SPECIFICATION

Customer : 四海永通

Applied To :

Product Name: SPEAKER

Model Name : KP1528SP2

Drawing No. : KFC2302

Signature of Appronal

Signature of KEPO

Approved by	Checkde by	Issued by	Date



Ningbo Kepo Electronics Co.,Ltd.

Address: No.25 Baoyuan Road Dongqian Lake Industrial Area, Dongqian Lake Ningbo 315121, China Tel: +86(574)88371186, 88370330 Fax: +86(574)88370329 http://www.chinaacoustic.com E-mail:Sales@kepo.com.cn

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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
 : 15 mm

 2.2 Height
 : 2.8 mm

 2.3 Weight
 : 1 g

2.4 Operating Temperature range:

-20~+70℃ without loss of function

2.5 Store Temperature range:

-40~+85℃ without loss of function

3. Electrical and Acoustic Characteristics.

Test condition: $15 \sim 35 \,^{\circ}\text{C}$, $25\% \sim 85\% \,^{\circ}\text{RH}$, $860 \sim 1060 \,^{\circ}\text{mbar}$

No	Items	Specification		
1	Impedance	$8 \Omega \pm 15\%$ (1Vrms at 1KHz)		
2	Sound Pressure Level	88 dB ± 3dB (0.1W/0.1M at 1kHz)		
3	Resonance Frequency	850 Hz ± 20%		
4	Frequency Range	Fo ~20KHz		
5	Input Power	Rated 0.5 W / Max. 1 W		
6	Distortion	<10% Max. at 2kHz/2Vrms		
7	Buss and Rattle	Should not be audible buzzes, rattles when the 2V 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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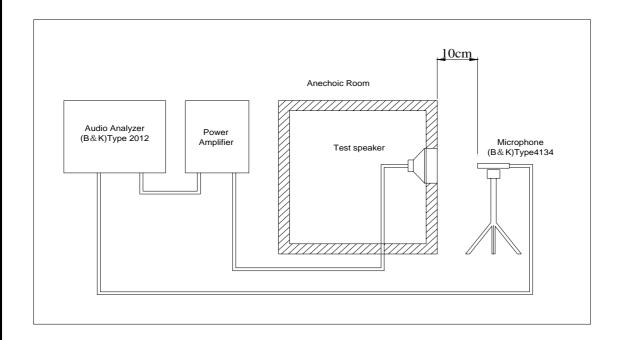
4. Reliability Test

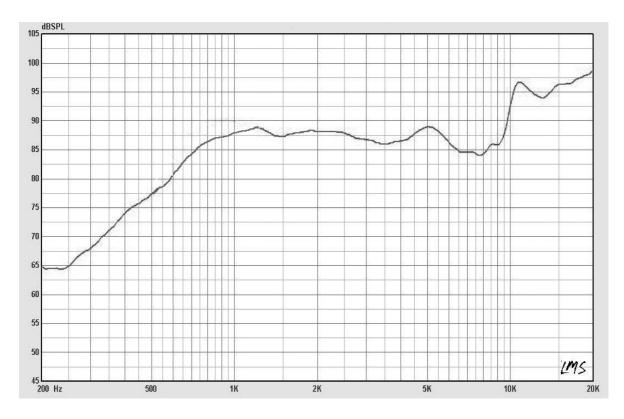
After test(1~7item), the speaker S.P.L . difference shall be within $\pm 3 dB$, and the appearance not exist any change to be harmful to normal operation (e.g. cracks,rusts,damages and especially distortion).

No	Items	Specification		
1	High Temperature Test	After being placed in a chamber with +85±3 °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 ℃ for 96 hours and then 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 +40±2 °C for 9 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 +70°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 6 above cycles, speaker shall be measured after being placed in natural condition for 1 hour. +70°C -20°C 1 hour 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(2Vrms.) 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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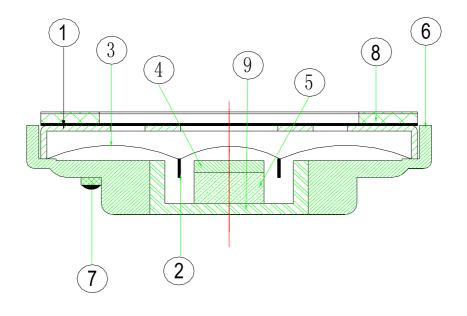
5. Measurement Block Diagram & Response curve





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6. Structure

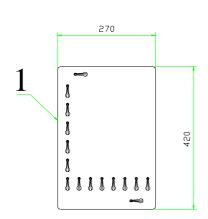


9	Yoke	1	SPC	
8	Gasket	1	unwoven fabric	800+2B+800+PSR1.2+800
7	Terminal	1	Epoxy PCB	
6	Frame	1	SPC	
5	Magnet	1	Nd-Fe-B	
4	Plate	1	SPC	
3	Diaphragm	1	PEN	
2	Voice Coil	1	Copper	
1	Cap	1	SUS304	
No.	Part Name	Q'ty	Material	Remarks

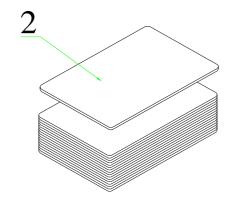
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4.4(free position) 4.2(working position)	mensions Property of the second seco	UL1571 AWG32# Re UL1571 AWG32#	
		1.0± 0.3 25± 2	
ST ANGLE PROJEC	TION		: mm

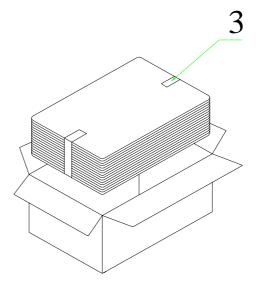
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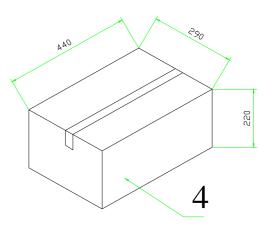
8. Packing



100Pcs







QTY: 2000Pcs 440 x290 x220

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	9. Revision	on			
Rev. No.	DATE	PAGE	DESCRIPTIO)N	во
1.0	2007-6-8		Primary		