

SPECIFICATION

Customer : KEPO

Applied To :

Product Name : SPEAKER

Model Name : KP1636SP1

Drawing No. : KF3.001.019.01

Signature of Approval

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Signature of KEPO

Approved by	Checked by	Issued by	Date



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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 : \varnothing 16 mm

2.2 Height : 3.6 mm

2.3 Weight : 1.4 gr.

2.4 Operating Temperature range:

-20~+70°C without loss of function

2.5 Store Temperature range:

-20~+70°C without loss of function

3. Electrical and Acoustic Characteristics.

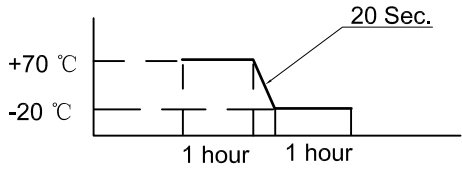
Test condition : 15 ~ 35 °C, 25% ~ 85% RH, 860~1060 mbar

	Items	Specification
1	Impedance	$8 \Omega \pm 15\%$ (at 1Vrms,1.5kHz)
2	Sound Pressure Level	86dB \pm 3dB(1kHz/0.1W/0.1M)
3	Resonance Frequency	700 Hz \pm 20%
4	Frequency Range	$F_0 \sim 10$ kHz
5	Input Power	Rated 0.3W / Max. 0.5W
6	Distortion	<10% Max. at 2kHz/0.1W
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 1.55V sine wave signal swept at frequency range.
8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.

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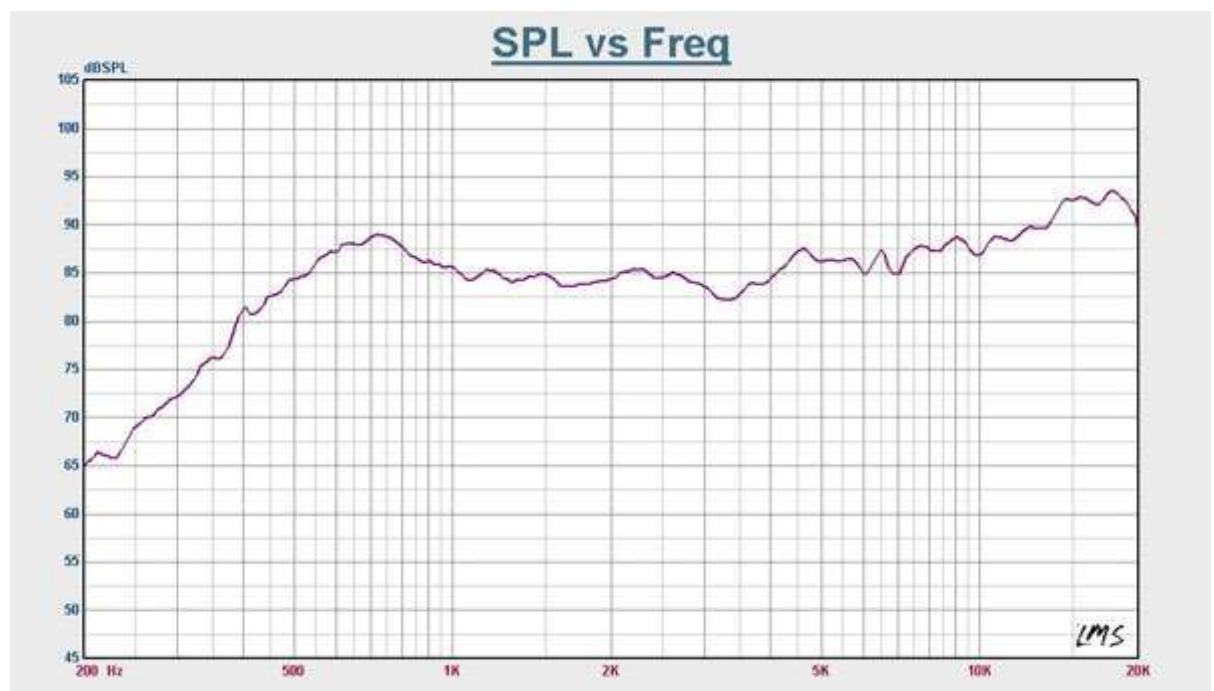
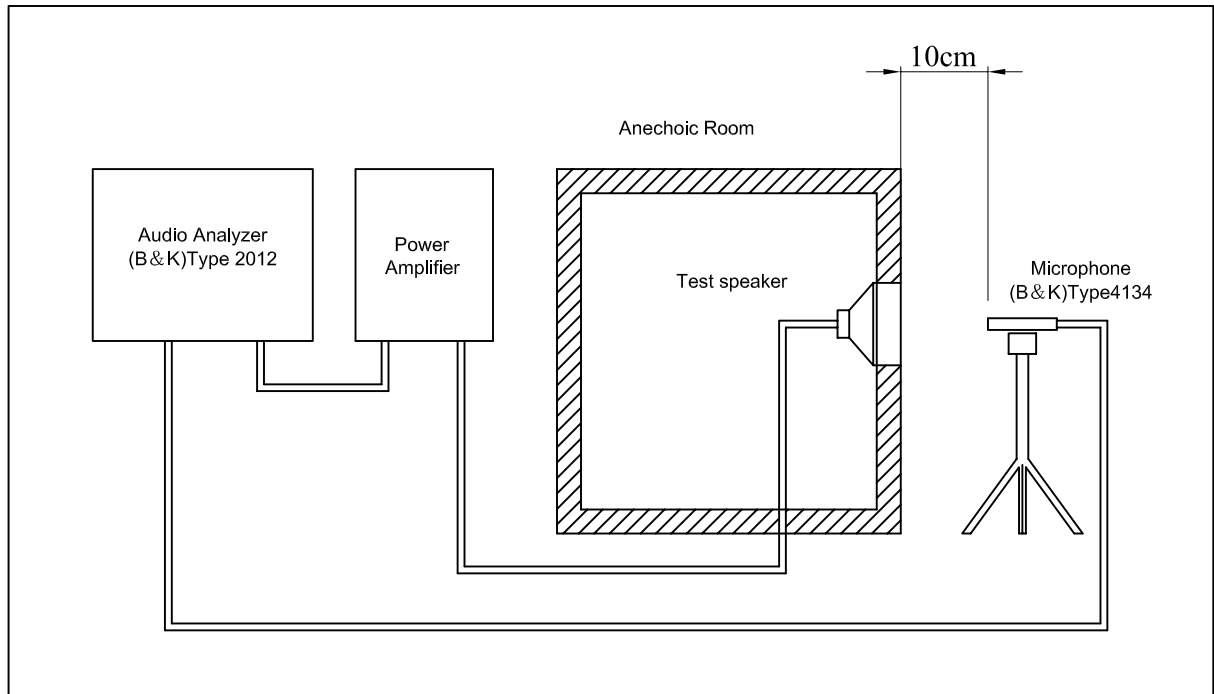
4. Reliability Test

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).

	Item	Specification
1	High Temperature Test	After being placed in a chamber with $+70\pm 3\text{ }^{\circ}\text{C}$ 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 $-20\pm 3\text{ }^{\circ}\text{C}$ 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 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
4	Thermal Shock Test	<p>After being placed in a chamber at $+70\text{ }^{\circ}\text{C}$ for 1 hour, then speaker shall be placed in a chamber at $-20\text{ }^{\circ}\text{C}$ for 1 hour(1 cycle is the below diagram).</p> <p>After 6 above cycles, speaker shall be measured after being placed in natural condition for 1 hour.</p> 
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 0.3W 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

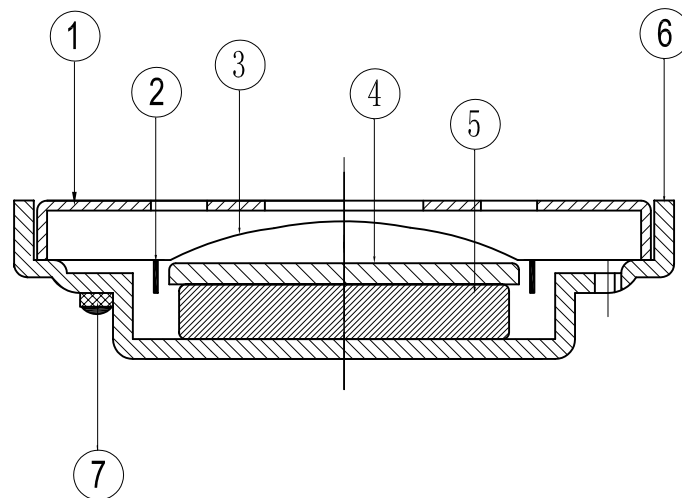
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5. Measurement Block Diagram & Response curve



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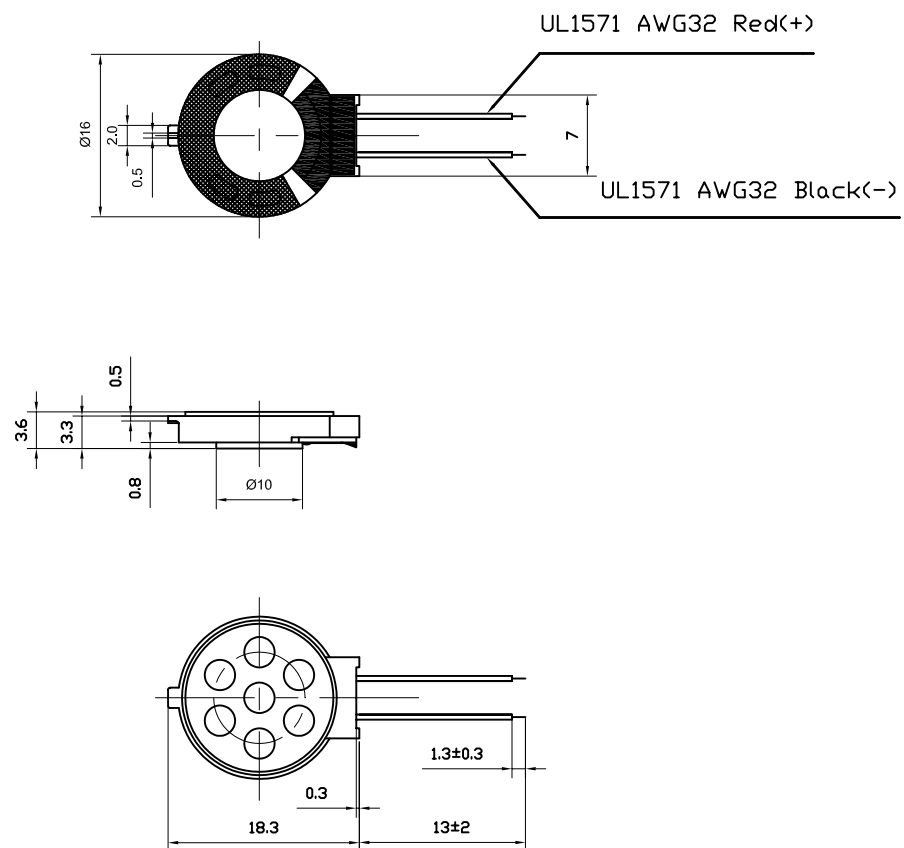
6. Structure



7	Terminal	1	Epoxy PCB	
6	Frame	1	SPC	
5	Magnet	1	Nd-Fe-B	
4	Plate	1	SPC	
3	Diaphragm	1	PEI	
2	Voice Coil	1	Copper	
1	Cap	1	SUS304	
No.	Part Name	Q'TY	Material	Remarks

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7. Dimensions



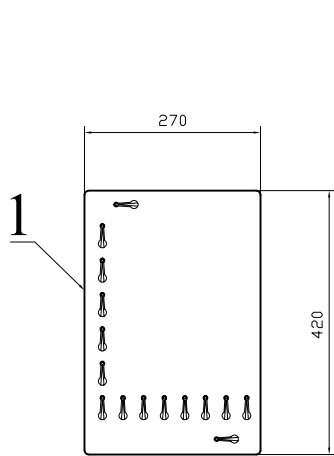
FIRST ANGLE PROJECTION



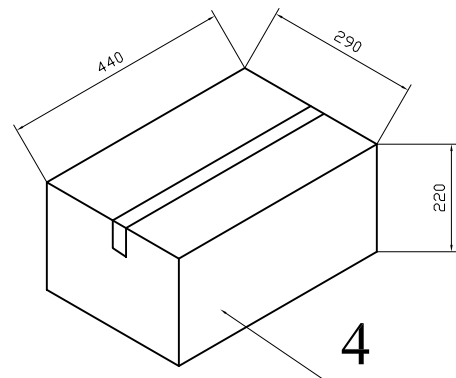
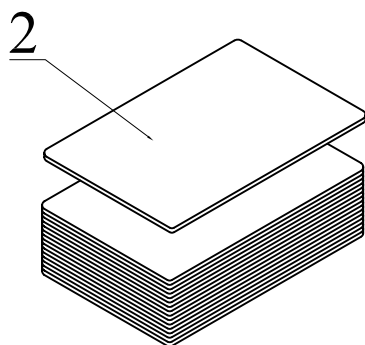
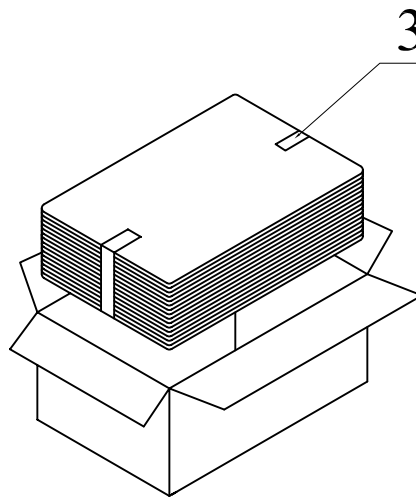
UNIT : mm
Tolerance : ± 0.2

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8. Packing



100Pcs



QTY: 2000Pcs
440 x290 x220

