

SPECIFICATION

Customer :

Applied To :

Product Name : Piezo Buzzer

Model Name : KWT1470J12B-K0592

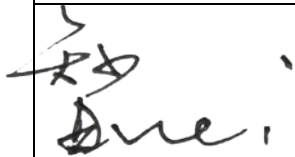
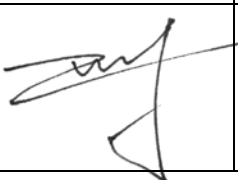
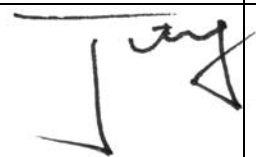
Drawing No. : OEM0912037

Green Level : ☐ Sn-Pb ☒ RoHS ☐ RoHS and HF

Signature of Approval

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Signature of Kingwei

Approved by	Checked by	Issued by	Date
			



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1. Scope

This product specification is applied to the piezo buzzer in alarm systems.

Please contact us when using this product for any other applications than described in the above.

本規格書適用於壓電式蜂鳴器，通常它用在系統中做報警或提示的聲響器用，如果將該產品用於其他領域，請與我們取得聯繫。

2. General

2.1 Out-Diameter : Ø14.0 mm

外徑：Ø 14.0 mm

2.2 Height : 7.0 mm

高度：7.0 mm

2.3 Weight : 0.9 g

重量：0.9 克

2.4 Operating Temperature range : -20~+70 °C without loss of function

工作溫度：-20~+70°C

2.5 Store Temperature range : -30~+80°C without loss of function

儲藏溫度：-30~+80°C

3. Electrical and Acoustic Characteristics.

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

測試條件：15~35 °C , 25%~85%RH , 860~1060mbar

	Items 項目	Specification 規格
1	Rated Voltage 額定電壓	12.0Vp-p Square Wave
2	Max. Allowable Voltage 最大輸入電壓	25Vp-p Square Wave
3	Rated Current(Max) 最大消耗功率	2.0mA at 4.0KHz/12Vp-p Square Wave
4	Capacitance at 100Hz 電容量(at 120Hz)	15000pF± 30%
5	Resonant Frequency 諧振頻率	4.0± 0.5KHz
6	Min.Sound Pressure Level 額定聲壓	85dB / 12Vp-p Square Wave/10cm
7	Case Material/Color 殼體材質/顏色	PPO/BLACK

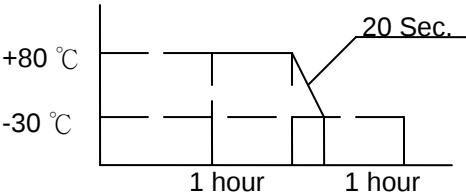
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4. Reliability Test

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).

在1-7項試驗後，聲響器的聲壓變化值在 $\pm 10\text{dB}$ 之內，外觀無變化（例如：開裂、生銹、損傷、變形等現象）。

	Item	Specification
1	High Temperature Test 高溫試驗	After being worked in a chamber with $+80\pm 2^\circ\text{C}$ for 240h and then being placed in natural condition for 4h, sounder shall be measured. 將產品置於 $+80\pm 2^\circ\text{C}$ 試驗箱中，先工作 240小時，然後在正常大氣壓條件下恢復4小時後，進行測量
2	Low Temperature Test 低溫試驗	First being worked in a chamber with $-30\pm 2^\circ\text{C}$ for 240h and then being placed in a chamber with $-30\pm 2^\circ\text{C}$ for 16h, finally being placed in natural condition for 4h, sounder shall be measured. 將產品置於 $-30\pm 2^\circ\text{C}$ 試驗箱中，先工作 240小時，再放置16小時，然後在正常大氣壓條件下恢復4小時後，進行測量
3	Humidity Test 潮濕試驗	After being placed in a chamber with 90 to 95%R.H. at $+40\pm 2^\circ\text{C}$ for 240 h and then being placed in natural condition for 4h, sounder shall be measured. 將產品置於濕度為90~95%R.H.，溫度為 $+40\pm 2^\circ\text{C}$ 試驗箱中 240 小時，然後在正常大氣壓條件下恢復4小時後，進行測量
4	Thermal Shock Test 熱衝擊試驗	After being worked in a chamber at $+80^\circ\text{C}$ for 1 hour, then sounder shall be placed in a chamber at -30°C for 1 hour(1 cycle is the below diagram). After 5 above cycles, sounder shall be measured after being placed in natural condition for 1 hour. 將產品置於 $+80\pm 2^\circ\text{C}$ 試驗箱中，先工作1小時，然後將產品置於 $-30\pm 2^\circ\text{C}$ 試驗箱中，再工作1小時，經過5個迴圈後，在正常大氣壓條件下恢復1小時，進行測量  The diagram illustrates a thermal shock cycle. It shows a temperature profile with two horizontal segments: one at $+80^\circ\text{C}$ and another at -30°C. Each segment is labeled '1 hour'. A diagonal line connects the two segments, with a label '20 Sec.' indicating the dwell time during the temperature transition.

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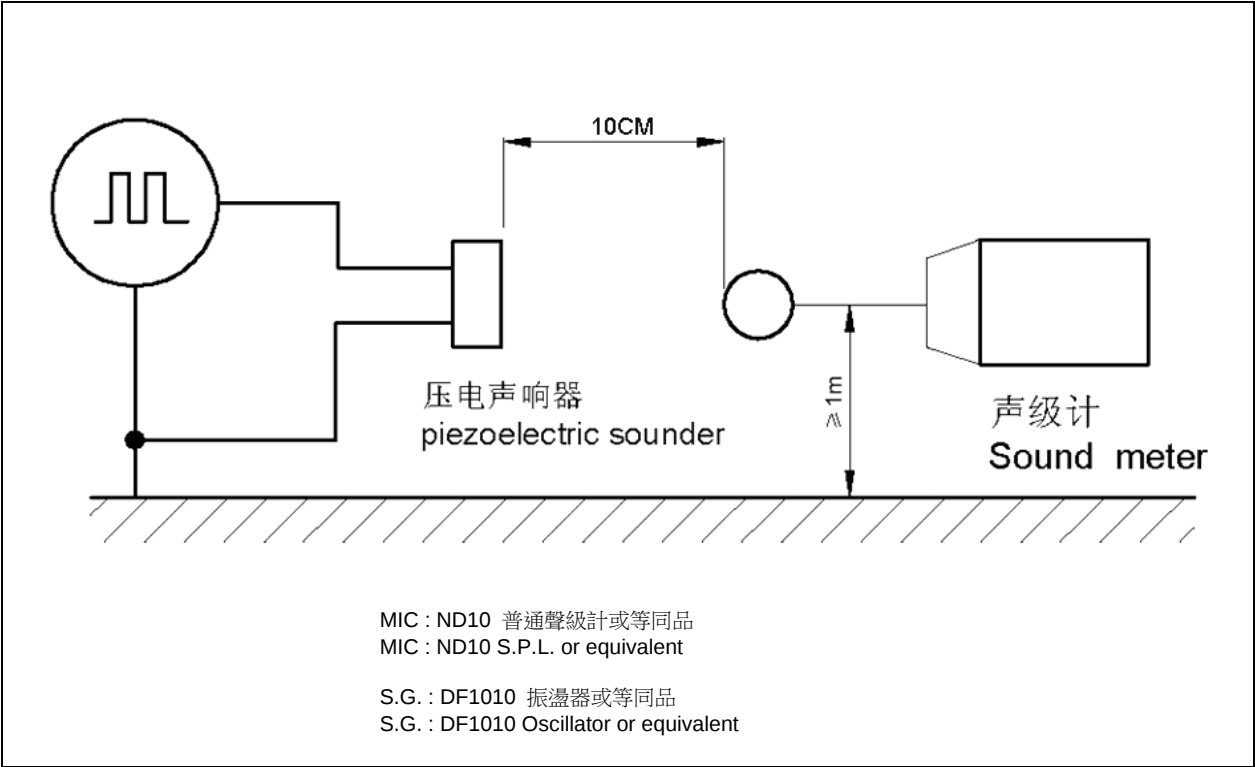
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4. Reliability Test

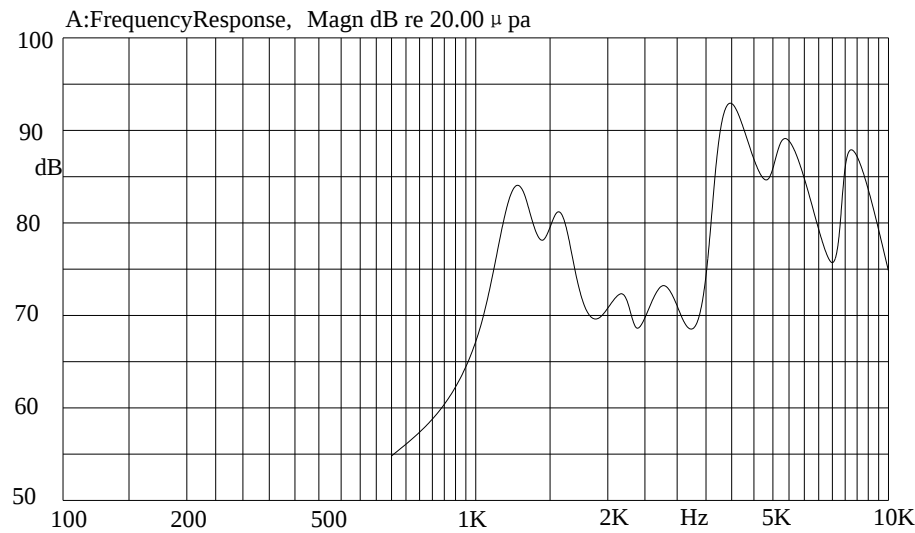
	Item	Specification
5	Vibration Resistance 振動試驗	Sounder shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 30Hz band of vibration frequency to each of 3 perpendicular directions for 2 hour. 振幅為1.5mm，頻率為10~30Hz，三個不同軸方向各振動2小時，試驗後進行測量。
6	Drop Test 跌落試驗	Sounder packed in the carton are dropped in six direction from the height of 80cm to the concrete floor. 跌落高度80cm, 6 個不同方向整箱跌落到水泥地，試驗後進行測量。
7	Solderability 可焊性試驗	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. 插針浸入松香5秒，然後再浸入$+260 \pm 5^{\circ} \text{C}$的錫爐中$3 \pm 0.5$秒，插針表面應覆蓋一層光滑明亮的焊料。
8	Terminal Strength Pulling 插針強度試驗	The force 10 seconds of 9.8N is applied to each terminal in axial direction. 插針應承受9.8N拉力，拉力時間10秒，插針無鬆動和脫落現象。

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5. Measurement Block Diagram & Response curve

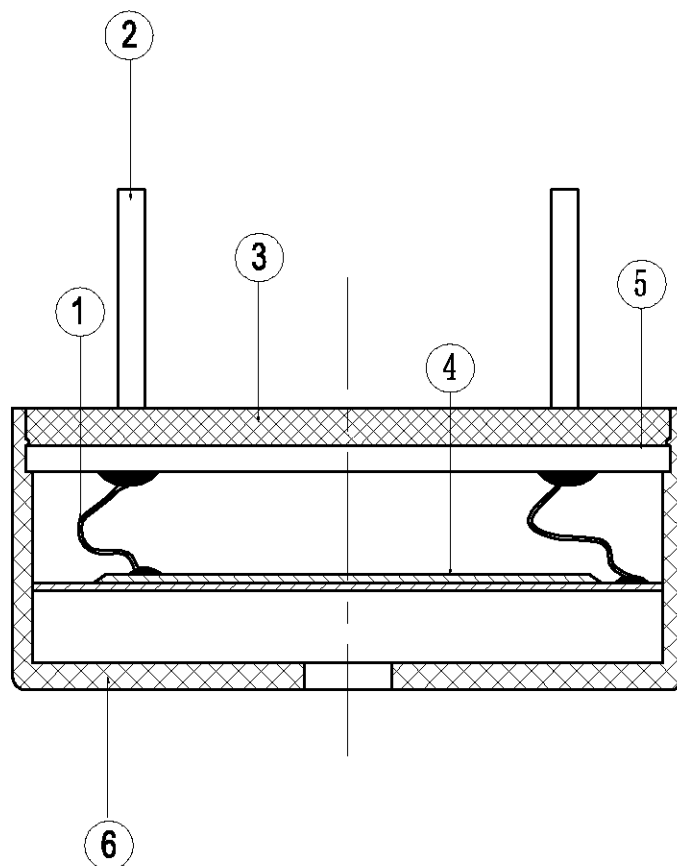


FREQUENCY RESPONSE:



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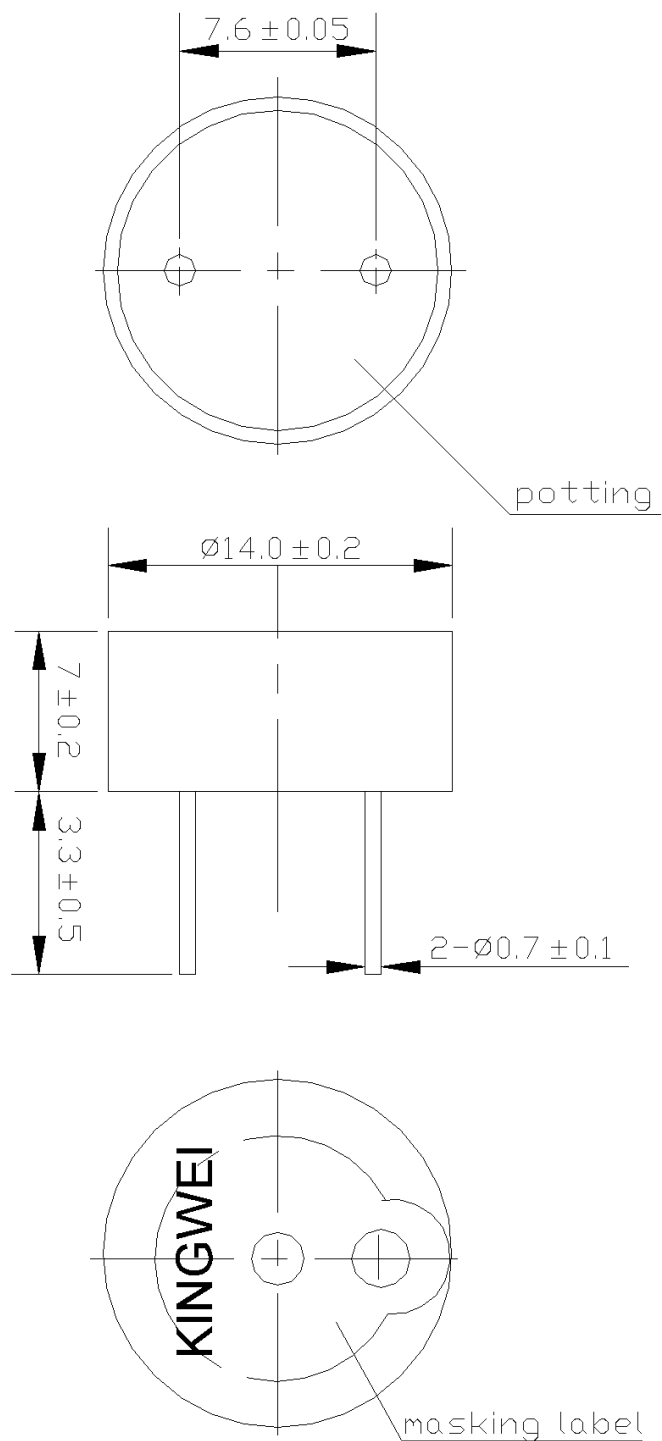
6. Structure



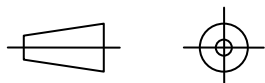
6	Case 殼體	1	PPO	
5	PCB 印製板	1	/	
4	Element 蜂鳴片	1	H65	
			AB膠	
3	Epoxy resin 環氧	1	/	
2	Pin 插針	2	Gu	
1	Wire QA-1漆包線	2	/	
No.	Part Name 型號	Q'TY 數量	Material 材質	Remarks 備註

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7. Dimensions



FIRST ANGLE PROJECTION



UNIT : mm
Tolerance : ± 0.5

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8. Revision

Rev. No.	DATE	PAGE	DESCRIPTION	SIGN
1.0	2008.11.02	/	primary	
1.1	2011.03.01	/	PIN長修由5.5mm改為3.3mm	