 hours of recovery period.
2	High Temperature Test	96 hours at $+60^{\circ}\text{C} \pm 3^{\circ}\text{C}$
3	Low Temperature Test	96 hours at $-20^{\circ}\text{C} \pm 3^{\circ}\text{C}$
4	Humidity Test	$+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Relative Humidity(RH)90~95% 96 Hours
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;"> <math>90 \sim 95 \% \text{ RH}</math>  <math>65^{\circ}\text{C}</math>  <math>25^{\circ}\text{C}</math>  <math>0.5\text{hr}</math>    <math>6\text{hrs}</math>    <math>0.5\text{hr}</math>    <math>5\text{hrs}</math> </p>
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**

**Standard test condition of speaker**



**L=10cm**

**Fig. 2 Speaker Test Condition**

# PACKAGING

units: cm

Remark:

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: 4KGS            Gross Weight: 4 KGS

净重: 2KGS            Net Weight: 2 KGS

