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 : 40 mm

2.2 Height : 10.1 mm

2.3 Weight : 10 g

2.4 Operating Temperature range:

-30~+85℃ without loss of function(Working time less than 10 Minutes)

2.5 Store Temperature range:

-40~+85℃ without loss of function

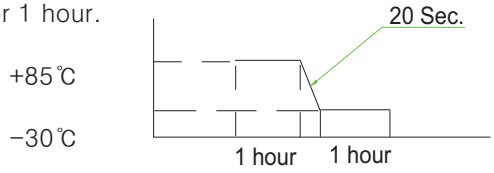
3. Electrical and Acoustic Characteristics.

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

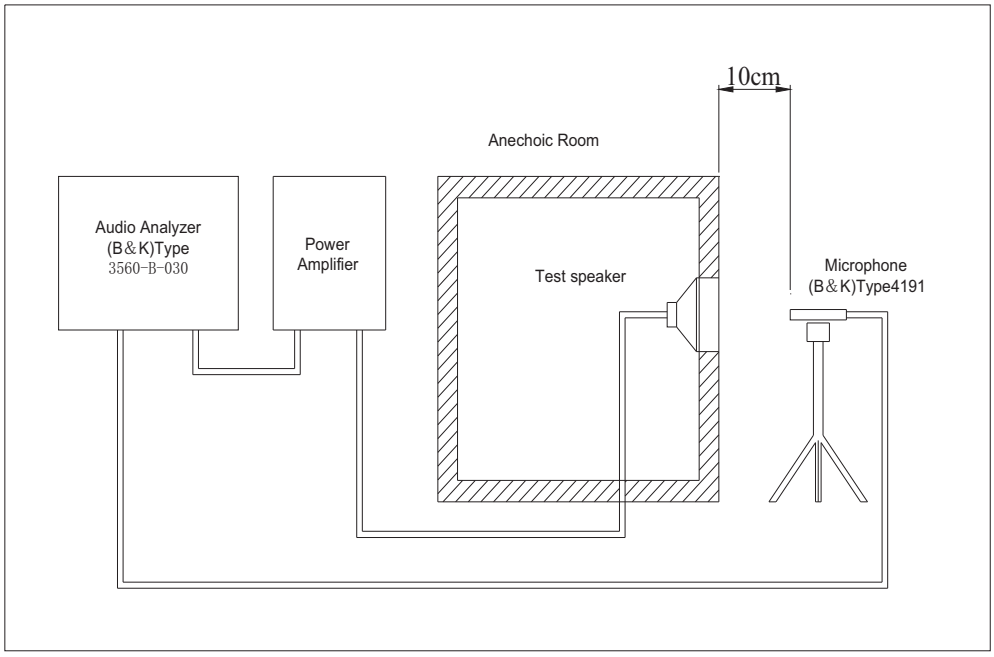
No	Items	Specification
1	Impedance	8 Ω ± 15% (1Vrms at 1KHz)
2	Sound Pressure Level	92 dB ± 3dB (0.1W/0.1M at average 0.8,1.0,1.2,1.5kHz)
3	Resonance Frequency	450 Hz ± 20%
4	Frequency Range	Fo ~20KHz
5	Input Power	Rated 2 W / Max. 2.8 W
6	Distortion	<5% Max. at 2kHz/1Vrms
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 4V sine wave signal swept at frequency range.
8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.

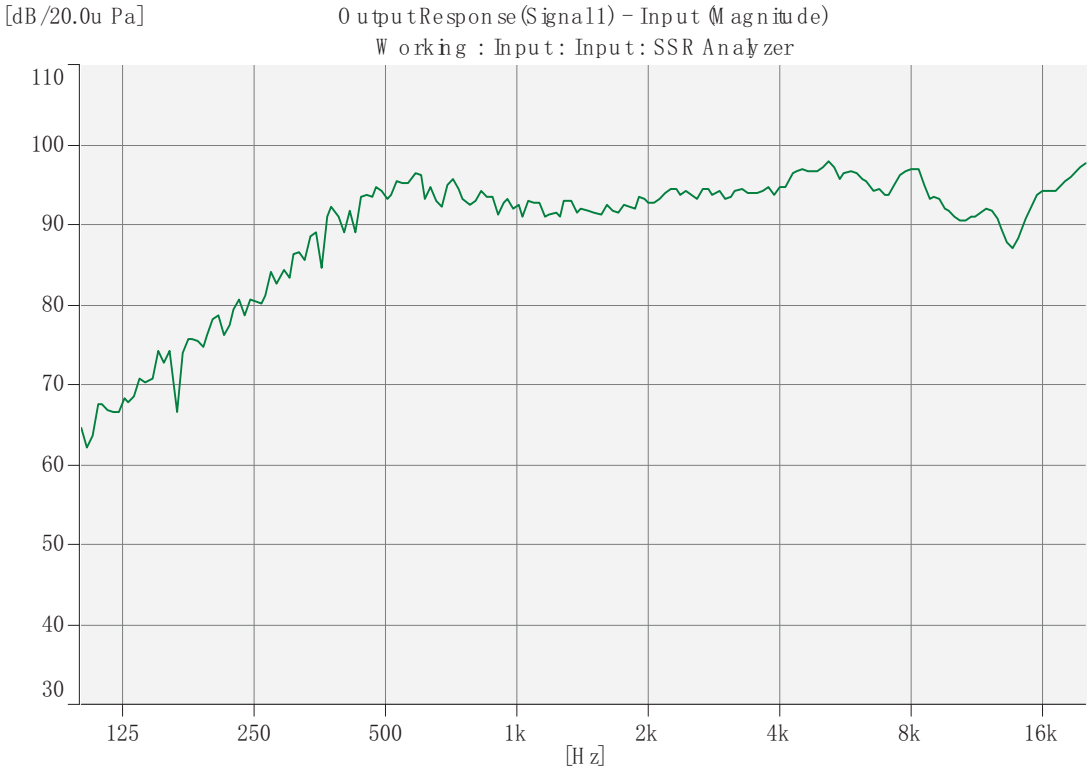
4. Reliability Test

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).

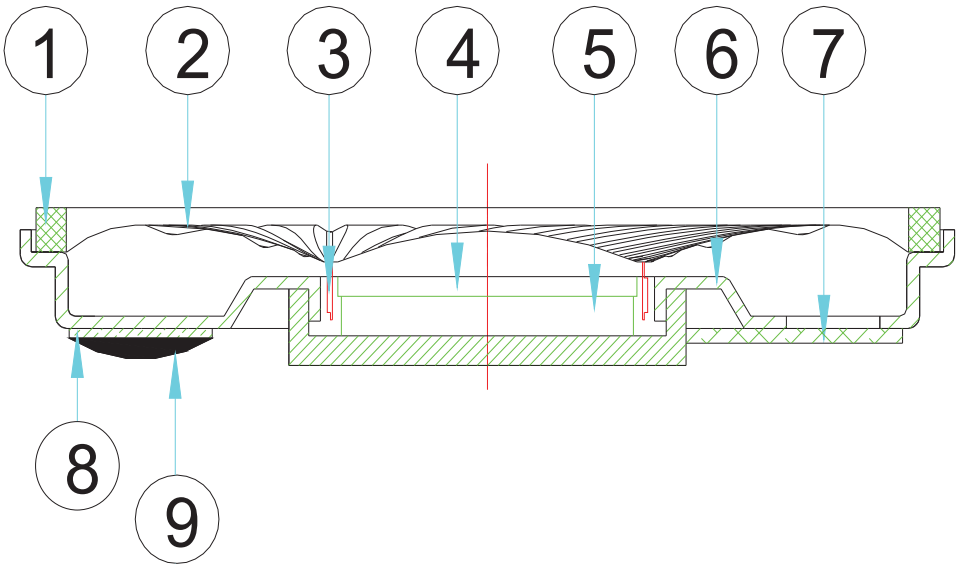
No	Items	Specification
1	High Temperature Test	After being placed in a chamber with +85±3 ℃ for 96 hours and the being placed in natural condition for 1 hour, speaker shall be measured.
2	Low Temperature Test	After being placed in a chamber with −40±3 ℃ for 96 hours and the being placed in natural condition 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 ℃ fo 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 +85℃ for 1 hour, then speaker shall placed in a chamber at −30℃ 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 2W(4Vrms.) 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



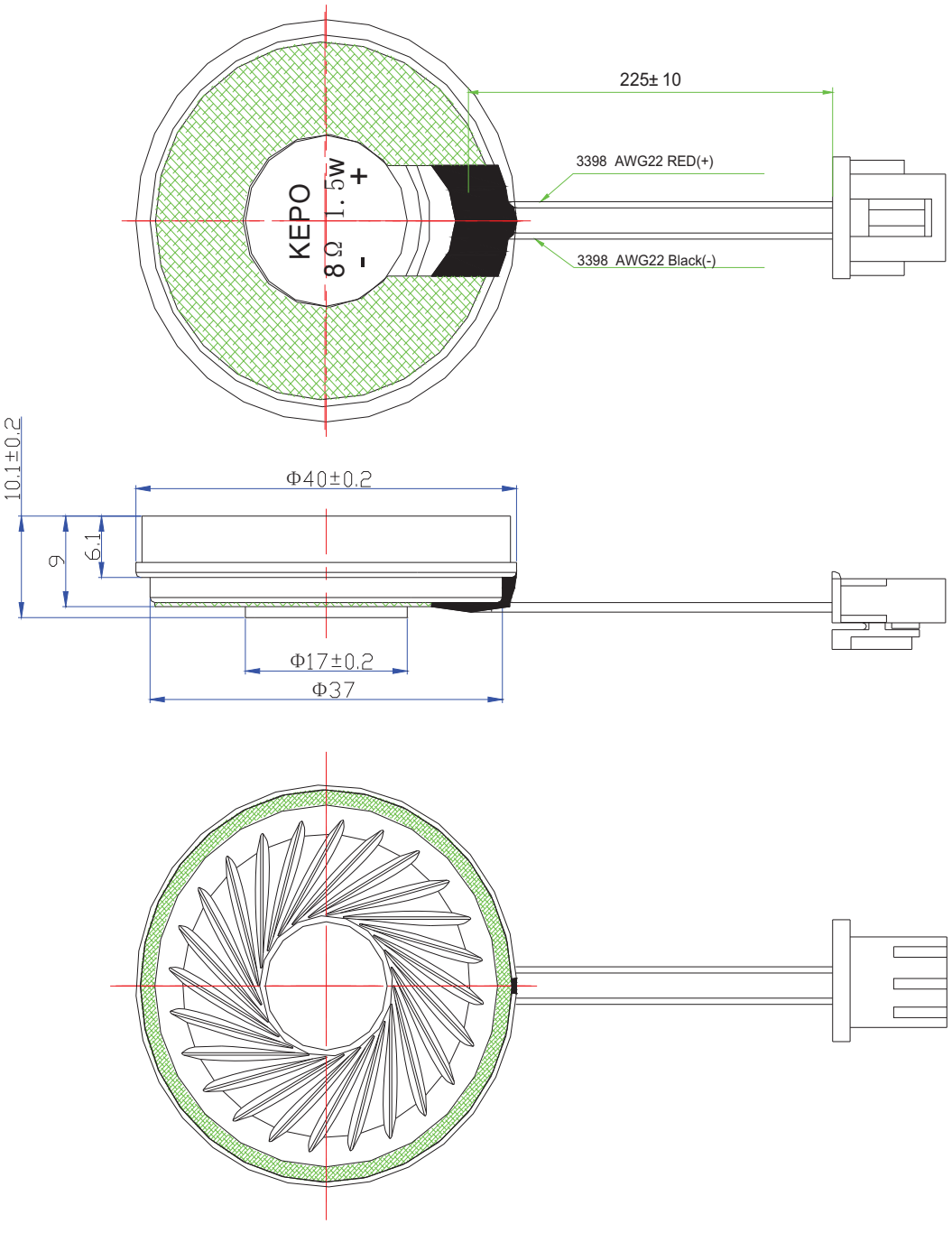


6. Structure



9	Glue	1		
8	Terminal	1	PCB	
7	Screen	1	5B	
6	Frame	1	SPCC	
5	Magnet	1	Nd-Fe-B	
4	Plate	1	SPCC	
3	V-coil	1	bobbin coil	
2	Diaphragm	1	PEN	
1	Gasket	1	Paper	
No.	Part Name	Q'ty	Material	Remarks

7. Dimensions

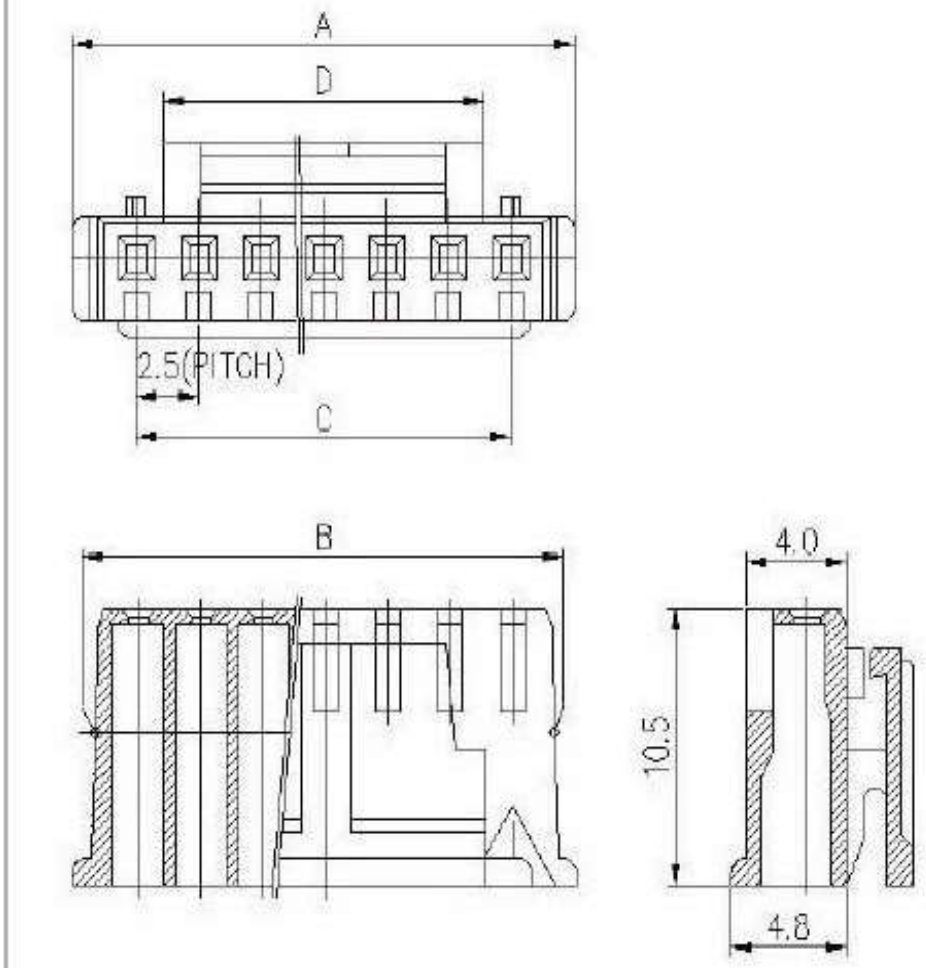


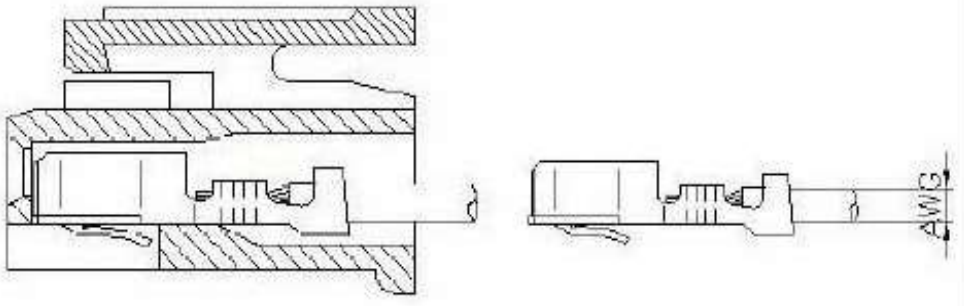
	Connecter	SMH-250-03L(RED)
		YST-025L
		RETAINER SMH-250J-3RT
	Wire:	1569 AWG 22

FIRST ANGLE PROJECTION

UNIT : mm

Tolerance : ±0.2





TERMINAL ASSEMBLY DRAWING

AWG : #22 ~ #28

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.