SPECIFICATION

Customer :

Applied To :

Product Name : SPEAKER

Model Name : KP1536ST4

Drawing No. : KF3.001.284

Signature of Appronal

Signature of KEPO

Approved by	Checkde by	Issued by	Date

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CONTENTS

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 : 3.6 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

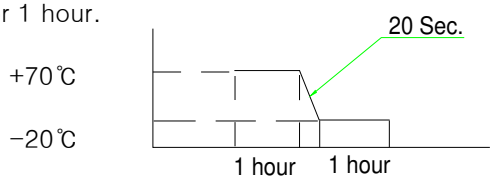
3. Electrical and Acoustic Characteristics.

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

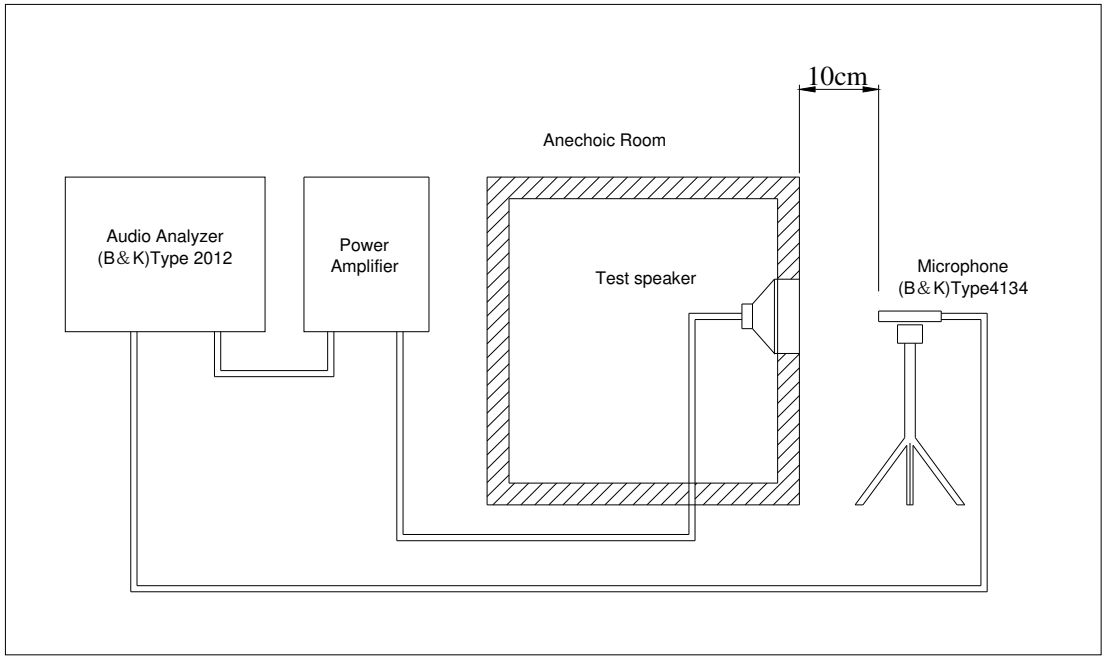
No	Items	Specification
1	Impedance	8 Ω ± 15% (1Vrms at 1KHz)
2	Sound Pressure Level	87 dB ± 3dB (0.1W/0.1M at 1kHz)
3	Resonance Frequency	900 Hz ± 20%
4	Frequency Range	Fo ~20KHz
5	Input Power	Rated 0.8 W / Max. 1 W
6	Distortion	<10% Max. at 2kHz/2Vrms
7	Buss and Rattle	Should not be audible buzzes,rattles when the 2.53V sine wave signal swept at frequency range.
8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.

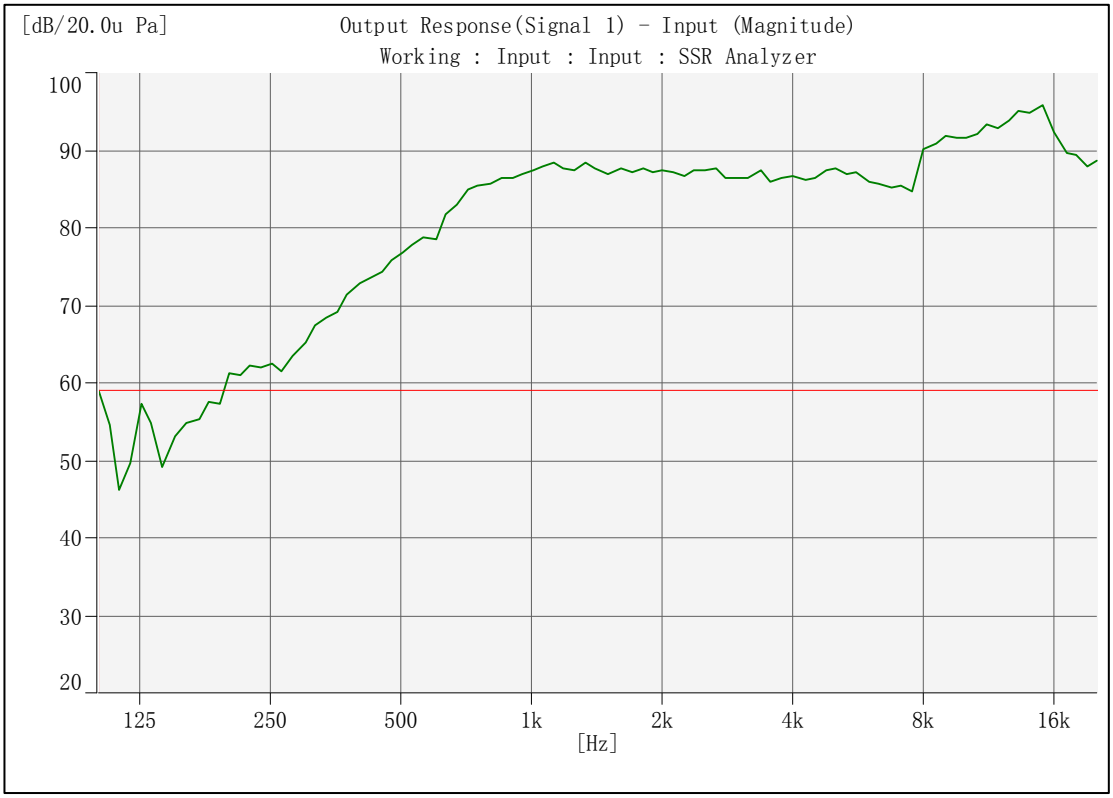
4. Reliability Test

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

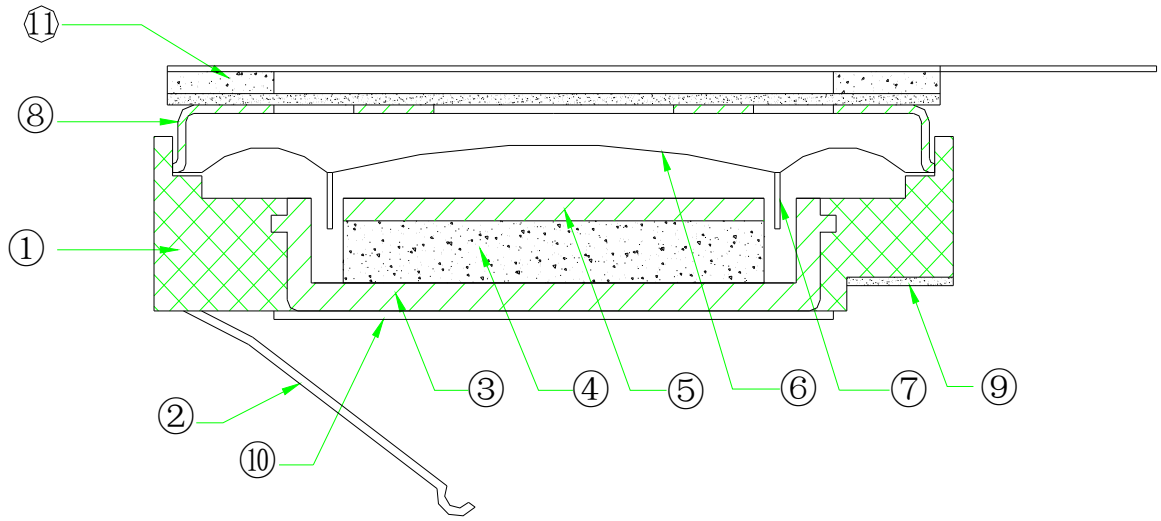
No	Items	Specification
1	High Temperature Test	After being placed in a chamber with +85±3 ℃ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
2	Low Temperature Test	After being placed in a chamber with −40±3 ℃ for 96 hours and then being placed in natural condition for 1 hour, speaker shall be measured.
3	Humidity Test	After being placed in a chamber with 85 to 90%R.H. at +40±2 ℃ 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 +70℃ for 1 hour, then speaker shall be placed in a chamber at −20℃ 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(2.53Vrms.) 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 MΩ

5. Measurement Block Diagram & Response curve



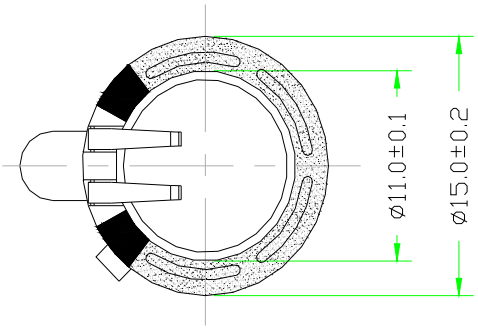


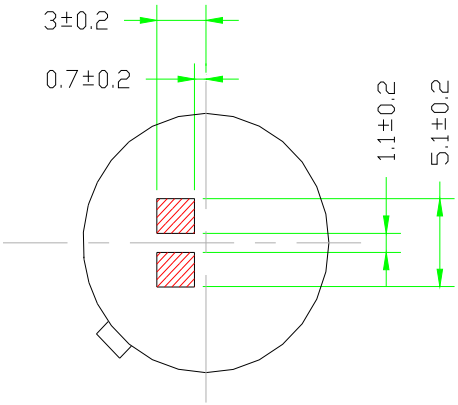
6. Structure



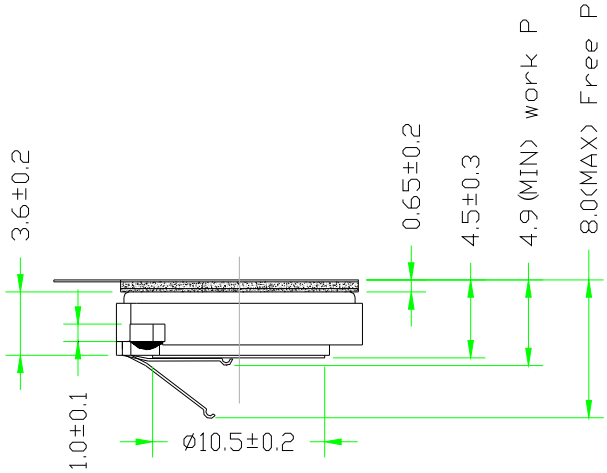
No.	Part Name	Q'ty	Material	Remarks
11	Gasket	1	2B-PSR0.3	
10	Cushion	1	Paper	
9	Screen	1	2B	
8	Protector	1	SUS304	
7	V-coil	1	Cu	
6	Diaphragm	1	PEN	
5	Plate	1	SPCC	
4	Magnet	1	Nd-Fe-B	
3	Yoke	1	SPCC	
2	Spring	1	SUS304	
1	Frame	1	PBT	

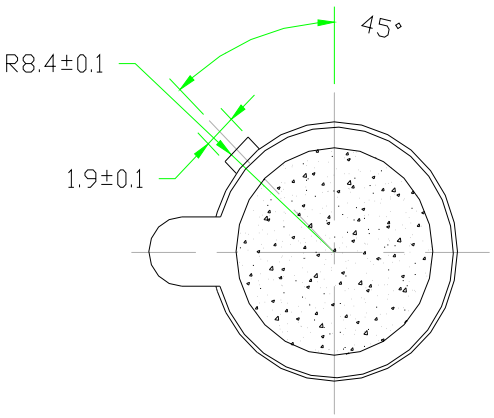
7. Dimensions





PCB layer



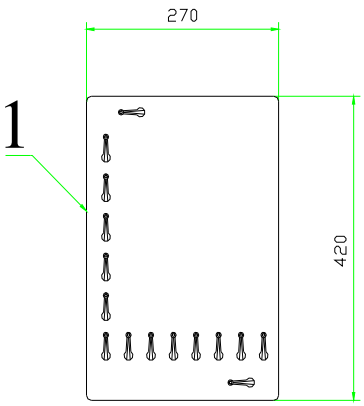


FIRST ANGLE PROJECTION

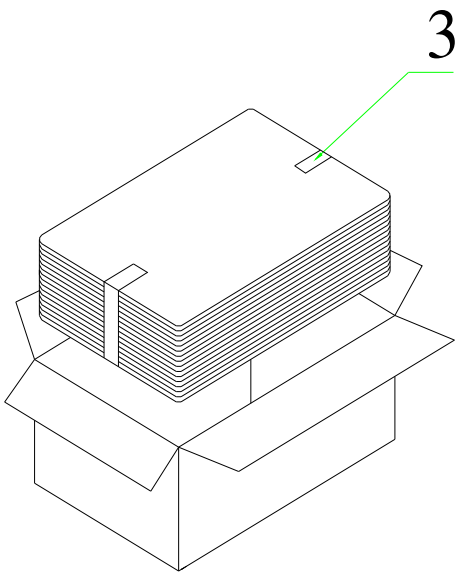
UNIT : mm

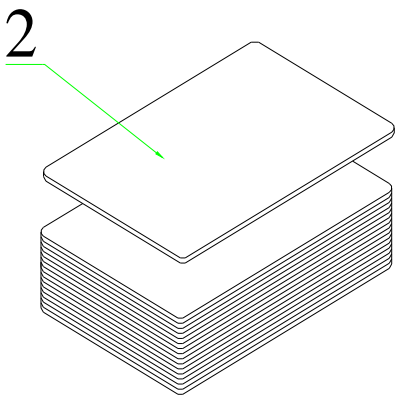
Tolerance : ±0.2

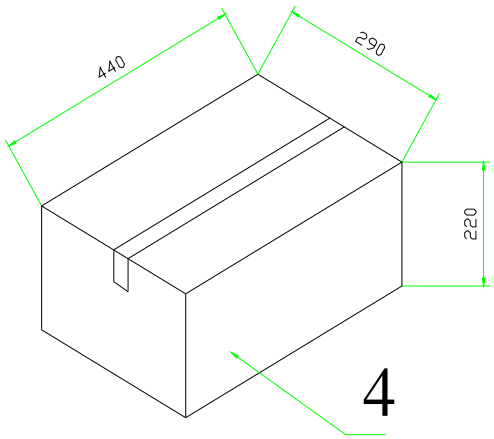
8. Packing



100Pcs







QTY: 2000Pcs

440 x290 x220

9. Revision

Rev. No.	DATE	PAGE	DESCRIPTION	BOM
1.0	08.06.06		Primary	