

SPECIFICATION

Customer :

Cusomer No:

Applied To :

Product Name : Piezo Buzzer

Model Name : KPI-G2610(With KEPO)

Drawing No. : KP3.840.013.04R

Compliance with RoHS

Signature of Approval

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Signature of KEPO

Approved by	Checked by	Issued by	Date



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1. Scope

This product specification is applied to the piezoelectric sounder in alarm systems. Please contact us when using this product for any other applications than described in the above.

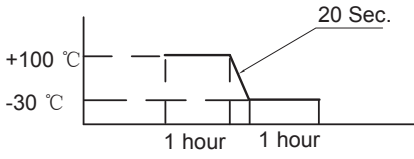
2. General

- 2.1 Out-Diameter : Ø23 mm
- 2.2 Height : 9.8 mm
- 2.3 Weight : 4 g
- 2.4 Operating Temperature range:
-20÷ +80°C without loss of function
- 2.5 Store Temperature range:
-30÷ +100°C without loss of function

3. Electrical and Acoustic Characteristics.

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

	Items	Specification
1	Rated Voltage	12VDC
2	Operating Voltage	3-24VDC
3	Max. Rated Current	10mA at 12VDC
4	Resonant Frequency	3.5±0.5KHz
5	Min. Sound Pressure Level	85dB at 12VDC/30cm
6	Tone Nature	Continuous
7	Case Material/Color	PC/BLACK

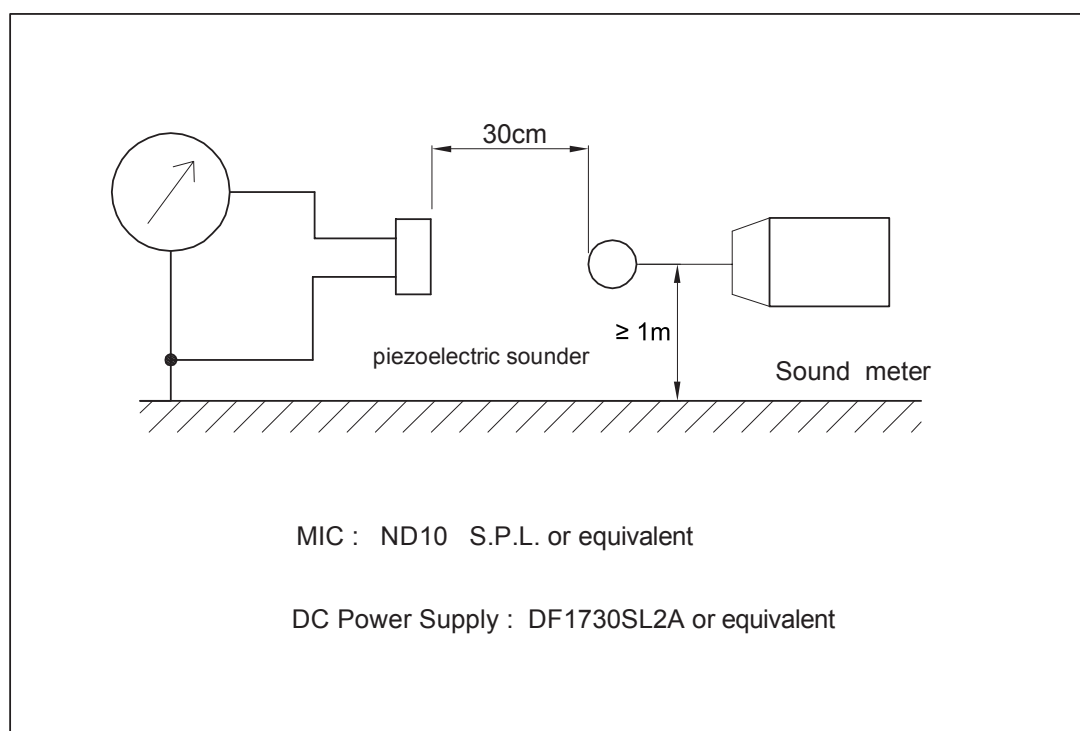
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<h3>4. Reliability Test</h3> <p>After test(1~7item), the transducer S.P.L . difference shall be within $\pm 10\text{dB}$, and the appearance not exist any change to be harmful to normal operation(e.g. cracks,rusts,damages and especially distortion).</p>			
	Item	Specification	
1	High Temperature Test	After being worked in a chamber with $+100\pm 2\text{ }^{\circ}\text{C}$ for 2h and then being placed in natural condition for 2h, sounder shall be measured.	
2	Low Temperature Test	First being worked in a chamber with $-30\pm 2\text{ }^{\circ}\text{C}$ for 2h and then being placed in a chamber with $-30\pm 2\text{ }^{\circ}\text{C}$ for 16h, finally being placed in natural condition for 2h, sounder 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 2 h and then being placed in natural condition for 2h , sounder shall be measured.	
4	Thermal Shock Test	<p>After being worked in a chamber at $+100\pm 2\text{ }^{\circ}\text{C}$ for 1 hour, then sounder shall be placed in a chamber at $-30\pm 2\text{ }^{\circ}\text{C}$ for 1 hour(1 cycle is the below diagram).</p> <p>After 6 above cycles, sounder shall be measured after being placed in natural condition for 1 hour.</p>  <p>The diagram shows a temperature profile for a thermal shock test cycle. The vertical axis represents temperature in degrees Celsius, with marked levels at $+100\text{ }^{\circ}\text{C}$ and $-30\text{ }^{\circ}\text{C}$. The horizontal axis represents time. The cycle consists of: a 1-hour dwell at $+100\text{ }^{\circ}\text{C}$, a 20-second ramp down to $-30\text{ }^{\circ}\text{C}$, a 1-hour dwell at $-30\text{ }^{\circ}\text{C}$, and a 20-second ramp up to $+100\text{ }^{\circ}\text{C}$. The 20-second ramp times are indicated by arrows pointing to the sloped portions of the cycle.</p>	

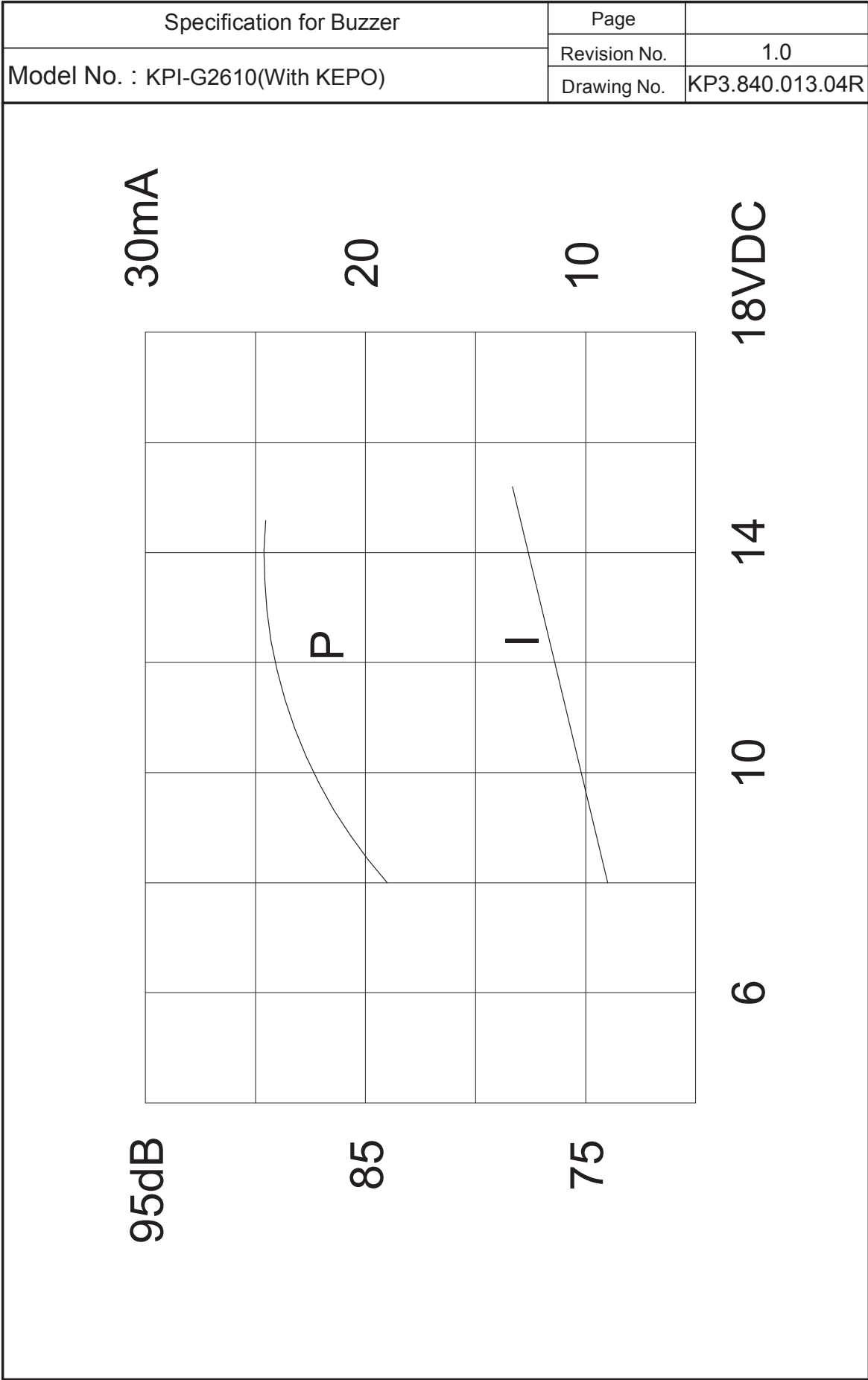
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4. Reliability Test

	Item	Specification
5	Vibration Resistance	Sounder shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 30Hz band of vibration frequency to each of 3 perpendicular directions for 2 hour.
6	Drop Test	Sounder packed in the carton are dropped in six direction from the height of 80cm to the concrete floor.
7	Solderability	Lead terminals are immersed in rosin for 5 seconds and the immersed in solder bath of $+260 \pm 5^{\circ} \text{C}$ for 3 ± 0.5 seconds.
8	Terminal Strength Pulling	The force 10 seconds of 9.8N is applied to each terminal in axial direction.

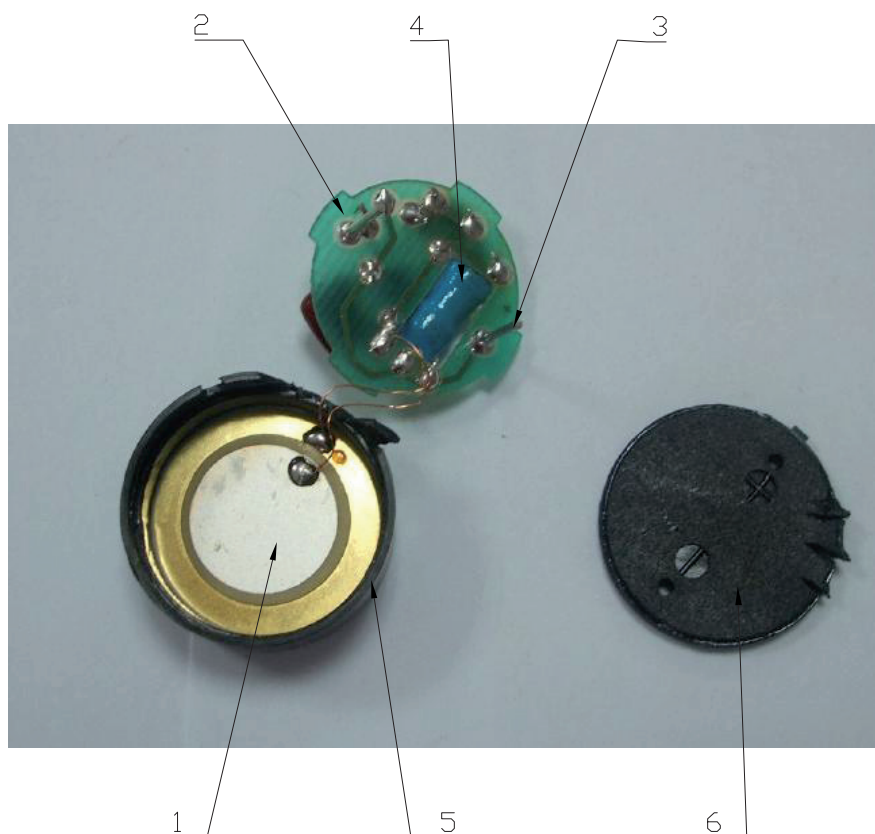
5. Measurement Block Diagram & Response curve





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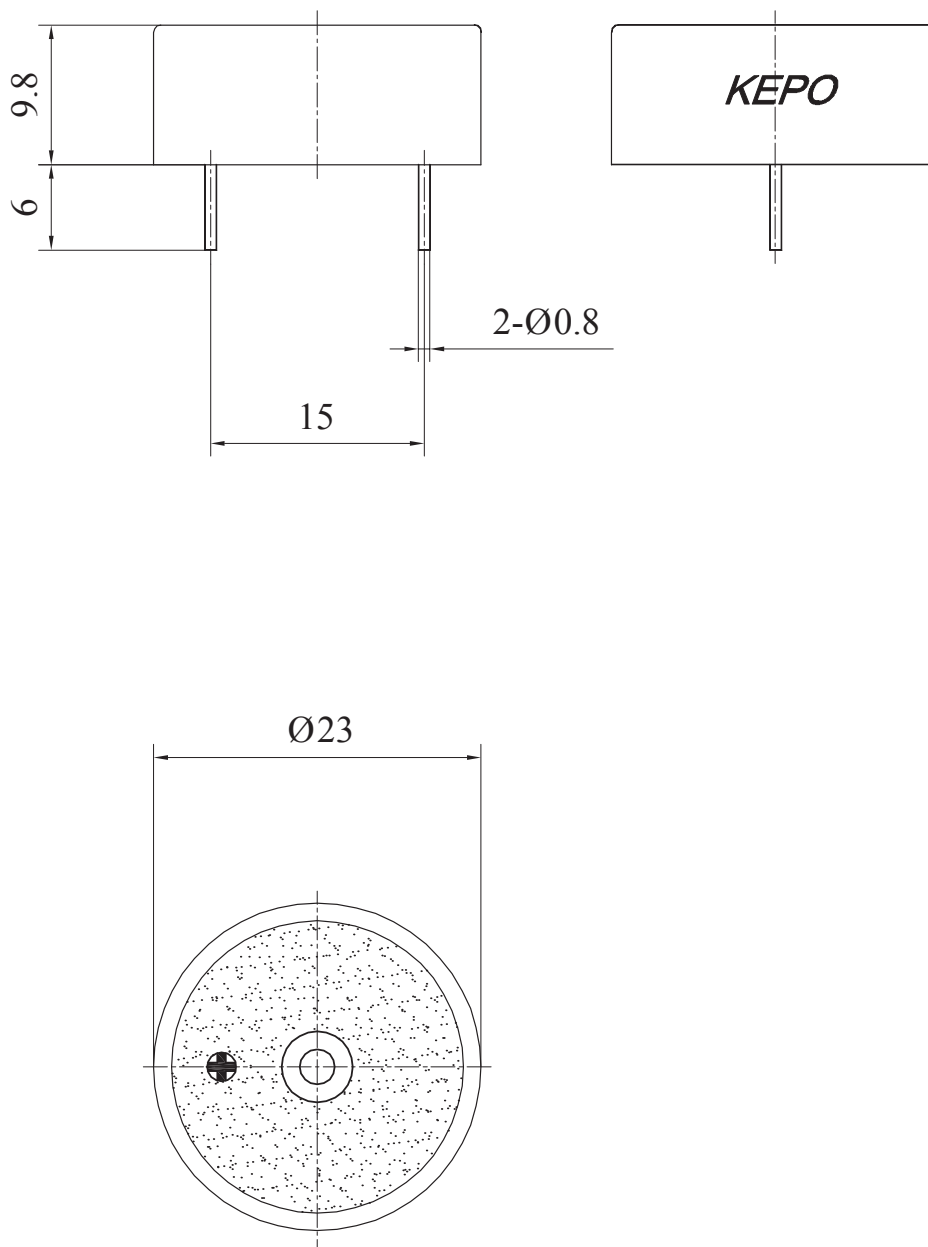
6. Structure



6	Cover	1	PC	
5	Case	1	PC	
4	Component	/	/	
3	Pin	2	H62	
2	PCB	1	FR-4	
1	Piezo-Element	1	H68	
			Piezo Ceramic	
No.	Part Name	Q'TY	Material	Remarks

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7. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm
Tolerance : ±0.5