# **SPECIFICATION**

Customer:

隽宇企业

Applied To:

Product Name: Speaker

Model Name: KP1832SP1

Drawing No.: KFC2339

#### 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 : Ø18 mm
 2.2 Height : 3.2 mm
 2.3 Weight : 2.0 gr.

2.4 Operating Temperature range:

-20~+70 °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  $^{\circ}$ C, 25% ~ 85% RH, 860~1060 mbar

	Items	Specification
1	Impedance	8 Ω ± 15%(at 1Vrms,1.5kHz)
2	Sound Pressure Level	88dB ± 3dB( 1kHz/0.1W/0.1M )
3	Resonance Frequency	750 Hz ± 20%
4	Frequency Range	F₀ ~ 10.0kHz
5	Input Power	Rated 0.5W / Max. 0.8W
6	Distortion	<10% Max. at 2kHz/2Vrms
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 2.0V 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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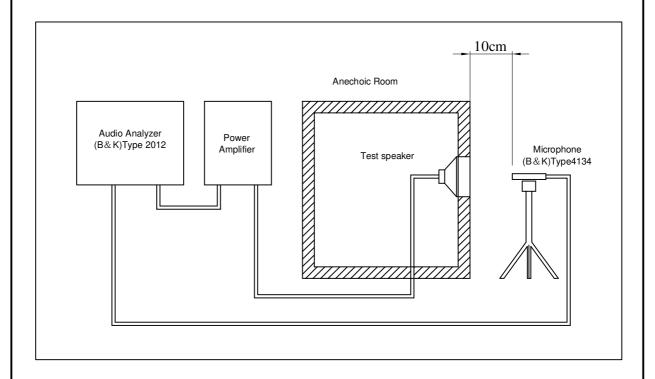
## 4. Reliability Test

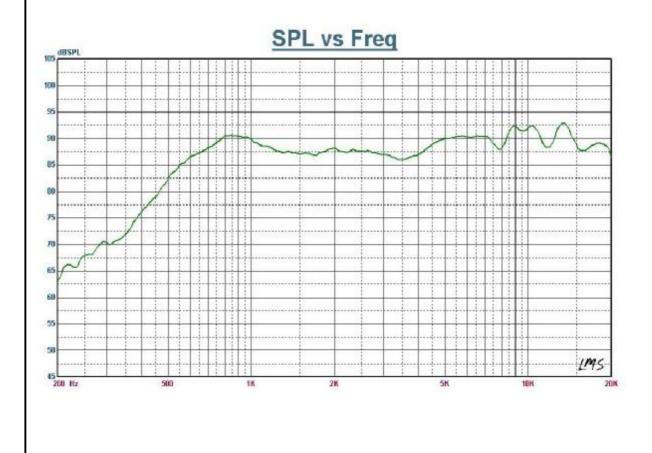
After test(1~7item), the speaker S.P.L . difference shall be within  $\pm$  3dB, and the appearance not exist any change to be harmful to normal operation(e.g. cracks,rusts,damages and especially distortion).

	Item	Specification
1	High Temperature Test	After being placed in a chamber with $+85\pm3$ °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±3 °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 $\pm 40\pm 2$ °C for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
4	Thermal Shock Test	After being placed in a chamber at +80 °C for 1 hour, then speaker shall be placed in a chamber at -40 °C for 1 hour(1 cycle is the below diagram).  After 6 above cycles, speaker shall be measured after being placed in natural condition for 1 hour.
5	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to55Hz 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 0.5W(2.0Vrms.) 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 $\Omega$

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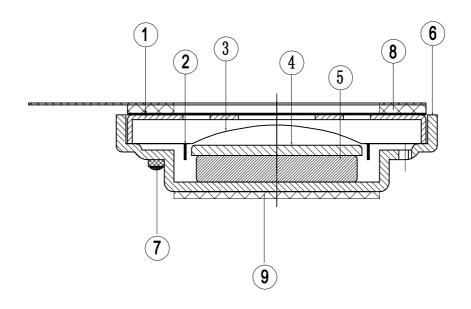
## 5. Measurement Block Diagram & Response curve





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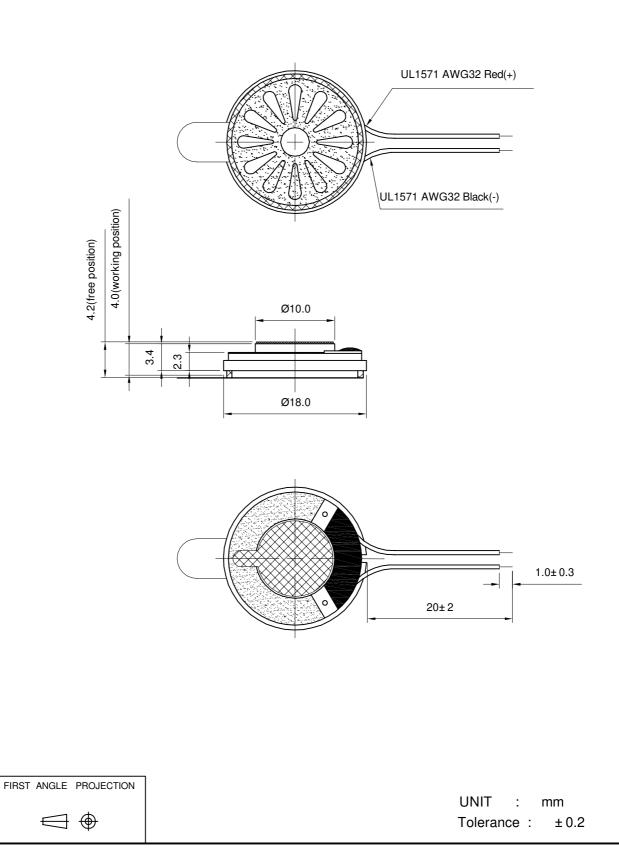
## 6. Structure



9	Cushion	1	unwoven fabric	paper
8	Gasket	1	unwoven fabric	800+2B+800
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	Сар	1	SUS304	
No.	Part Name	Q'TY	Material	Remarks

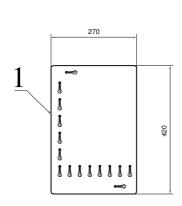
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### 7. Dimensions

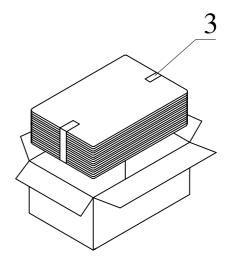


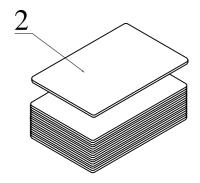
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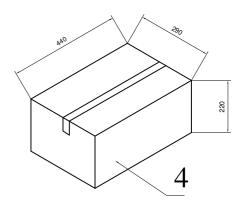
# 8. Packing



100Pcs







QTY: 2000Pcs 440 x290 x220

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9. Revision										
Rev. No.	DATE	PAGE	DESCRIP	TION		SIGN				
1.0	2007.04.24		Primar	у						
1.1	2007.05.18		Cushion change							