

Customer's No. :	Page	2/9
KEPO Model No. KP2848SP1F-1613	Revision No.	1.1
	Drawing No.	KFC1613

CONTENTS

1. Scope
2. General
3. Electrical and Acoustic Characteristics.
4. Reliability Test
5. Measurement Block Diagram & Response curve
6. Structure
7. Dimensions
8. Packing
9. Revision

Customer's No. :	Page	3/9
	Revision No.	1.1
	Drawing No.	KFC1613
KEPO Model No. : KP2848SP1F-1613		

1. Scope

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

- compact, rich sound
- applications: telephone, computer, etc. ..

2. General

- 2.1 Out-Diameter : Ø28 mm
- 2.2 Height : 4.8 mm
- 2.3 Weight : 5.4 gr.
- 2.4 Operating Temperature range:
-25~+65°C without loss of function
- 2.5 Store Temperature range:
-30~+70°C without loss of function

3. Electrical and Acoustic Characteristics.

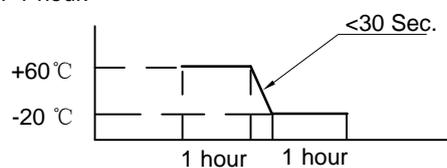
Test condition : 15 ~ 35 °C , 25% ~ 85% RH, 860~1060 mbar

	Items	Specification
1	Impedance	8 Ω ± 15%(at 1Vrms,1000Hz)
2	Sound Pressure Level	80dB ± 3dB(0.25W,0.5M;AT800,1000,1200,1500Hz)
3	Resonance Frequency	650 Hz ± 104Hz
4	Frequency Range	F ₀ ~ 6.5kHz
5	Input Power	Rated 0.5W / Max. 1.1W
6	Distortion	<5% Max. at Rated power input 1000Hz
7	Buzz and Rattle	Should not be audible buzzes,rattles when the 2.0V sine wave signal swept at frequency range.
8	Polarity	When supplied plus D.C. voltage to (+) terminal, the cone diaphragm must move to forward.

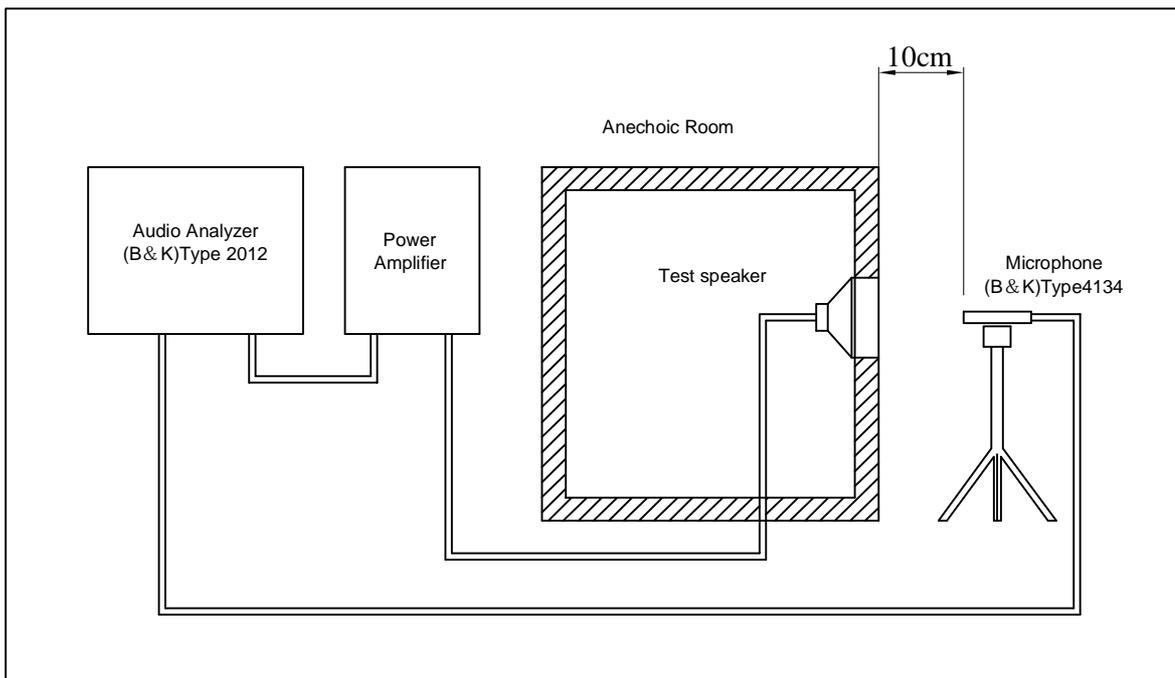
Customer's No. :	Page	4/9
	Revision No.	1.1
	Drawing No.	KFC1613
KEPO Model No. : KP2848SP1F-1613		

4. Reliability Test

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

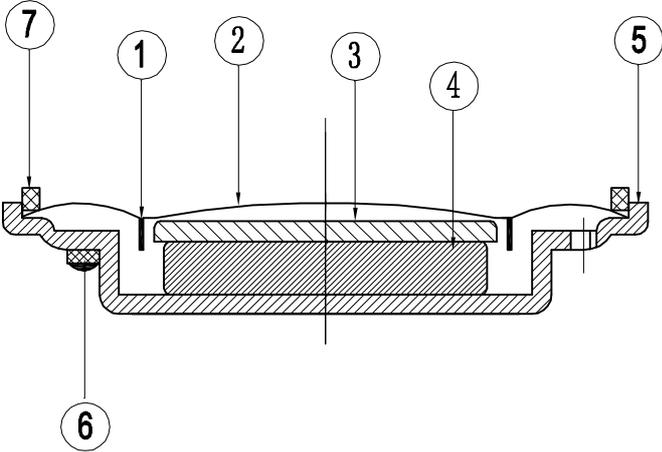
	Item	Specification
1	High Temperature Test	After being placed in a chamber with $+60\pm 2\text{ }^\circ\text{C}$ for 96 hours and then being placed in natural condition for 2 hour, speaker shall be measured.
2	Low Temperature Test	After being placed in a chamber with $-25\pm 3\text{ }^\circ\text{C}$ for 96 hours and then being placed in natural condition for 2 hour, speaker shall be measured.
3	Humidity Test	After being placed in a chamber with 90 to 95 %R.H. at $+40\pm 2\text{ }^\circ\text{C}$ for 96 hours and then being placed in natural condition for 4 hour, speaker shall be measured.
4	Thermal Shock Test	<p>After being placed in a chamber at $+60\text{ }^\circ\text{C}$ for 1 hour, then speaker shall be placed in a chamber at $-20\text{ }^\circ\text{C}$ for 1 hour(1 cycle is the below diagram). After 5 above cycles, speaker shall be measured after being placed in natural condition for 1 hour.</p>  <p>The diagram illustrates a thermal shock cycle. It shows a temperature profile starting at $+60\text{ }^\circ\text{C}$, which is held constant for 1 hour. The temperature then drops to $-20\text{ }^\circ\text{C}$ through a ramp with a time of less than 30 seconds. At $-20\text{ }^\circ\text{C}$, the temperature is held constant for another 1 hour. This cycle repeats five times.</p>
5	Load test	After being applied loading white noise with input power 0.2W for 96 hours, then placed in natural condition for 2 hour, speaker shall be measured.

5. Measurement Block Diagram & Response curve



Customer's No. :	Page	6/9
	Revision No.	1.1
KEPO Model No. : KP2848SP1F-1613	Drawing No.	KFC1613

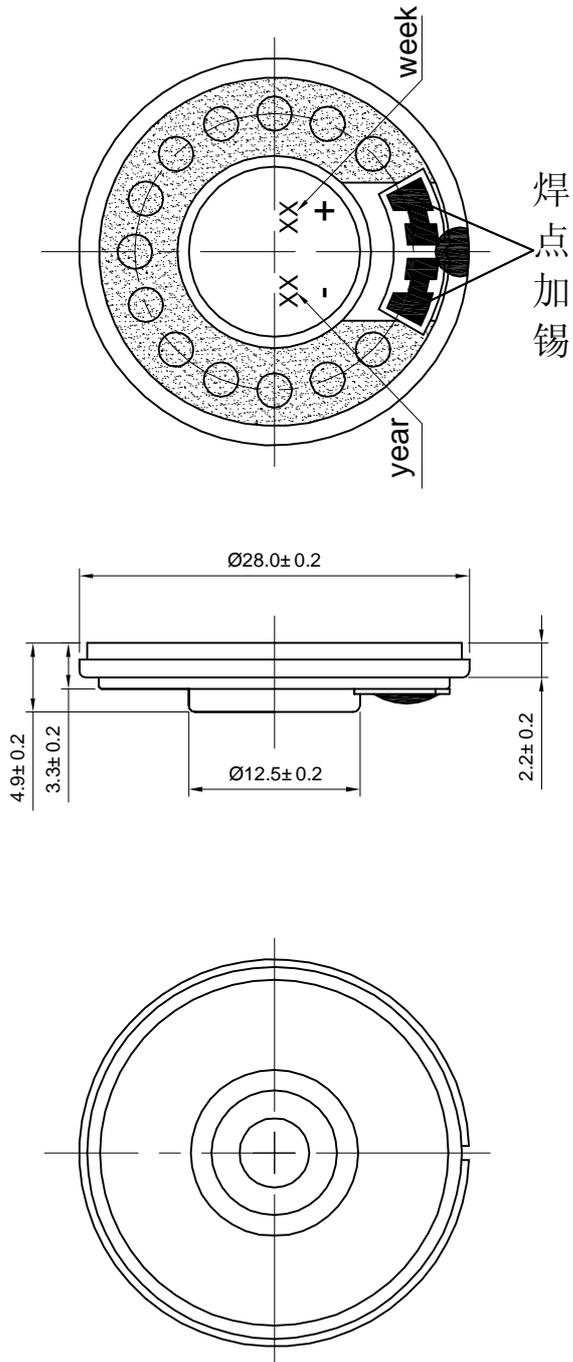
6. Structure



7	Gasket	1	Rubber	
6	Terminal	1	Epoxy PCB	
5	Frame	1	SPCC	Zn Plated
4	Magnet	1	Nd-Fe-B	
3	Plate	1	SPCC	Zn Plated
2	Diaphragm	1	PET Black	
1	Voice Coil	1	Copper	
No.	Part Name	Q'TY	Material	Remarks

Customer's No. :	Page	7/9
	Revision No.	1.1
KEPO Model No. : KP2848SP1F-1613	Drawing No.	KFC1613

7. Dimensions



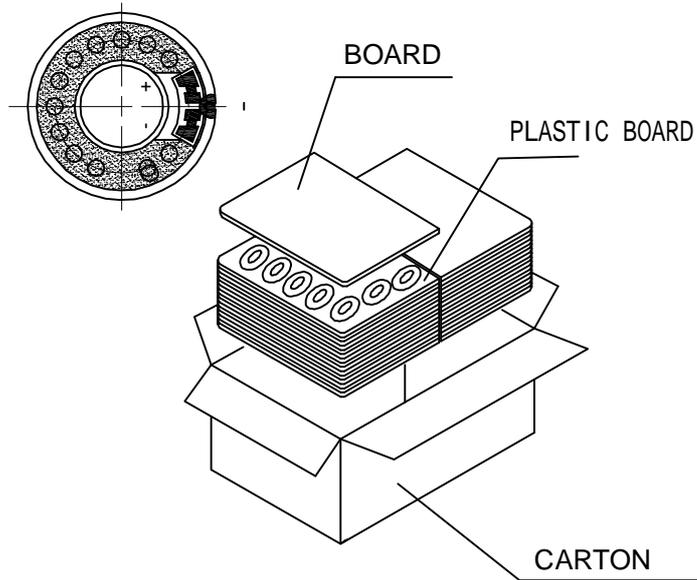
FIRST ANGLE PROJECTION



UNIT : mm
Tolerance : ± 0.2

Customer's No. :	Page	8/9
	Revision No.	1.1
	Drawing No.	KFC1613
KEPO Model No. : KP2848SP1F-1613		

8. Packing



Note:

1. BOARD 40PCS
2. PLASTIC BOARD 40PCS
3. CARTON 1PCS
4. 2000PCS/CARTON