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		Drawing No.	KFC6279
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1. Scope

This specification is applied to the dynamic speaker which is used all of the electrical acoustic product.

-- compact, rich sound

-- applications: mobile phone, PDA, notebook computer, etc. ...

2. General

2.1 Out-Diameter : 17x10 mm

2.2 Height : 3.7 mm

2.3 Weight : 1.2 g

2.4 Operating Temperature range:

-20~+70℃ without loss of function

2.5 Store Temperature range:

-40~+85℃ without loss of function

3. Electrical and Acoustic Characteristics.

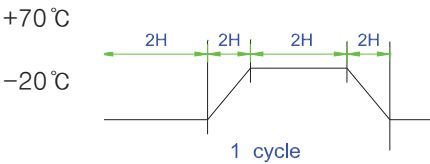
Test condition : 15 ~ 35 ℃, 25% ~ 85% RH, 860~1060 mbar

3.1 Speaker

No	Items	Specification
1	Impedance	8 Ω ± 15% (at 1Vrms,1.5kHz)
2	Sound Pressure Level	86 dB ± 3dB (at 1kHz/0.1W/0.1M)
3	Resonance Frequency	1000 Hz ± 20%
4	Frequency Range	F0 ~ 10.0kHz
5	Input Power	Rated 0.5 W / Max. 0.8 W
6	Distortion	<10% Max. at 2kHz/2Vrms
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 2V sine wave signal swept at frequency range.
8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.

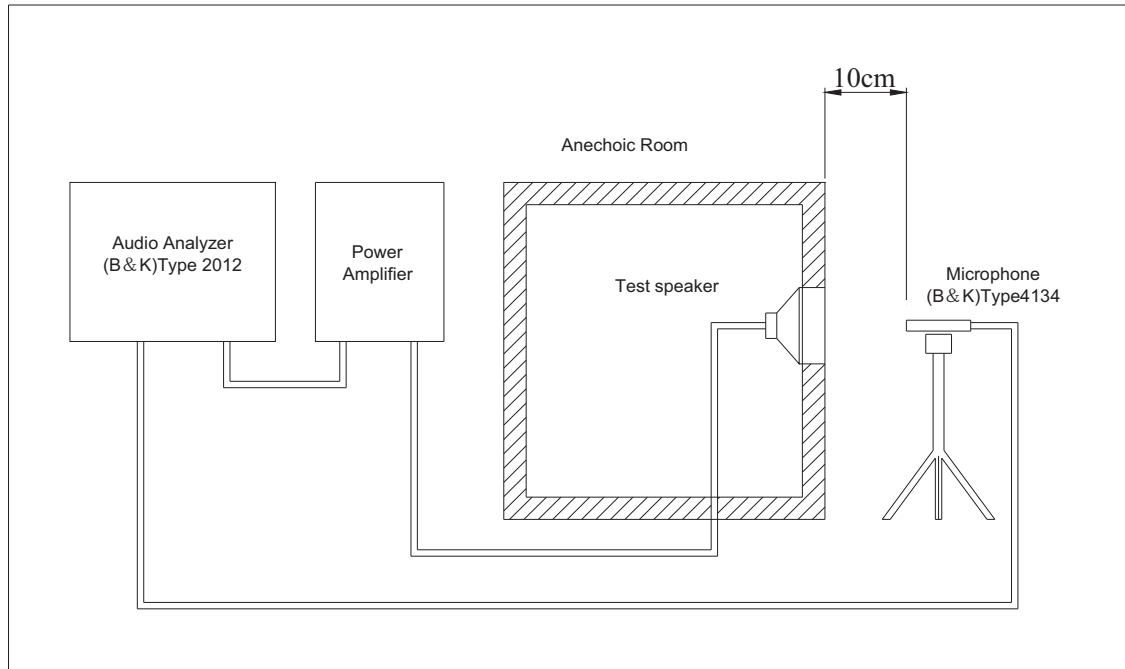
3.2 Receiver

No	Items	Specification
1	Impedance	8 Ω ± 15% (at 1Vrms,1.5kHz)
2	Sound Pressure Level	118 dB ± 3dB (1kHz/100mV)
3	Frequency Range	300~3400Hz
4	Input Power	Rated 0.01 W / Max. 0.03 W
5	Distortion	<3% Max. at 1kHz/1Vrms
6	Buzz and Rattle	Should not be audible buzzes,rattles when the 0.28V sine wave signal swept at frequency range.

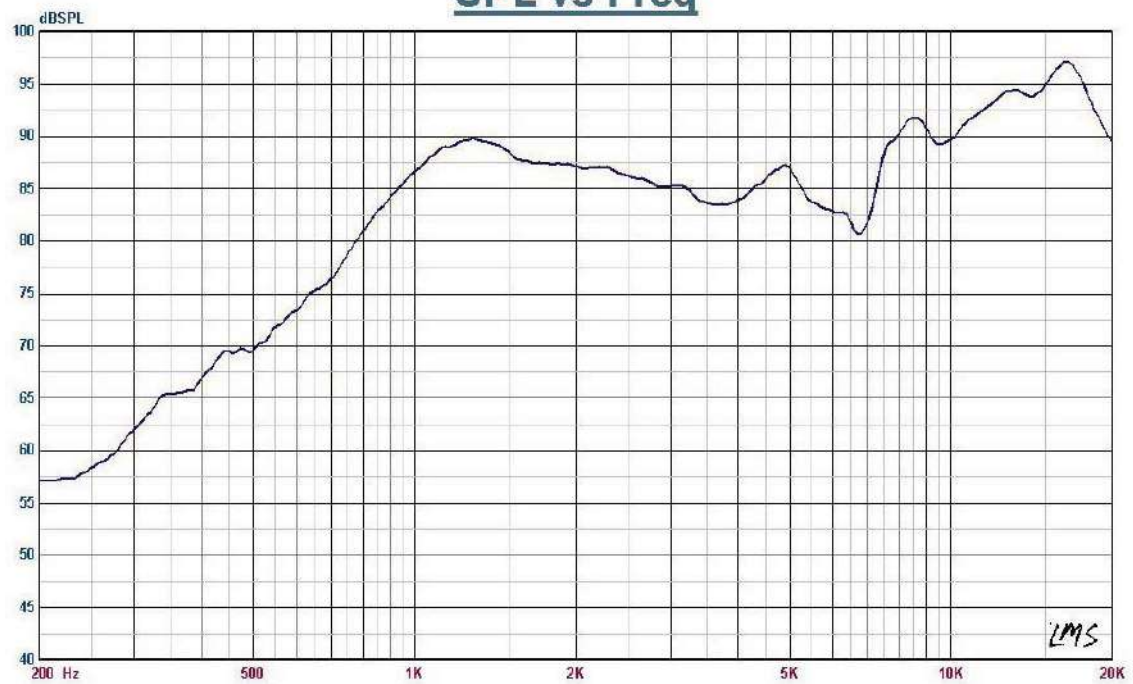
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4. Reliability Test After test(1~7item), the speaker S.P.L . difference shall be within $\pm 3\text{dB}$, and the appearance not exist any change to be harmful to normal operation (e.g. cracks,rusts,damages and especially distortion).			
No	Items	Specification	
1	High Temperature Test	After being placed in a chamber with $+85\pm 3\text{ }^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.	
2	Low Temperature Test	After being placed in a chamber with $-40\pm 3\text{ }^{\circ}\text{C}$ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.	
3	Humidity Test	After being placed in a chamber with 85 to 90%R.H. at $+40\pm 2\text{ }^{\circ}\text{C}$ for hours and then being placed in natural condition for 1 hour, speaker shall be measured.	
4	Thermal Shock Test	After being placed in a chamber at $+70^{\circ}\text{C}$ for 1 hour, then speaker shall b placed in a chamber at -20°C for 1 hour(1 cycle is the below diagram). After 6 above cycles, speaker shall be measured after being placed in natural condition for 1 hour.  The diagram illustrates one cycle of a thermal shock test. It shows a temperature profile starting at $+70^{\circ}\text{C}$, dropping to -20°C, and then returning to $+70^{\circ}\text{C}$. The duration of each temperature hold is labeled as 2H (2 hours). The entire sequence of heating, cooling, and heating is labeled as '1 cycle'.	
5	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 perpendicular directions for 1 hour, then placed in natural condition for 1 hour, speaker shall be measured.	
6	Drop Test	The speaker when mounted in the jig which weight 85g~100g, shall with stand 15 times random drops from a height of 1.5 meter to a concrete floor faced with 5mm thick hard wood board.and be nothing mechanical damage.	
7	Load test	After being applied loading white noise with input power 0.5W(2Vrms.) for 96 hours, then placed in natural condition for 1 hour, speaker shall be measured.	
8	Insulation test	When they are measured with DC 100V the insulation resistance between v.c. terminal and frame must be more than 1 M Ω	

5. Measurement Block Diagram & Response curve

Speaker

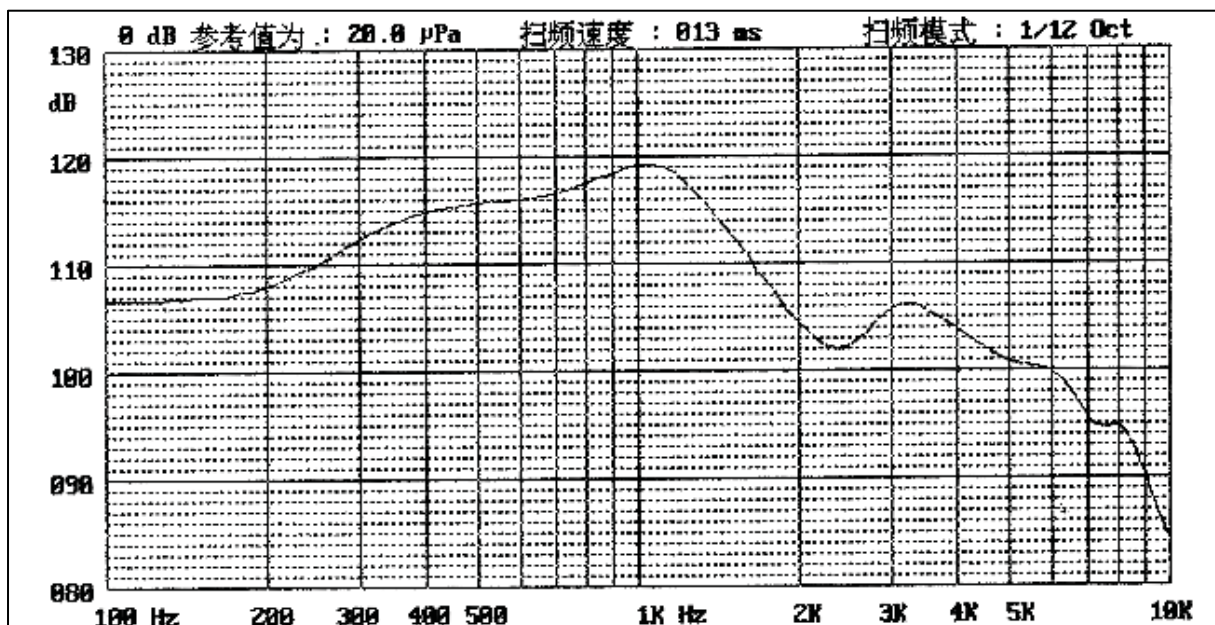
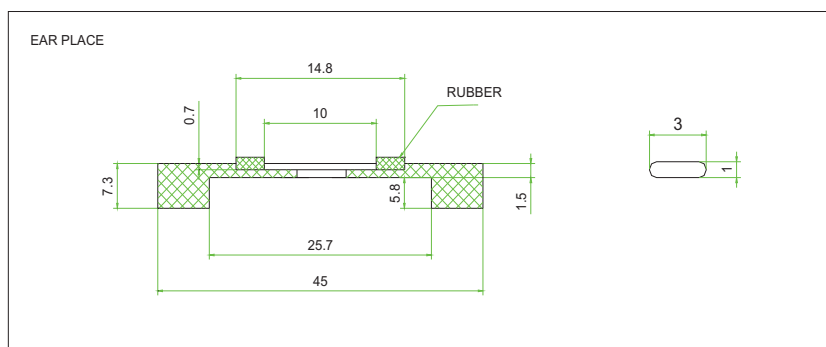
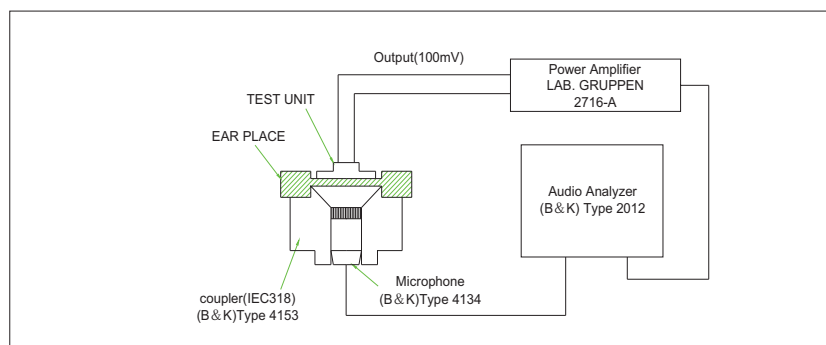


SPL vs Freq



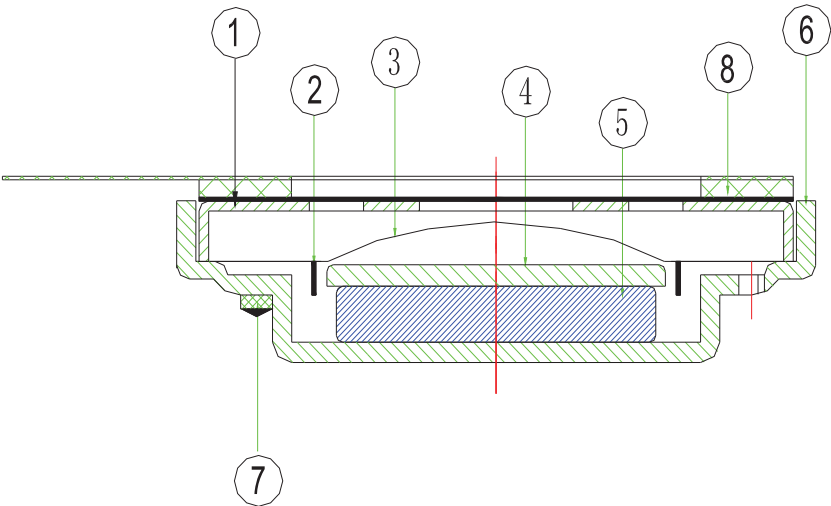
6. Measurement Block Diagram & Response curve

Receiver



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7. Structure



8	Gasket	1	unwoven fabric	
7	Terminal	1	EPOXY PCB	
6	Frame	1	SPCC	
5	Magnet1	1	Nd-Fe-B	
4	Plate1	1	Spcc	
3	Diaphragm	1	PEI	
2	Voice Coil	1	Copper	
1	Cap	1	SUS304	
No.	Part Name	Q'ty	Material	Remarks

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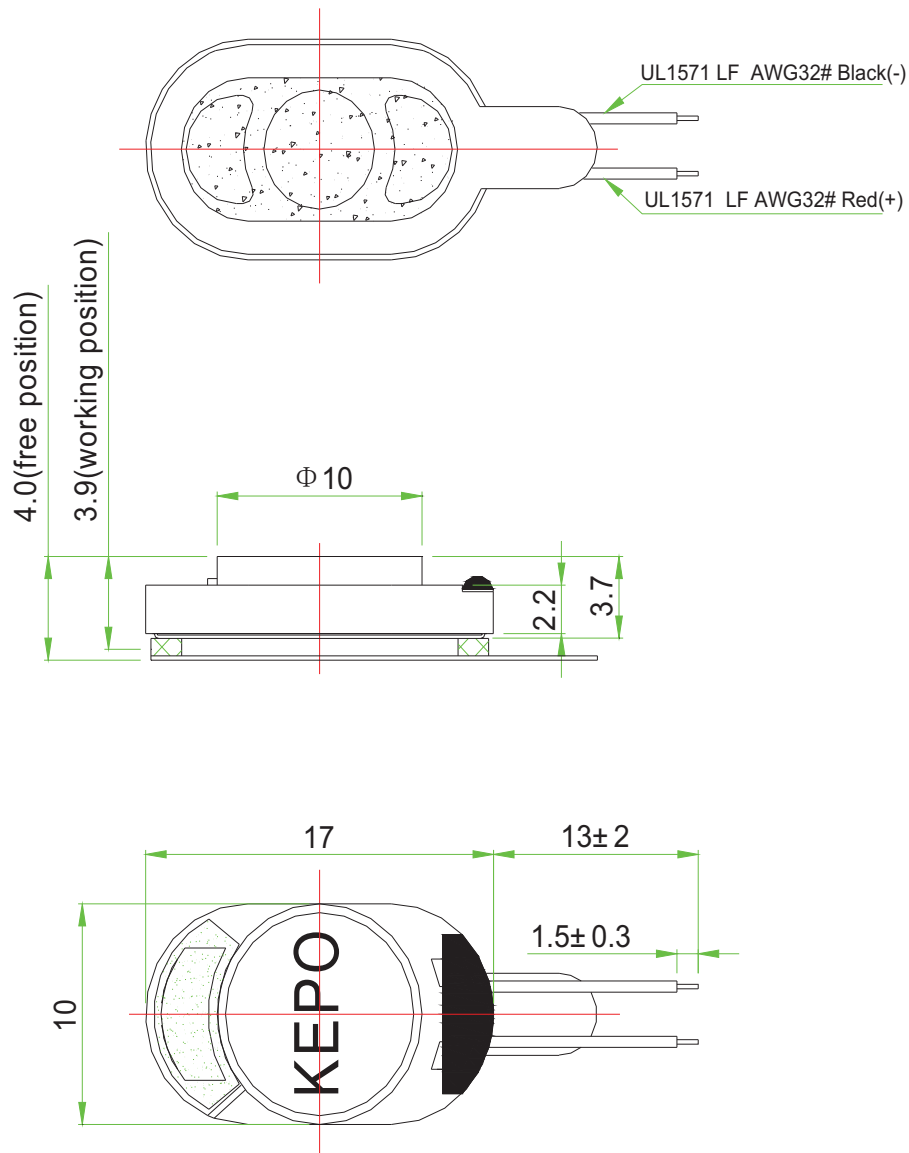
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8. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm

Tolerance : ± 0.2