

受 控

SPECIFICATION

Customer :

Applied To :

Product Name : Speaker



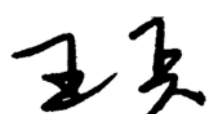
Model Name : KP25x16SP4

Drawing No. :

Signature of Approval

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Signature of KEPO

Approved by	Checked by	Issued by	Date
			

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Specification for Speaker	Page	2/9
Model No. : KP25x16SP4	Revision No.	1.0
	Drawing No.	

CONTENTS

1. Scope
2. General
3. Electrical and Acoustic Characteristics.
4. Reliability Test
5. Measurement Block Diagram & Response curve
6. Structure
7. Glue indication
8. Dimensions
9. Packing
10. Revision
11. Remarks

Specification for Speaker		Page	3/9
Model No. : KP25x16SP4		Revision No.	1.0
		Drawing No.	

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°C without loss of function
- 2.5 Store Temperature range:
-30~+80°C without loss of function

3. Electrical and Acoustic Characteristics.

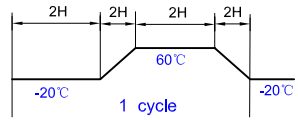
Test condition : 15 ~ 35 °C, 25% ~ 85% RH, 860~1060 mbar

	Items	Specification
1	Impedance	8 Ω ± 15%(at 1Vrms,2kHz)
2	Sound Pressure Level	79 dB ± 3dB(1W/1M)At AVG 2.0KHz,2.5KHz,3.0KHz,4.0KHz
3	Resonance Frequency	1280 Hz ± 25%
4	Frequency Range	f ₀ ~ 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 ₀ to 20KHz,0.6mm or less

Specification for Speaker		Page	4/9
Model No. : KP25x16SP4		Revision No.	1.0
		Drawing No.	

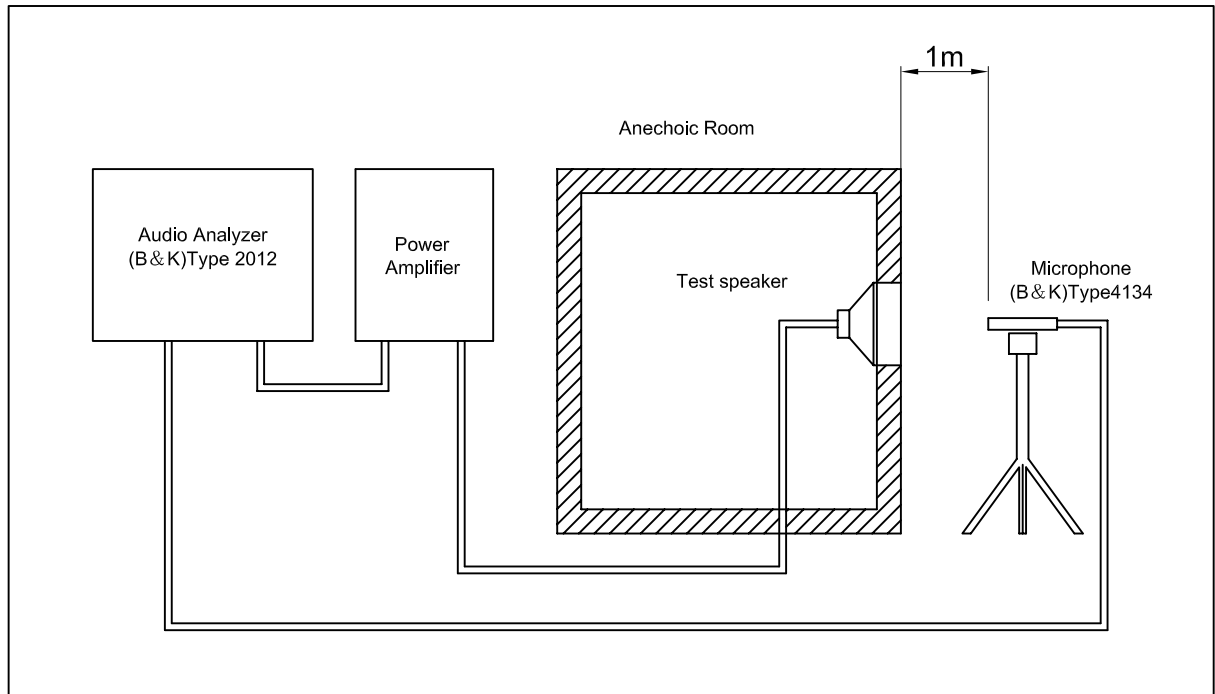
4. Reliability Test

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).

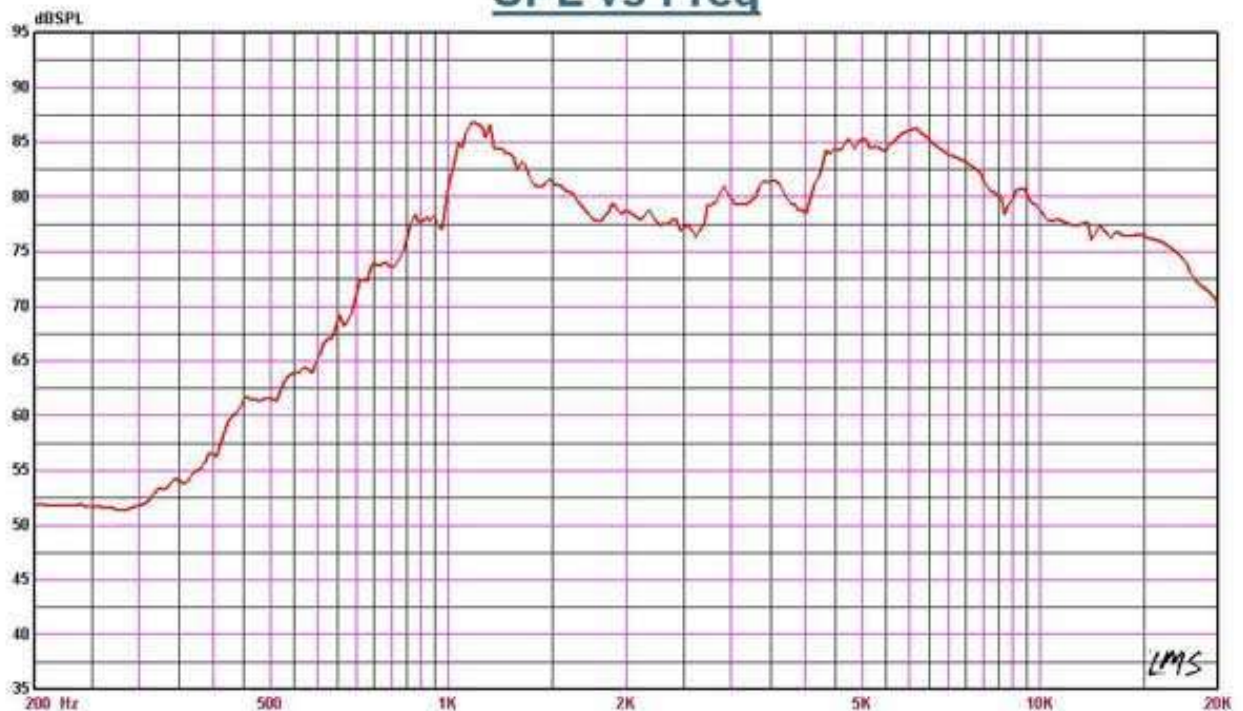
	Item	Specification
1	High Temperature Test	After being placed in a chamber with $60\pm 3\text{ }^{\circ}\text{C}$ for 168 hours and then being placed in natural condition for 2 hours, speaker shall be measured.
2	Low Temperature Test	After being placed in a chamber with $-20\pm 3\text{ }^{\circ}\text{C}$ 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 -20°C for 2 hours,then changed the temperature from -20°C to 60°C for 2 hours,kept on the temperature 60°C for 2 hours,then changed the temperature from 60°C to -20°C 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 Ω

Specification for Speaker		Page	5/9
Model No. : KP25x16SP4		Revision No.	1.0
		Drawing No.	

5. Measurement Block Diagram & Response curve

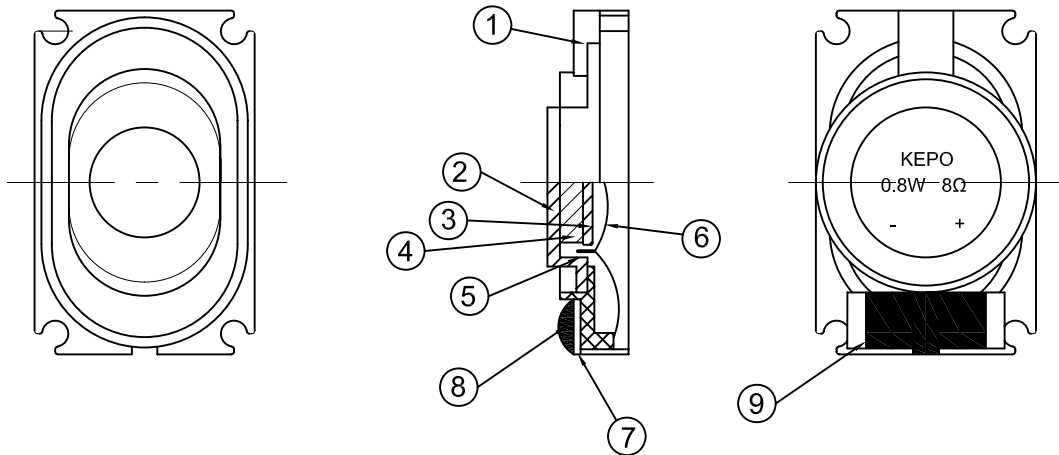


SPL vs Freq



Specification for Speaker		Page	6/9
		Revision No.	1.0
Model No. :	KP25x16SP4	Drawing No.	

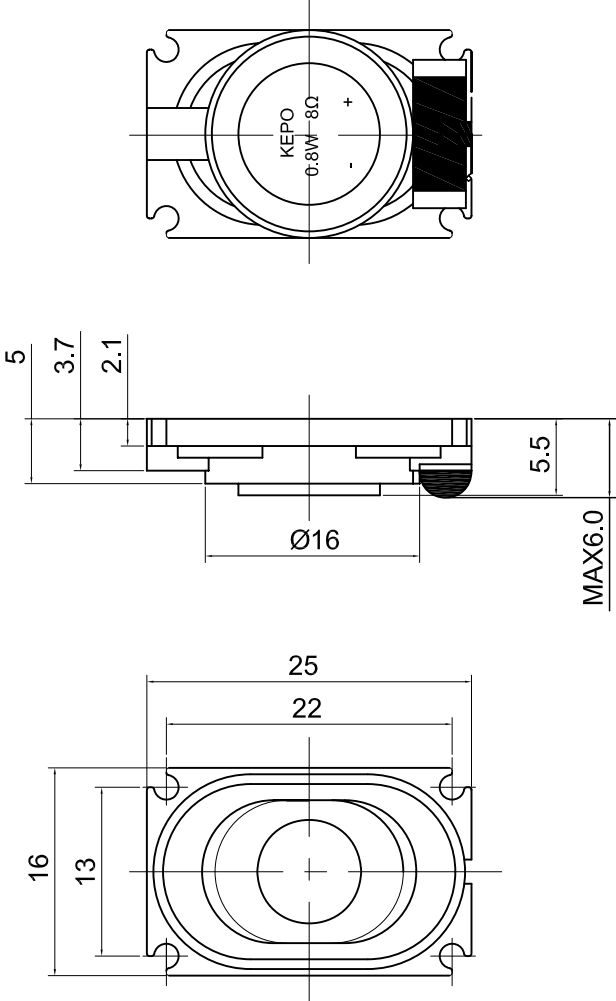
6. Structure



⑨	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 ϕ 0.05 绕2层
④	磁石	NdFeB ϕ 8.0X1.0t三价铬镀锌
③	金属板	SPCC ϕ 8.2X0.8t三价铬镀锌
②	金属帽	SPCC ϕ 9.7x1.8t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

Specification for Speaker		Page	7/9
		Revision No.	1.0
Model No. :	KP25x16SP4	Drawing No.	

7. Dimensions



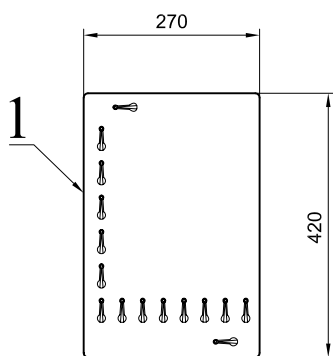
FIRST ANGLE PROJECTION



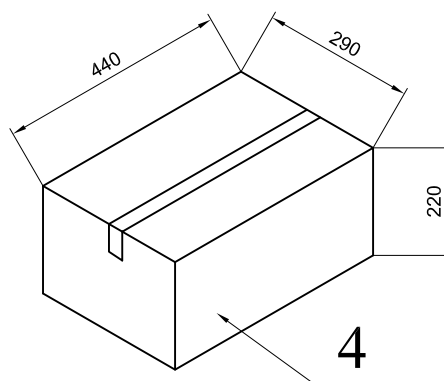
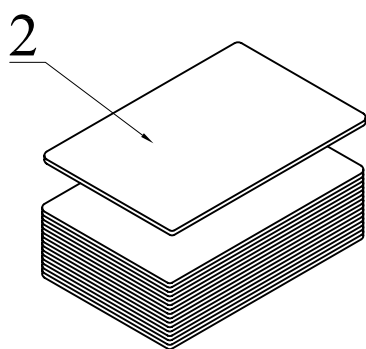
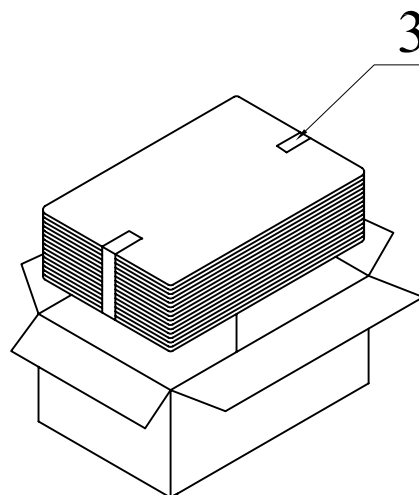
UNIT : mm
Tolerance : ± 0.2

Specification for Speaker	Page	8/9
	Revision No.	1.0
Model No. : KP25x16SP4	Drawing No.	

8. Packing



100Pcs



QTY: 2000Pcs
440 x290 x220