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Model No. : KP25x16SP4L2-4332	Revision No.	1.1
	Drawing No.	KFC4332

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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: telephone, computer, etc. ..

## 2. General

- 2.1 Out-Diameter : 25x16 mm
- 2.2 Height : 5.5 mm
- 2.3 Weight : 2.5 gr.
- 2.4 Operating Temperature range:  
-20~+60℃ without loss of function
- 2.5 Store Temperature range:  
-30~+80℃ without loss of function

## 3. Electrical and Acoustic Characteristics.

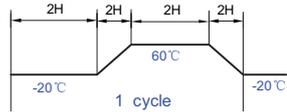
Test condition : 15 ~ 35 ℃, 25% ~ 85% RH, 860~1060 mbar

	Items	Specification
1	Impedance	8 Ω ± 15%(at 1Vrms,2kHz)
2	Sound Pressure Level	79 dB ± 3dB( 1W/1M )At AVG 2000Hz,2500Hz,3000Hz,4000Hz
3	Resonance Frequency	1280 Hz ± 25%
4	Frequency Range	f <sub>0</sub> ~ 18.0kHz
5	Input Power	Rated 0.8W / Max. 1.3W
6	Distortion	<5% Max. at 1kHz/0.8W
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 0.8W sine wave signal swept at frequency range.
8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.
9	Diaphragm Moving Range	When supplying the sinusoidal signals at following voltage in the specified frequency range, the range within which the vibration part can move over the frame, shall be measurd.(without scoustic loading or baffle) constant voltage:2.54v,frequency range:f <sub>0</sub> to 20KHz,0.6mm or less

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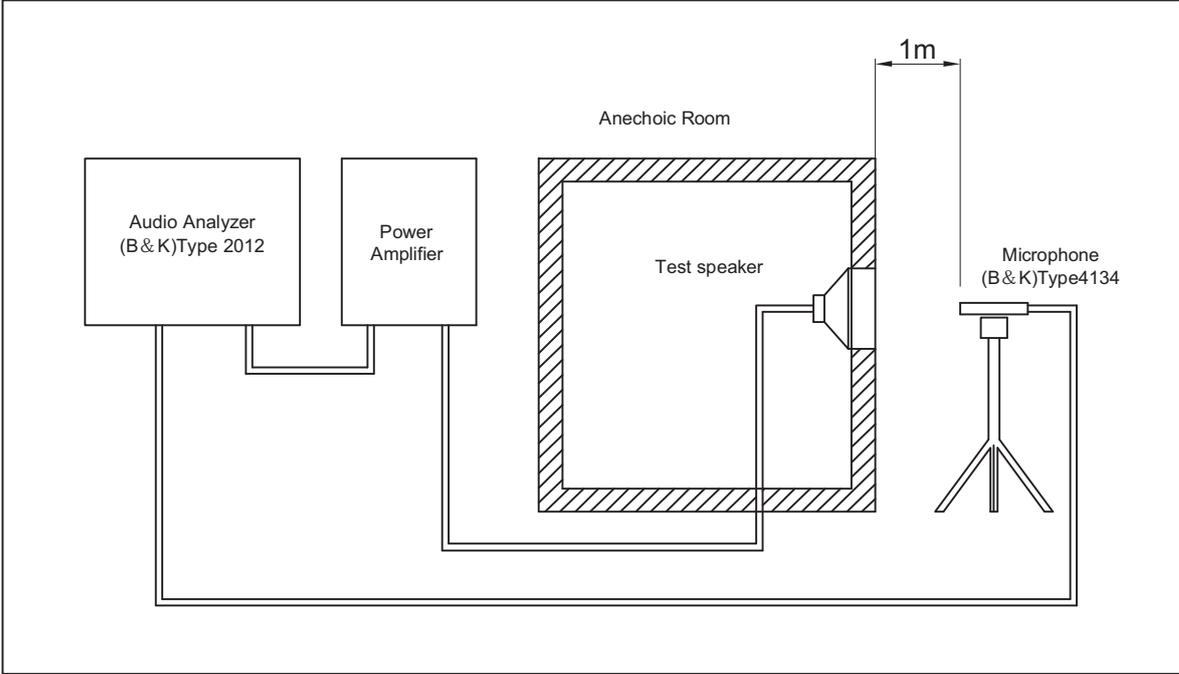
#### 4. Reliability Test

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).

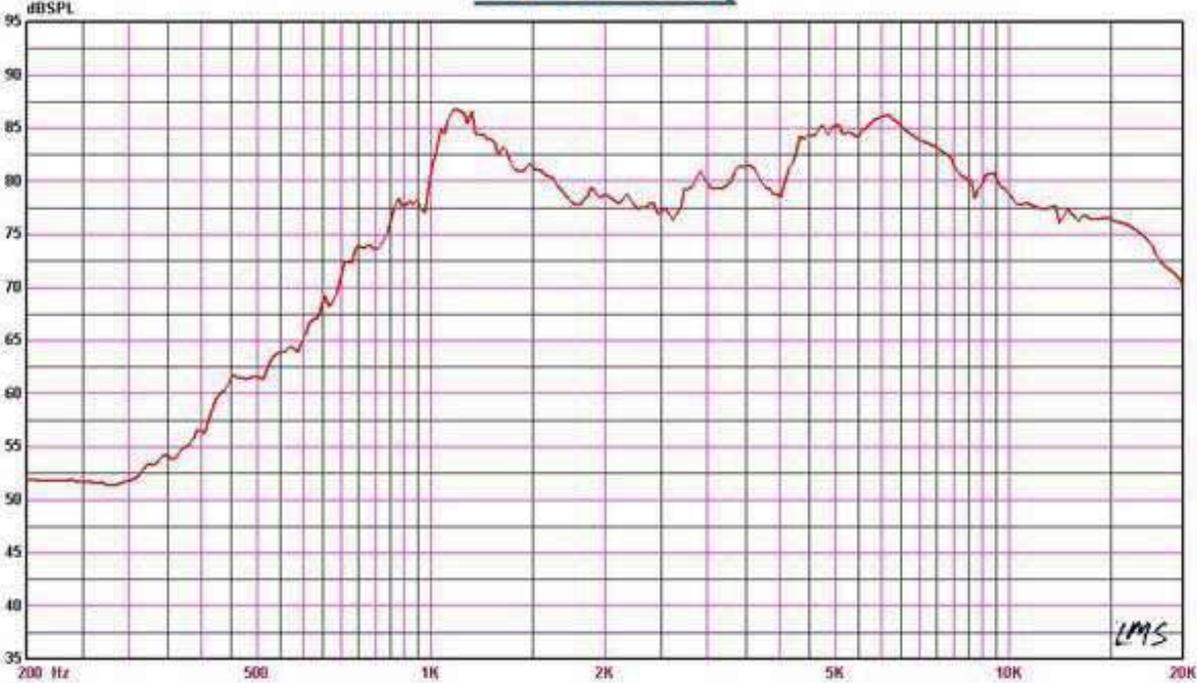
	Item	Specification
1	High Temperature Test	After being placed in a chamber with $60\pm 3\text{ }^{\circ}\text{C}$ for 168 hours and then being placed in natural condition for 2 hours, speaker shall be measured.
2	Low Temperature Test	After being placed in a chamber with $-20\pm 3\text{ }^{\circ}\text{C}$ for 168 hours and then being placed in natural condition for 2 hours, speaker shall be measured.
3	Humidity Test	After being placed in a chamber with 95%R.H. at $50\pm 2\text{ }^{\circ}\text{C}$ for 168 hours and then being placed in natural condition for 2 hours, speaker shall be measured.
4	Temperature cycling Test	<p>After being placed in a chamber with <math>-20\text{ }^{\circ}\text{C}</math> for 2 hours,then changed the temperature from <math>-20\text{ }^{\circ}\text{C}</math> to <math>60\text{ }^{\circ}\text{C}</math> for 2 hours,kept on the temperature <math>60\text{ }^{\circ}\text{C}</math> for 2 hours,then changed the temperature from <math>60\text{ }^{\circ}\text{C}</math> to <math>-20\text{ }^{\circ}\text{C}</math> for 2 hours(1 cycle is the below diagram).</p> <p>After 15 cycles,the speaker shall be measured after being placed in natural condition for 2 hours.</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 direction for 1 hour, then placed in natural condition for 2 hours, speaker shall be measured.
6	Drop Test	The speaker shall with stand 1 time and difference 6 sides drop from a height of 1 meter to a concrete floor with 5 mm thick hard wood board and be nothing mechanical damage, without irregularity in sound, volume and operation.
7	Load test	After being applied loading white noise with input power 0.8 W(2.53Vrms.) for 100 hours, then placed in natural condition for 2 hours, 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 $\Omega$

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### 5. Measurement Block Diagram & Response curve

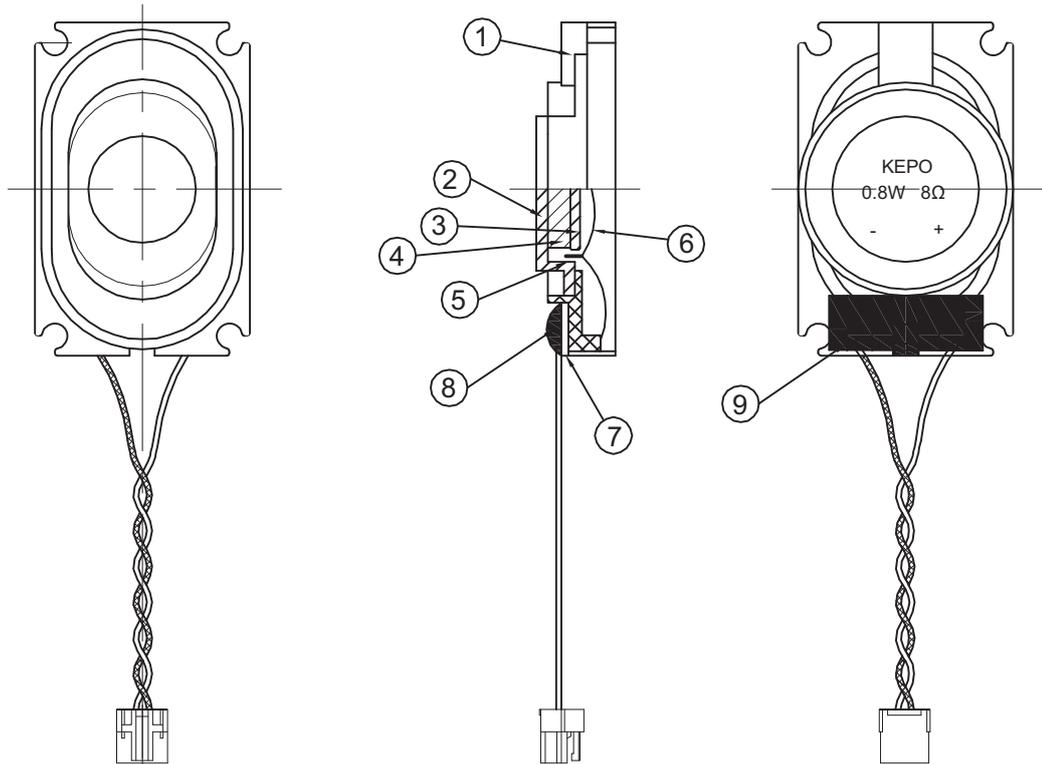


**SPL vs Freq**



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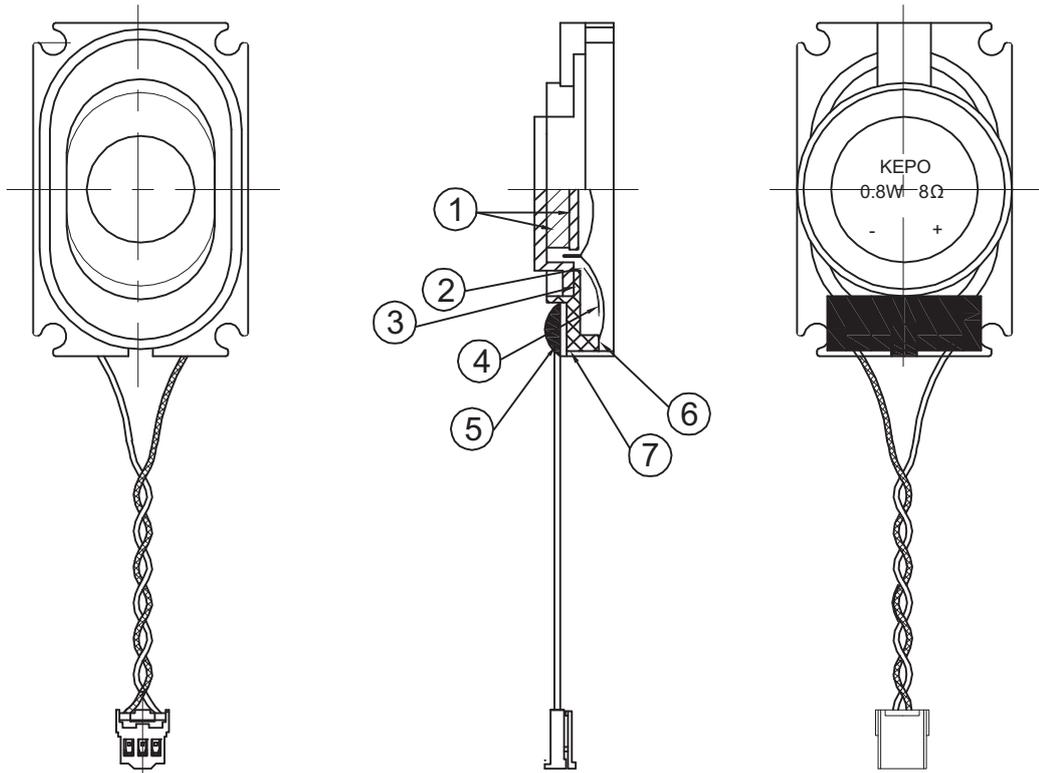
## 6. Structure



⑨	引线保护胶	氯丁橡胶 (HD-358B)
⑧	焊锡	无铅焊锡 Sn99.3Cu0.7
⑦	端子板	FR-4
⑥	振动板	纤维布 黑色
⑤	线圈	自粘漆包线 $\phi 0.05$ 绕2层
④	磁石	NdFeB $\phi 8.0 \times 1.0$ t 三价铬镀锌
③	金属板	SPCC $\phi 8.2 \times 0.8$ t 三价铬镀锌
②	金属帽	SPCC $\phi 9.7 \times 1.8$ t 三价铬镀锌
①	框架	PBT 4830(黑色) UL94V-0
NO.	部品名称	材质. 规格. 处理

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## 7. Glue Indication



⑦	框架, 端子板间	合成橡胶(1521)	日本
⑥	框架, 振动板间	合成橡胶(1521)	日本
⑤	端子板, 导线披覆	氯丁橡胶(HD-358B)	惠州恒大化工
④	振动板, 线圈引线间	水性柔软胶(829A)	日本
③	金属帽, 框架间	合成橡胶(1521)	日本
②	线圈, 振动板间	合成橡胶(1521)	日本
①	金属帽, 金属板, 磁石间	压克力系(Y-358)	台湾施敏打硬股份
序号	涂布位置	接着剂 处理剂名称	供应商

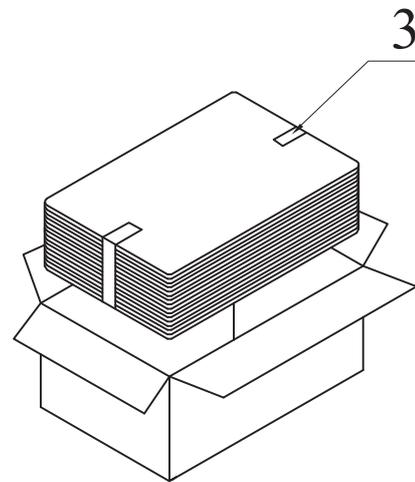
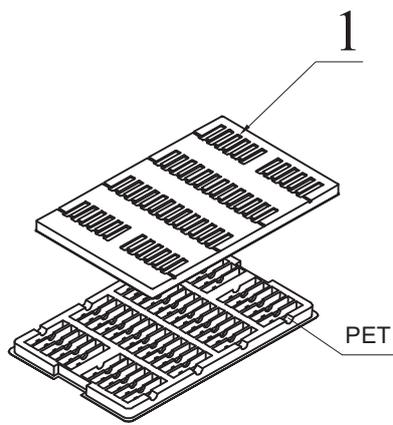


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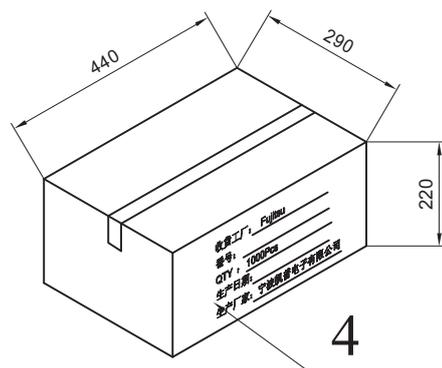
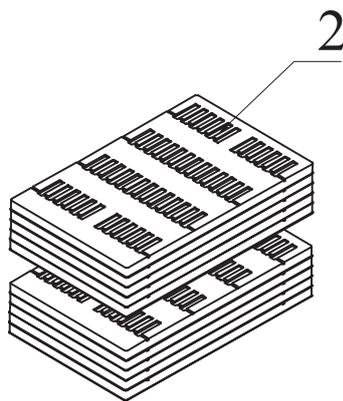
## 9. Packing

Each minimum package unit of products shall be in a carton box and it shall be clearly marked with Part Number, quantity and outgoing inspection number.

There shall be no mechanical damage on products during transportation and/or in storage.



100Pcs



收货工厂: Fujitsu  
 番号: 9900375034  
 QTY: 1000Pcs  
 生产日期: \_\_\_\_\_  
 生产厂家: 宁波凯普电子有限公司

QTY: 1000Pcs  
 440 x 290 x 220(mm<sup>3</sup>)

