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		Revision No	1.4
Model No.	KP57250SP1R16-6944	Drawing No	KFC6944

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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 : 57 mm
- 2.2 Height : 250 mm
- 2.3 Weight : 70±5 g
- 2.4 Operating Temperature range:
-40 ~+60°C without loss of function
- 2.5 Store Temperature range:
-40 ~+85 °C without loss of function

3. Electrical and Acoustic Characteristics.

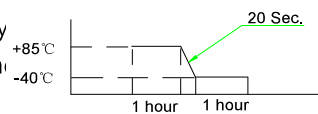
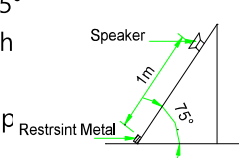
Test condition : 15 ~ 35 °C, 25% ~ 85% RH, 860~1060 mbar

No	Items	Specification
1	Impedance	16 Ω ± 15% (1Vrms at 2.5KHz)
2	Sound Pressure Level	>100 dB (at 1W/1M at 1.2KHz)
3	Resonance Frequency	1200 Hz ± 20% at 1V
4	Frequency Range	700Hz ~2.8KHz
5	Input Power	Rated 4 W/ Max. 5 W
6	Distortion	<10% Max. at 1.2kHz/4W
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 8V 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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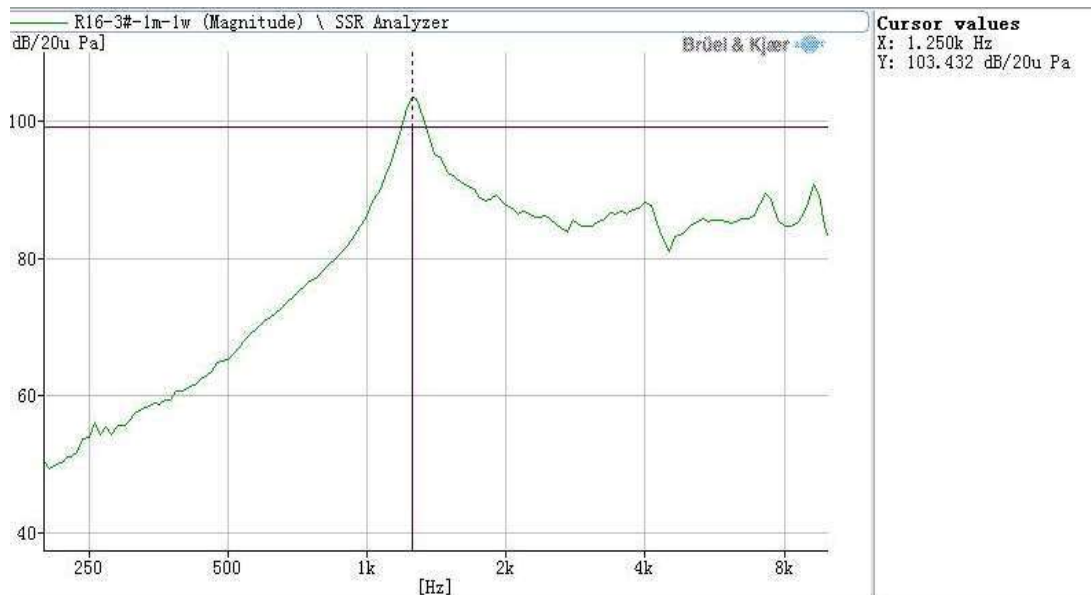
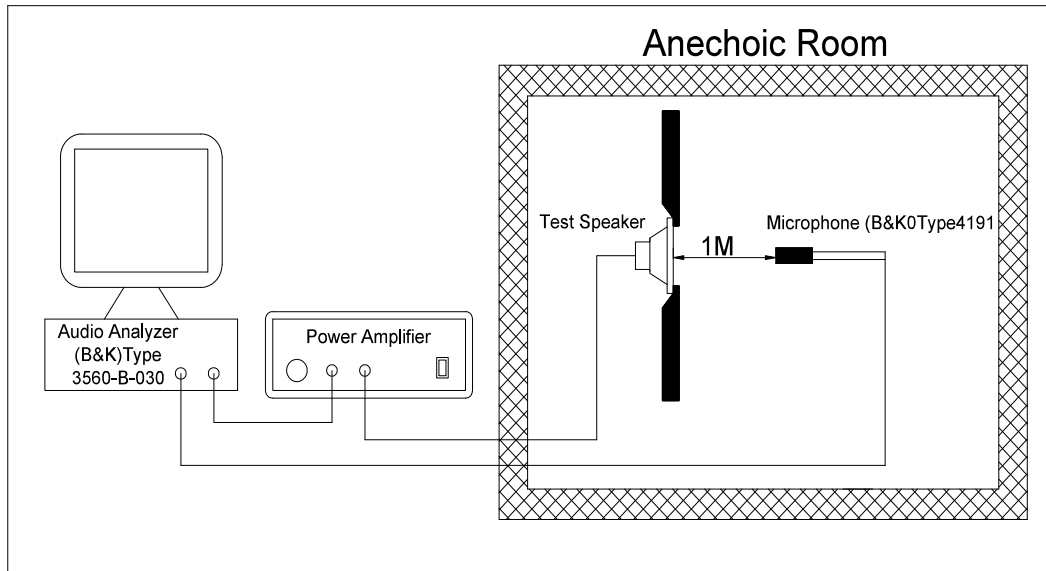
4. Reliability Test

After test(1~7item), the speaker S.P.L . difference shall be within $\pm 4\text{dB}$, 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 $85\pm 5\%\text{R.H.}$ at $+85\pm 5\text{ }^\circ\text{C}$ 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 $+85\text{ }^\circ\text{C}$ for 1 hour, then speaker shall be placed in a chamber at $-40\text{ }^\circ\text{C}$ for 1 hour(1 cycle is the below diagram).</p> <p>After 10 above cycles, speaker shall be placed in natural condition for 1 hour and then 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	<p>A speaker is dropped from 1m in length on 75° inclination and a magnetic circuit of speaker is held to the restraint metal.</p> <p>After the test, magnetic circuit should not drop and speaker shall be measured.</p> 
7	Load test	After being applied loading white noise with input power 4W(8Vrms.) for 24 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 MΩ
9	High Temp.input test	85°C input:1200Hz.4W.30min/on-30min/off.5 hours
10	Low Temp.input test	-40°C Input:1200Hz.4W.30min/on-30min/off.5 hours
11	Room temp.input test	Input:1200Hz.4W.30min/on-30min/off.150 hours

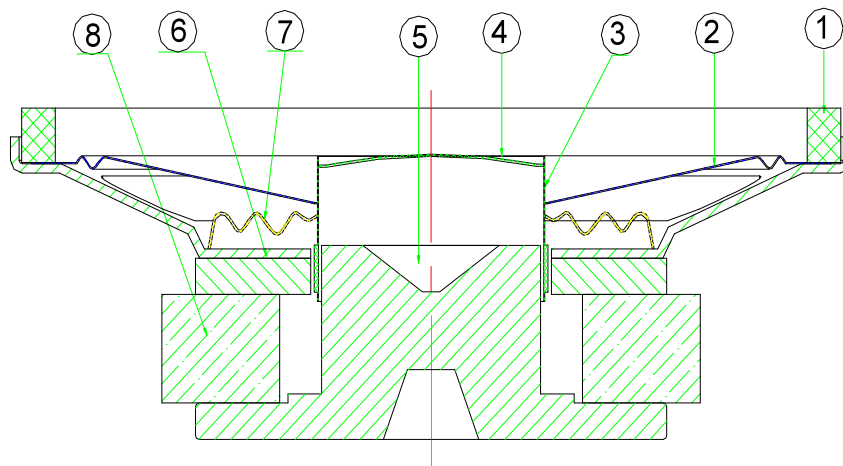
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5. Measurement Block Diagram & Response curve



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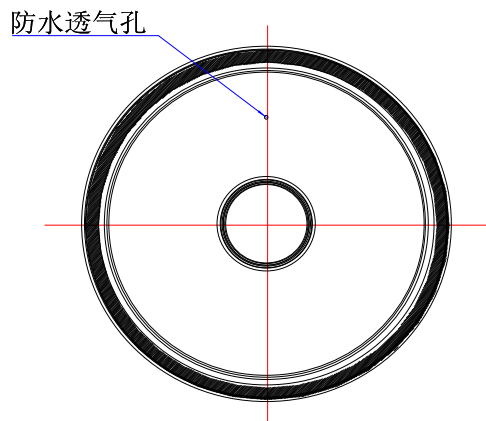
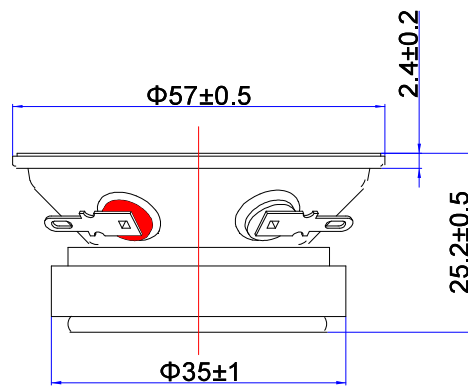
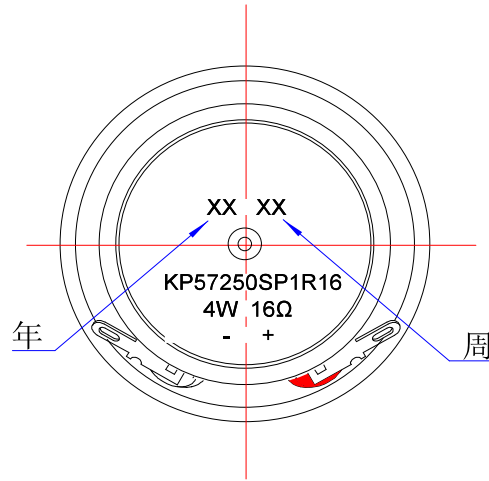
6. Structure



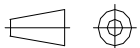
8	magnet	1	Y30	
7	Spider	1	cotton yarn	
6	Frame and top plate	1	spcc	Plating Zn Cr3+
5	back plate	1	spcc	Plating Zn Cr3+
4	dust cap	1	Mylar	PEI
3	voice coil	1	PSV	
2	paper Cone	1	Mylar	PEI
1	Gasket	1	Rubber	
No.	Part Name	Q'ty	Material	Remarks

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7. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm

Tolerance : ± 0.3

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8. 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.



QTY:96PCS
SIZE:370*280*140CM

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9. Revision

Rev. No.	DATE	PAGE	DESCRIPTION	BOM
1.0	2012-10-26		Primary	
1.1	2013-3-14		Change DP	
1.2	2014.10.23		change QTY:88pcs	
1.3	2015.10.06		change QTY:96pcs	
1.4	2021.8.6	7	Add waterproof of air vents	