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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
 : 30 mm

 2.2 Height
 : 6.4 mm

 2.3 Weight
 : 8.5 g

2.4 Operating Temperature range:

-40~+85°C without loss of function

2.5 Store Temperature range:

-40~+85℃ without loss of function

#### 3. Electrical and Acoustic Characteristics.

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

No	Items	Specification	
1	Impedance	16 Ω $\pm$ 15% (1Vrms at 1KHz)	
2	Sound Pressure Level	90 dB ± 3dB (0.1W/0.1M- at 0.8k;1k;1.2k;1.5kHz AVE)	
3	Resonance Frequency	450 Hz ± 20%	
4	Frequency Range	Fo ~10KHz	
5	Input Power	Rated 1 W / Max. 1.5 W	
6	Distortion	5% Max. at 1kHz/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.	

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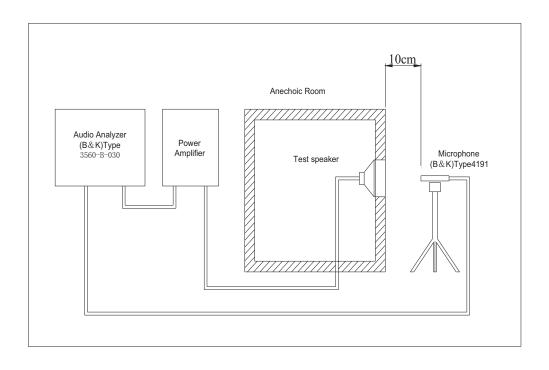
### 4. Reliability Test

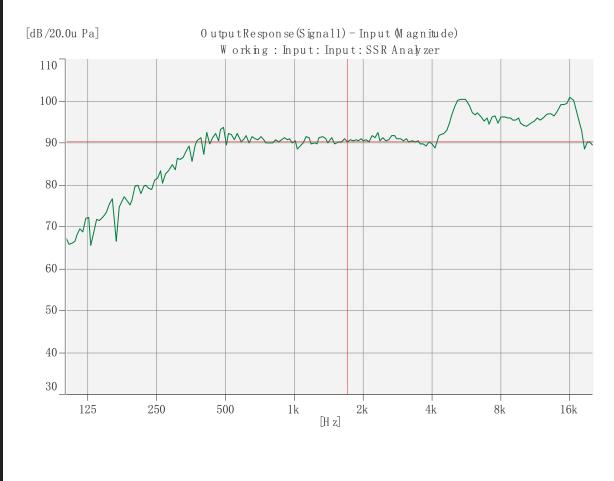
After test(1~7item), the speaker S.P.L . difference shall be within  $\pm 3 dB$ , and the appearance not exist any change to be harmful to normal operation (e.g. cracks,rusts,damages and especially distortion).

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 °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 +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 +85°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 4 above cycles, speaker shall be measured after being placed in natural condition for 10 Sec.  +85°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 1W(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 $M\Omega$		

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## 5. Measurement Block Diagram & Response curve

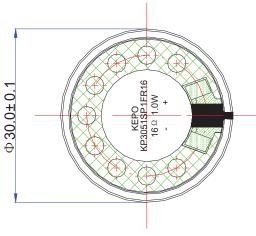


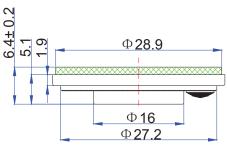


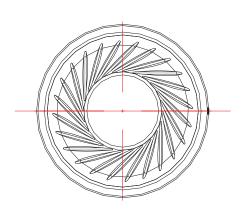
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	6. Structure	) (3	4 5		6
8 7 6 5 4 3 2	Screen Terminal Frame Magnet Plate Diaphragm Voice Coil Gasket	1 1 1 1 1 1	Unwoven Fabric Epoxy PCB SPC Nd-Fe-B SPC PEN Copper	8	
1	Gasket	1	Paper		
No.	Part Name	Q'ty	Material	Rei	marks

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## 7. Dimensions







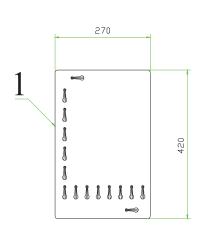
FIRST ANGLE PROJECTION



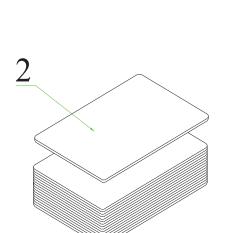
UNIT : mm Tolerance :  $\pm 0.2$ 

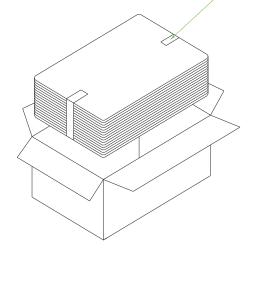
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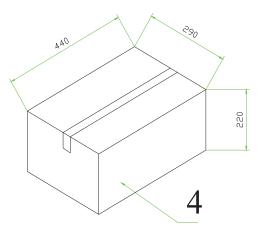
# 8. Packing



50Pcs







QTY: 800Pcs 440 x290 x220