SPECIFICATION

Customer:

Simcom

Applied To:

Product Name: Speaker

Model Name: KP3040SP1-2084

Drawing No.: KFC2084

Signature of Approval

Signature of KEPO

Approved by	Checked by	Issued by	Date



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1. Scope

This specification is applied to the two side dynamic speaker which is used all of the electrical acoustic product.

-- compact, rich sound

-- applications: mobile phone, PDA, notebook computer, etc. ..

2. General

2.3 Weight : 6.0gr.2.4 Operating Temperature range:

-20~+60 ℃ without loss of function

2.5 Store Temperature range:

-25~+60 °C without loss of function

3. Electrical and Acoustic Characteristics.

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

3.1 Speaker

	Items	Specification	
1	Impedance	8 Ω ± 15%(at 1Vrms,1.5kHz)	
2	Sound Pressure Level	90dB ± 3dB(1kHz/0.1W/0.1M)	
3	Resonance Frequency	650Hz ± 15%	
4	Frequency Range	F₀ ~ 7.0kHz	
5	Input Power	Rated 0.8W / Max. 1.5W	
6	Distortion	<10% Max. at 2kHz/2Vrms	
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 2.5V 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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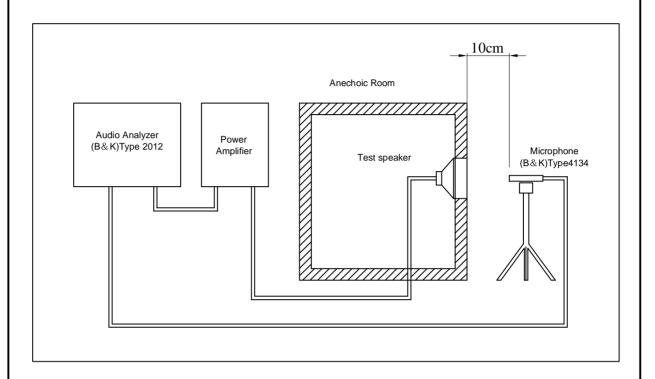
4. Reliability Test

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 +60±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 -20±3 ℃ 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 60 to 90%R.H. at +40±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 +60 °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.
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 0.8W(2.5Vrms.) 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 Ω

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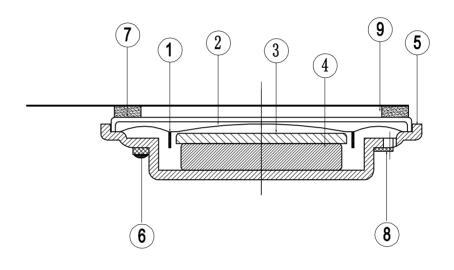
5. Measurement Block Diagram & Response curve





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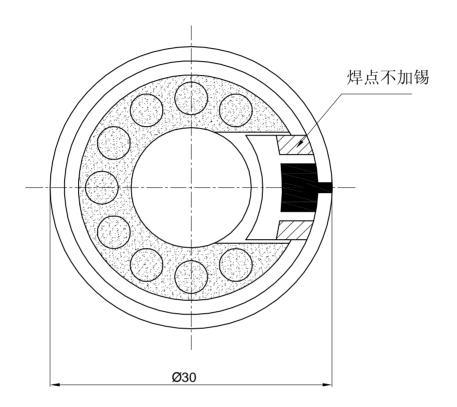
6. Structure

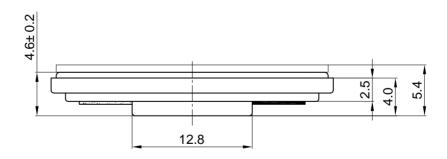


9	Gasket	1	unwoven fabric	800+PSR0.5+800+2B
8	Screen	1	Fabric	
7	Cap	1	PBT	
6	Terminal	1	Epoxy PCB	
5	Frame	1	SPC	
4	Magnet	1	Nd-Fe-B	
3	Plate	1	SPC	
2	Diaphragm	1	PET	
1	Voice Coil	1	Copper	
No.	Part Name	Q'TY	Material	Remarks

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7. Dimensions





FIRST ANGLE PROJECTION



UNIT : mm
Tolerance : ±0.5

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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.
in storage.

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9. Revision						
Rev. No.	DATE	PAGE	DESCRIPTION			SIGN
1.0	2007.01.10		Primary			
1.1	2007.01.29		Gasket ch	ange		
1.2	2008.12.02		Wire change			