

SPECIFICATION

Customer:

Applied To:

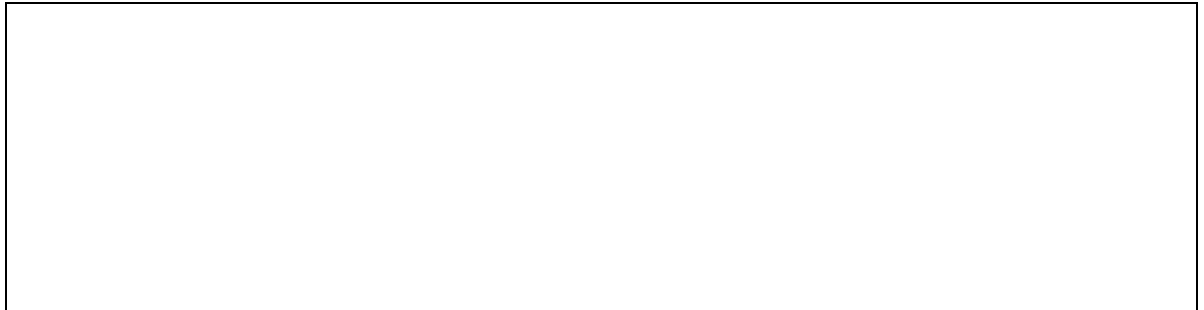
Product Name: SPEAKER

Model Name: KP2845SP4R4C-8037

Drawing No.: KFC8037

CONTROLLED

Compliance with ROHS (本品符合 ROHS 指令)



Signature of KEPO

Issued by	Checked by	Approved by	Date
王真	忻容荣		



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1.0	2016.08.03		Primary	
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1. Scop

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: Φ 28mm
- 2.2 Height: 6.0mm
- 2.3 Weight: 5.4g
- 2.4 Operating Temperature range:
-20~+60°C without loss of function
- 2.5 Store Temperature range:
-20~+70°C without loss of function

3. Electrical and Acoustic Characteristics

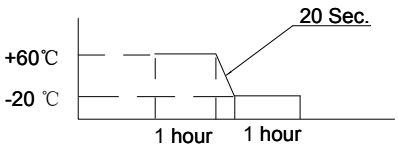
Test condition : 15 ~ 35 °C , 25% ~ 85% RH, 860~1060 mbar

	Item	Specification
3.1	Impedance	4 Ω ±15%(1Vrms at 2.0kHz)
3.2	Sound Pressure Level	88dB±3dB @1.5W/0.3M average at 1.0,1.2,1.5,2.0KHz
3.3	Resonance Frequency	500Hz±20%
3.4	Frequency Range	F0~20KHz
3.5	Input Power	Rated 1.5W/ Max 2.0W
3.6	Distortion	<10% Max. at 1kHz/2.45Vrms
3.7	Buzz and Rattle	Should not be audible buzzes, rattles when the 2.45Vrms sine wave signal swept at frequency range.
3.8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.

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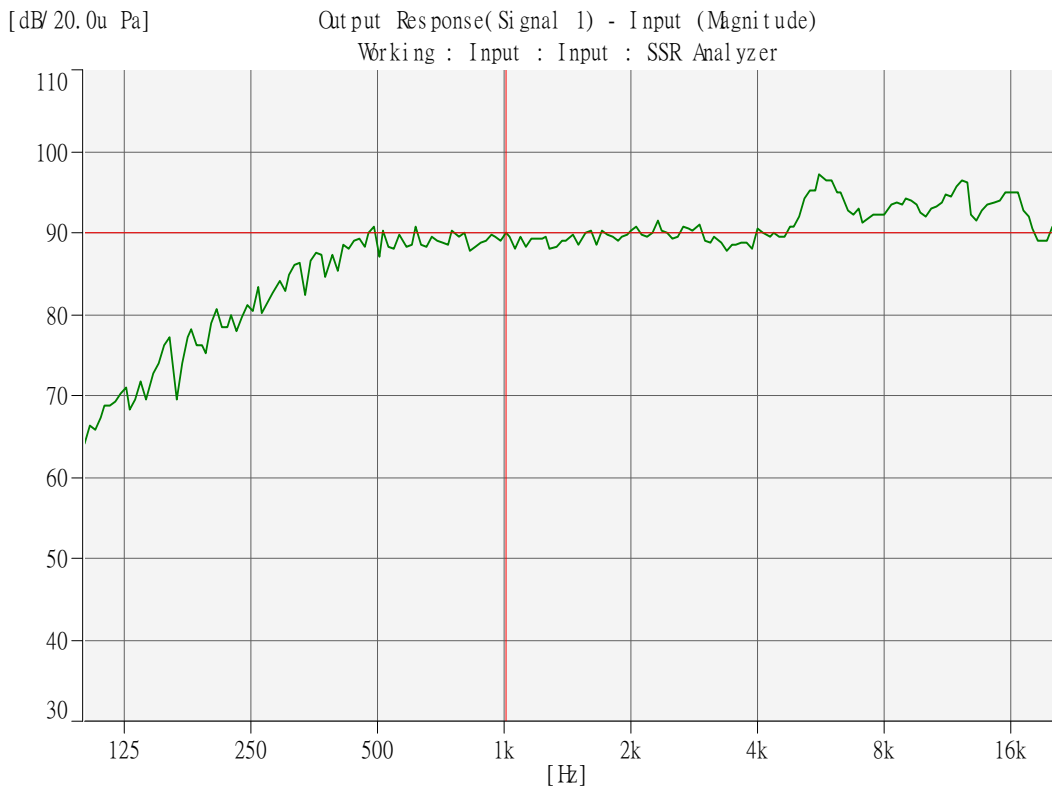
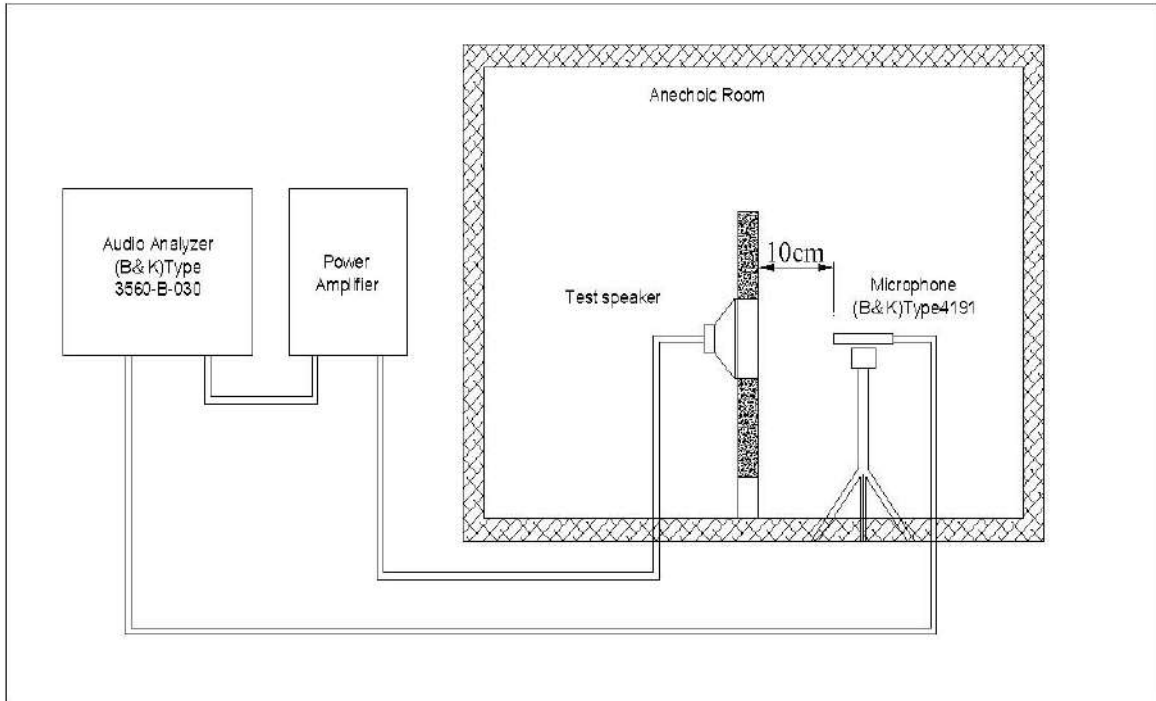
4. Reliability Test

After test(1~6item), 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
4.1	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.
4.2	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.
4.3	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.
4.4	Thermal Shock Test	<p>After being placed in a chamber at $+60\text{ }^{\circ}\text{C}$ for 1 hour, then speaker shall be placed in a chamber at -20°C for 1 hour(1 cycle is the below diagram). After above 10 cycles, speaker shall be measured after being placed in natural condition for 1 hour.</p>  <p>The diagram shows a temperature profile starting at $+60^{\circ}\text{C}$, ramping down to -20°C over a 20-second period, then dwelling at -20°C for 1 hour, ramping back up to $+60^{\circ}\text{C}$ over another 20-second period, and finally dwelling at $+60^{\circ}\text{C}$ for 1 hour.</p>
4.5	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.
4.5	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.
4.6	Load test	After being applied loading white noise with input power 1.5W(2.45Vrms.) for 96 hours, then placed in natural condition for 1 hour, speaker shall be measured.
4.7	Insulation test	When they are measured with DC 100V the insulation resistance between v.c. terminal and frame must be more than $1\text{ M}\Omega$

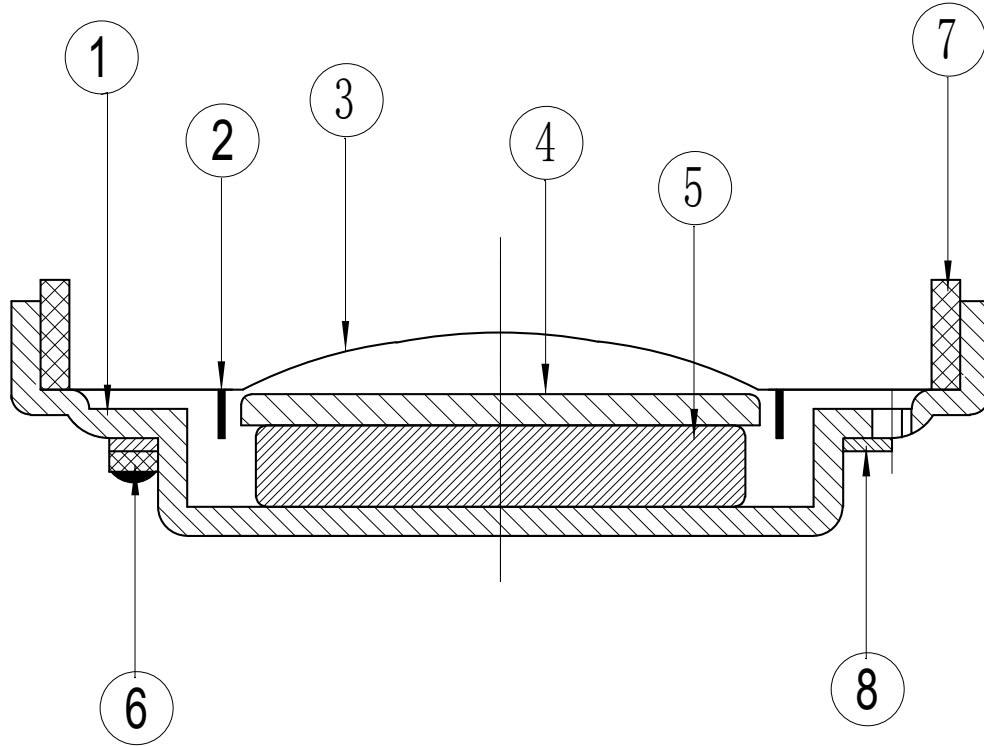
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5. Measurement Block Diagram & Response curve



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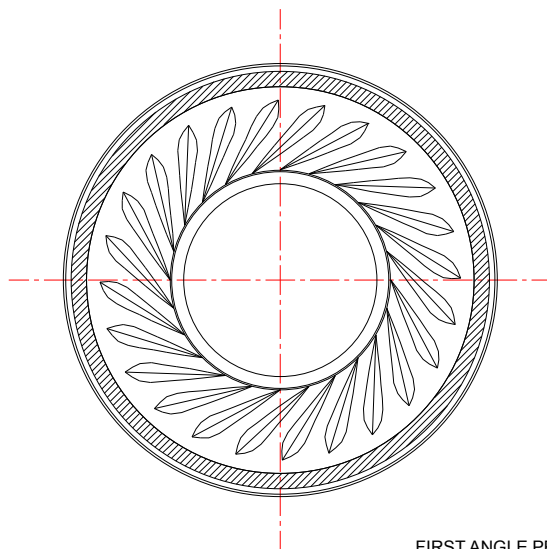
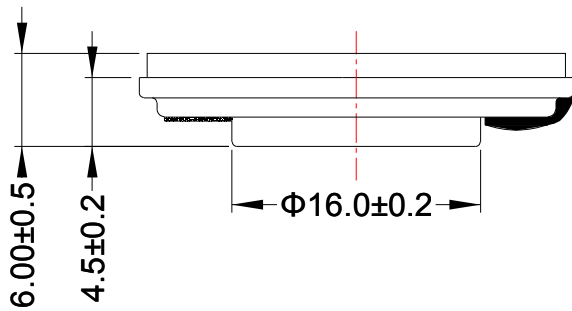
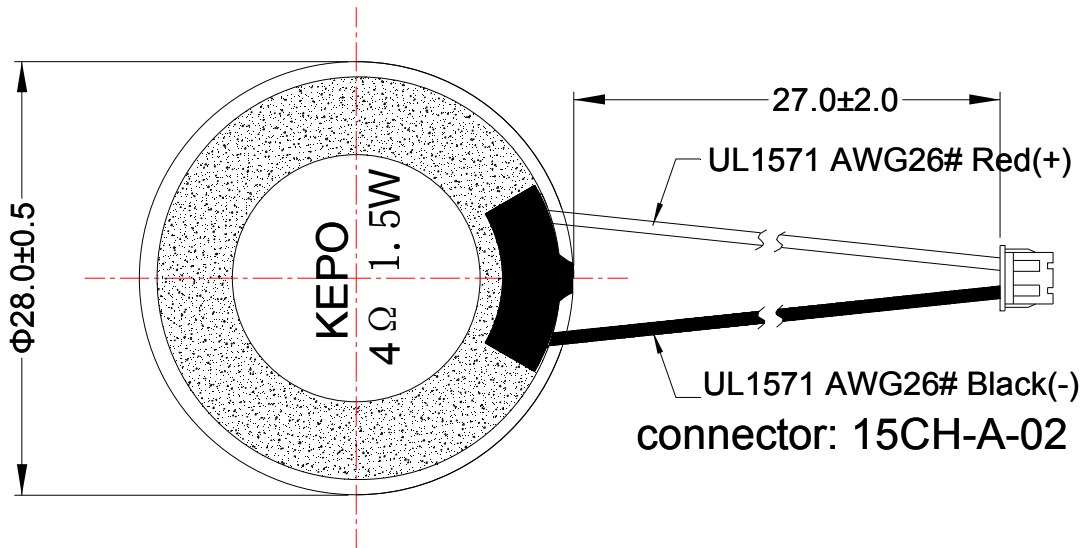
6. Structure



No.	Part Name	Q'ty	Material	Remarks
8	Screen	1	Un-woven fabric	
7	Gasket	1	PPA	
6	PCB	1	Epoxy	
5	Magnet	1	Nd-Fe-B	
4	Plate	1	SPCC	
3	Diaphragm	1	PET	
2	Voice Coil	1	Copper	
1	Frame	1	SPCC	

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7. Dimensions



FIRST ANGLE PROJECTION; UNIT : mm

Tolerance: ± 0.5 mm

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8. Packing

