Dynamic receiver

12×6×2.0 mm

With spring

CR1206L020YN32

Revision

Date	Version	Status	Changes	Approver
2019/11/21	V0.1	Draft	Initial release	AX
2024/4/22	V0.2	Draft	Update SPL and testing method，add gasket	AX
2024/6/6	V0.3	Draft	Update testing method and curves， add back gasket	AX
2024/6/27	V0.4	Draft	Add curves limited, update F0	AX
2024/8/9	V0.5	Draft	Update F0	AX
2024/12/31	V0.6	Draft	Update resistance parameter	AX

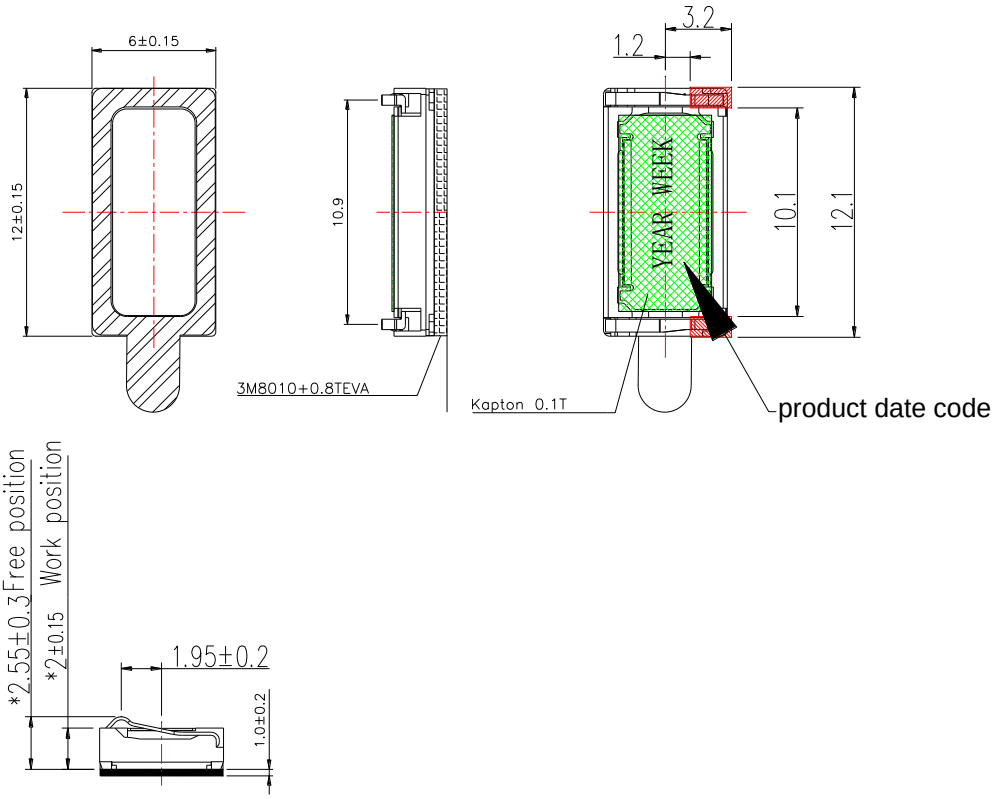
Parameter	Conditions/Description	Values	Units
Rated Input Power		20	mW
Max Input Power		40	mW
Voice Coil DC Resistance		26.8±10%	Ω
Sound Pressure Level (S.P.L.)	at 1.0K in 20mW/1cm (0dB SPL=20μPa), baffle	91±3	dB
Resonant Frequency (Fo)	At 800mV in Free air	450±20%	Hz
Frequency Range	Output S.P.L. -10dB	200~8K	Hz
Distortion	at 1K Hz, input 800mV,	< 5%	-
Magnet	NdFeB	8.5*2.5*0.7H	mm
Buzz, Rattle, etc.	must be normal at sine wave between 200 ~ 8K Hz	0.8	V
Polarity	cone will move forward with positive dc current to"+" terminal		
Weight		0.5	g
Operating Temperature		-25~+60	℃
Storage Temperature		-25~+60	℃
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

Tolerance: ±0.5mm



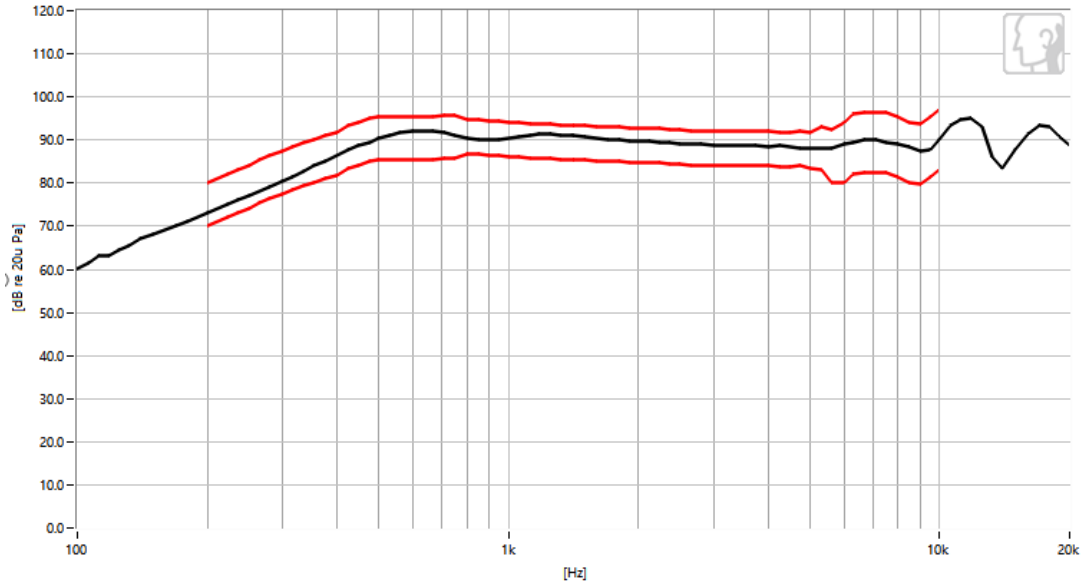
CONSTRUCTION DETAIL

No.	Part Name	Materia	Qty.	Treatment	Remark
1	Frame	Plastic	1		
2	Front cover	Cu	1		
3	Diaphragm	Polymer	1		
4	Magnet	Nd-Fe-B	1		
5	Inner pole plate	Steel	1		
6	Outer pole shoe	Steel	1		
7	Voice coil	Copper	1		
8	Leaf spring	Steel	2		

RESPONSE CURVES

Frequency Response Curve

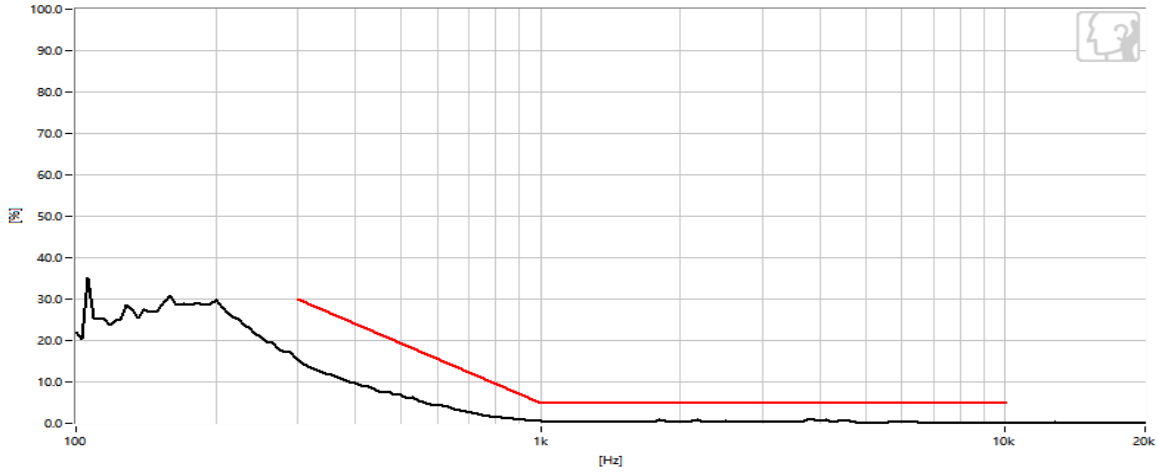
Test condition: 20mW/1cm



Frequency(Hz)	200-800	801-5K	5001-10K
Upper limit	+5	+4	+7
Lower limit	-5	-4	-7

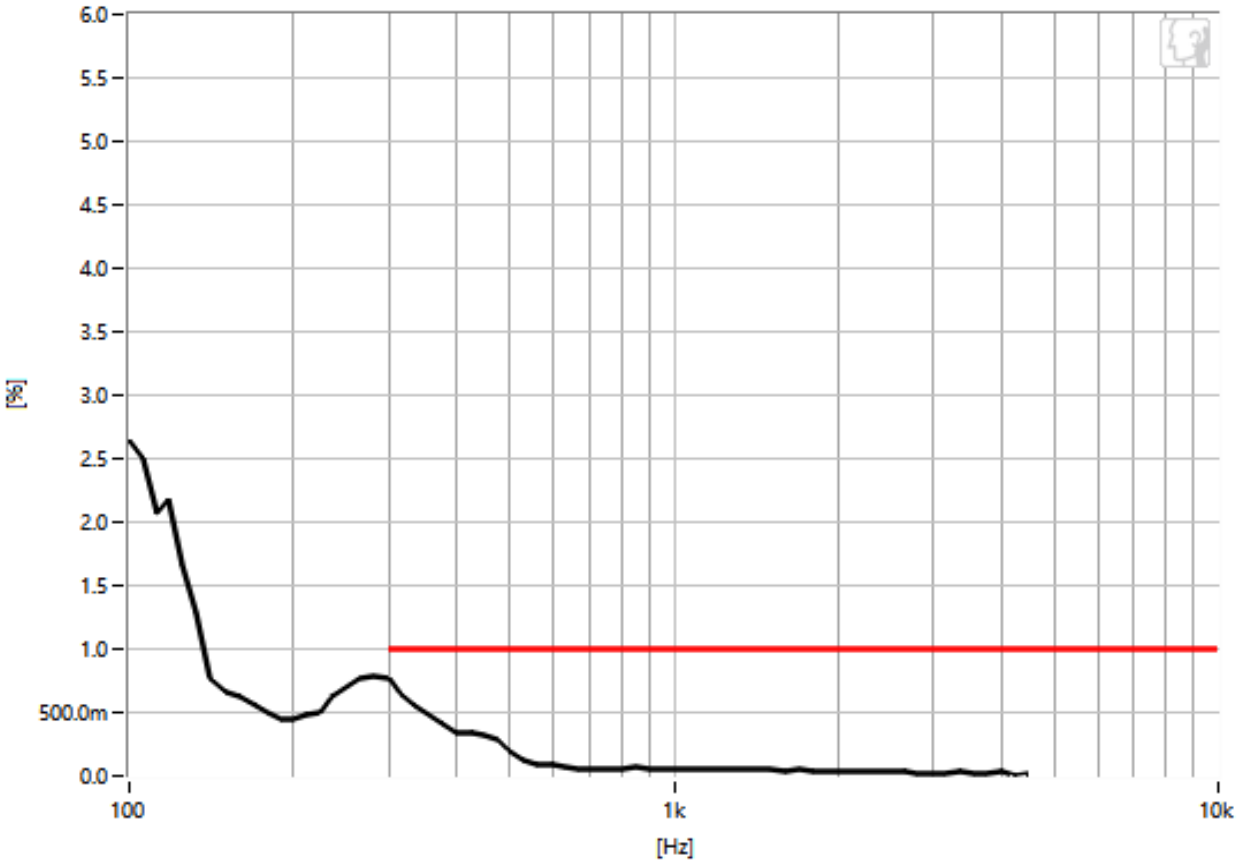
Hz	200	300	400	500	600	710	800	900	1000	1180	1500	2000	3000	4000	5000	6000	7100	8000	9000	10000
Upper	80	87.5	91.9	95.4	95.3	95.7	94.7	94.5	94.1	93.7	93.3	92.7	92.1	92	91.6	94.2	96.5	95.4	93.8	97
Lower	70	77.5	81.9	85.4	85.3	85.7	86.7	86.5	86.1	85.7	85.3	84.7	84.1	84	83.6	80.2	82.5	81.4	79.8	83

THD



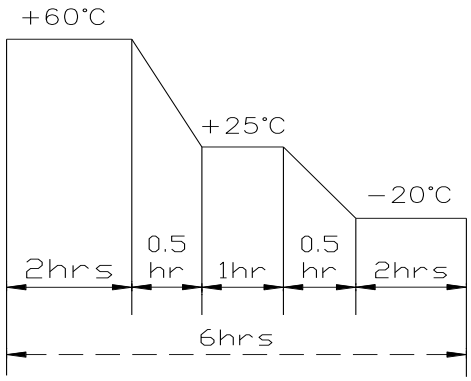
Frequency(Hz)	300	1K	10K
limit(%)	30%	5%	5%

R&B



Frequency(Hz)	300	500	10K
limit(%)	1	1	1

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	+ 60 ± 2 °C Humidity Random for 96 Hours. (GB/T 9397—200X)
3	Low Temperature Operation and Storage	− 25 ± 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

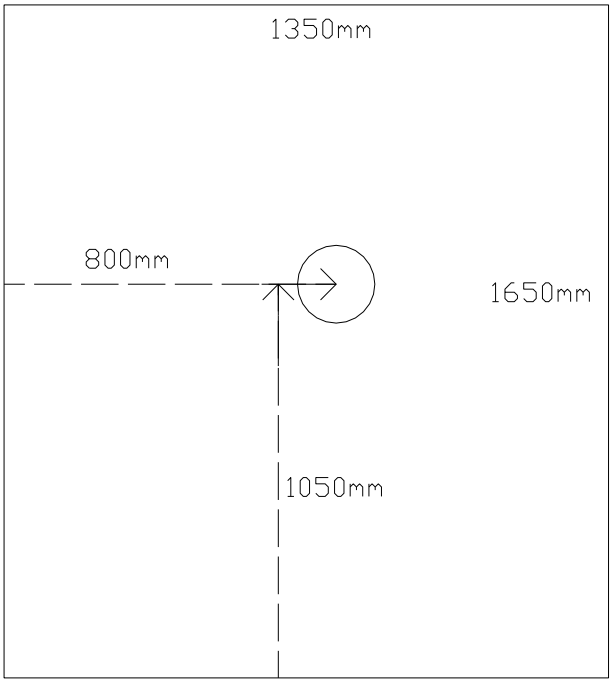
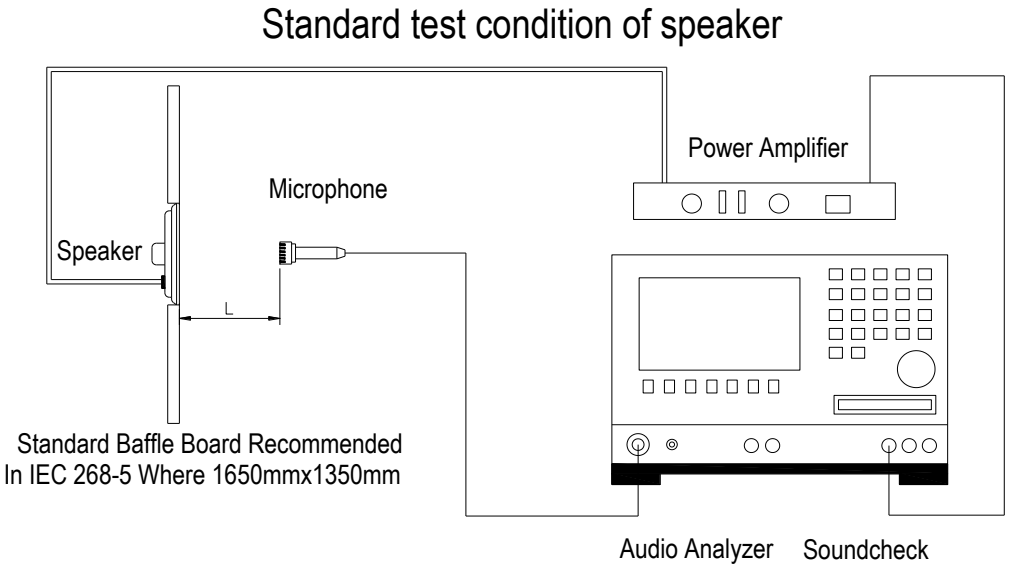


Fig. 1 Block Diagram for Measurement Method



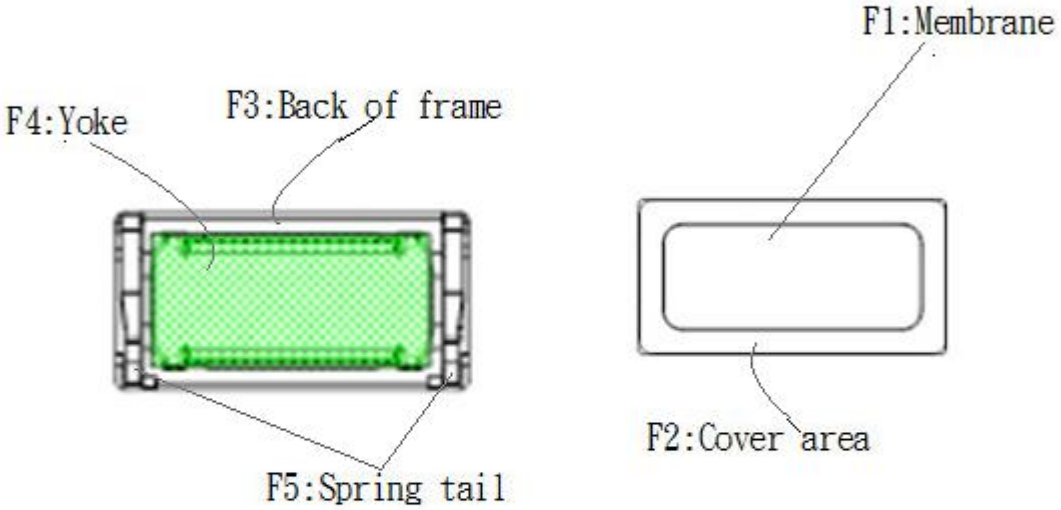
L=1cm

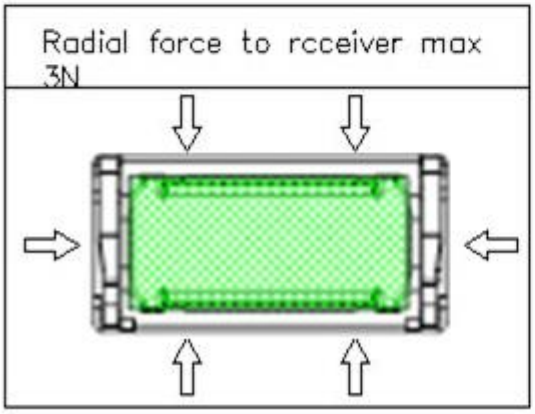
Fig. 2 Speaker Test Condition

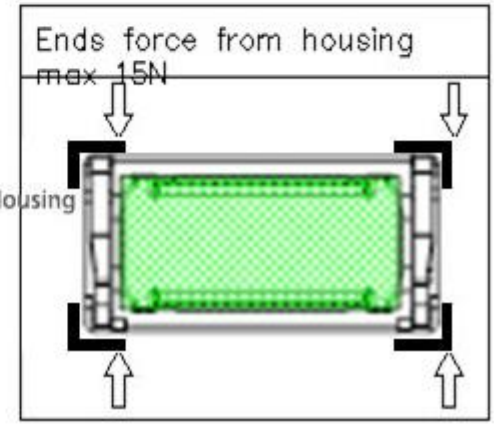
Permitted force to receiver

Max. allowable compression force

No.	from	to	Max. force
1	F2	F3	5N
3	F4	F2	5N
4	F1		0N
5	F5		0N

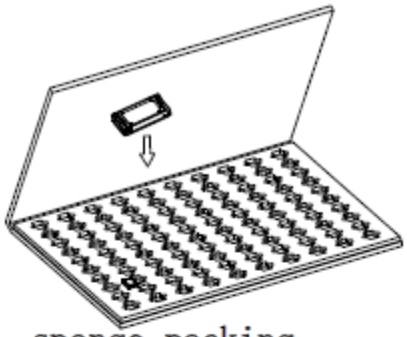




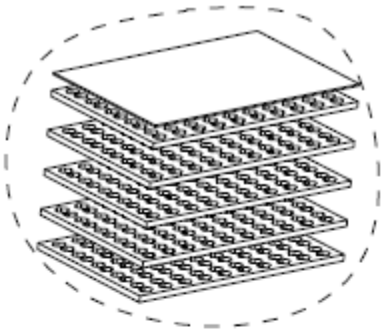


PACKAGING

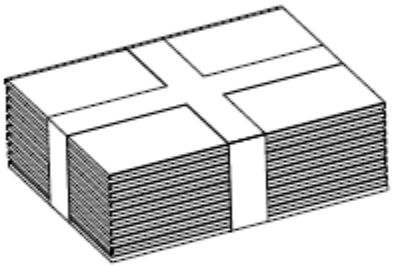
Storage conditions:
Speakers should be well packed.
The temperature should be as stable as possible and between -10° C and +40° C.
The relative humidity should be below 90%.
There should be no acid or other harmful gases in the surrounding air (GB/T 9397—200X)



sponge packing
10x10=100pcs
100pcs per tray



Pasteboard
10X100=1000pcs
1000pcs per pasteboards



Packing box
2 cartons per paking box
Total 2000pcs

1000pcs/carton