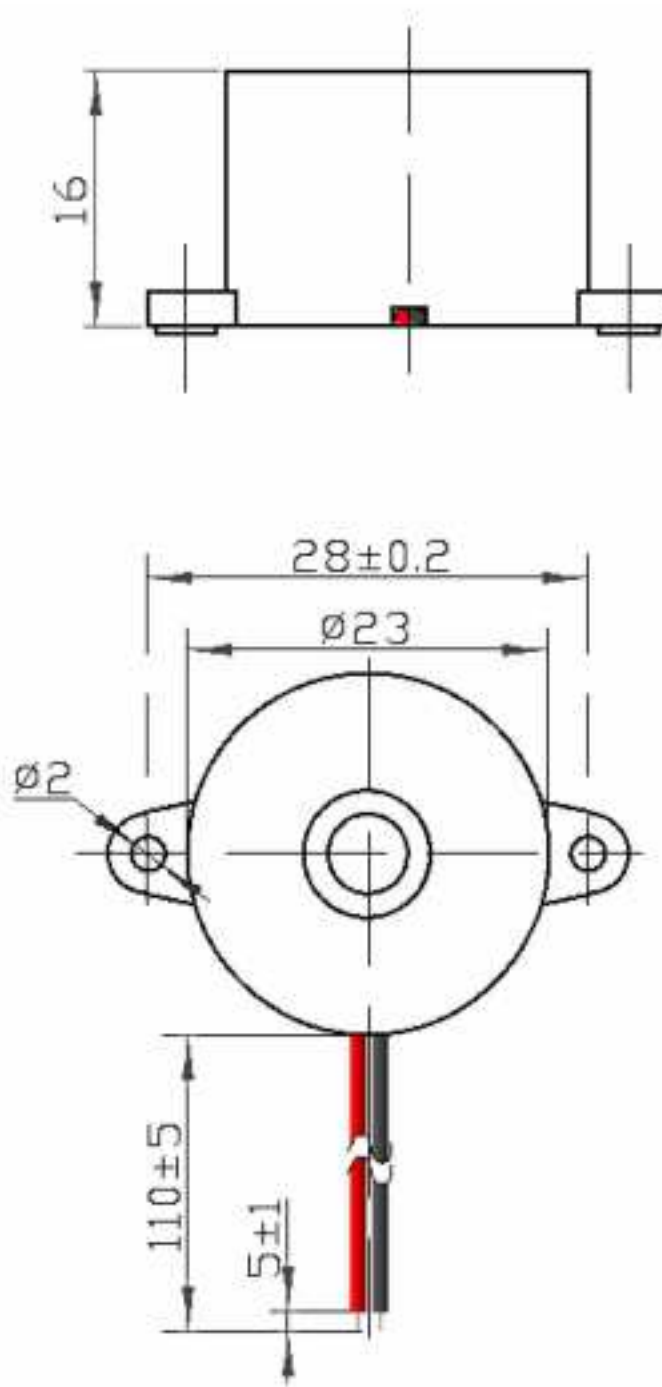




## 7. Dimensions

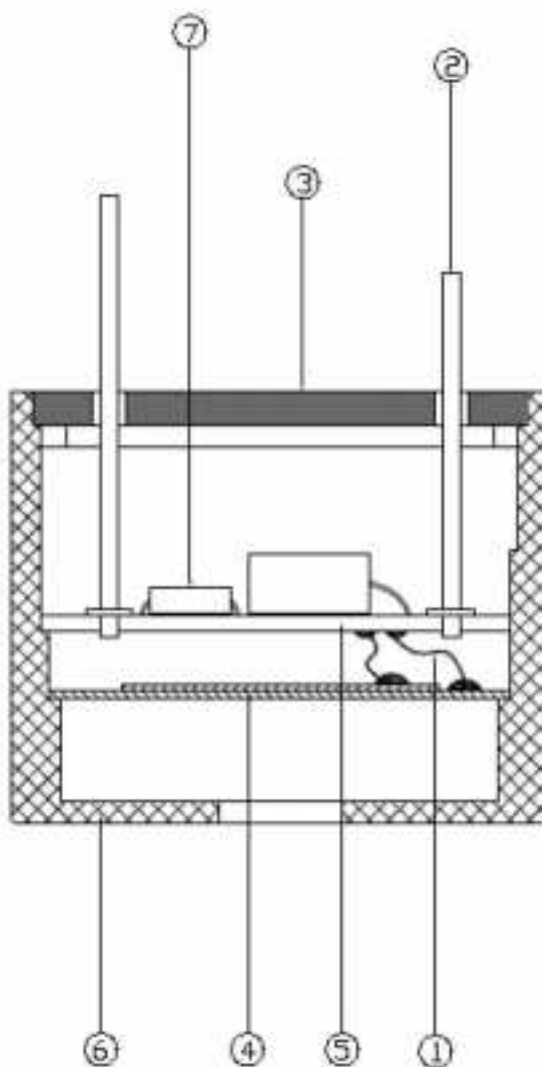


FIRST ANGLE PROJECTION



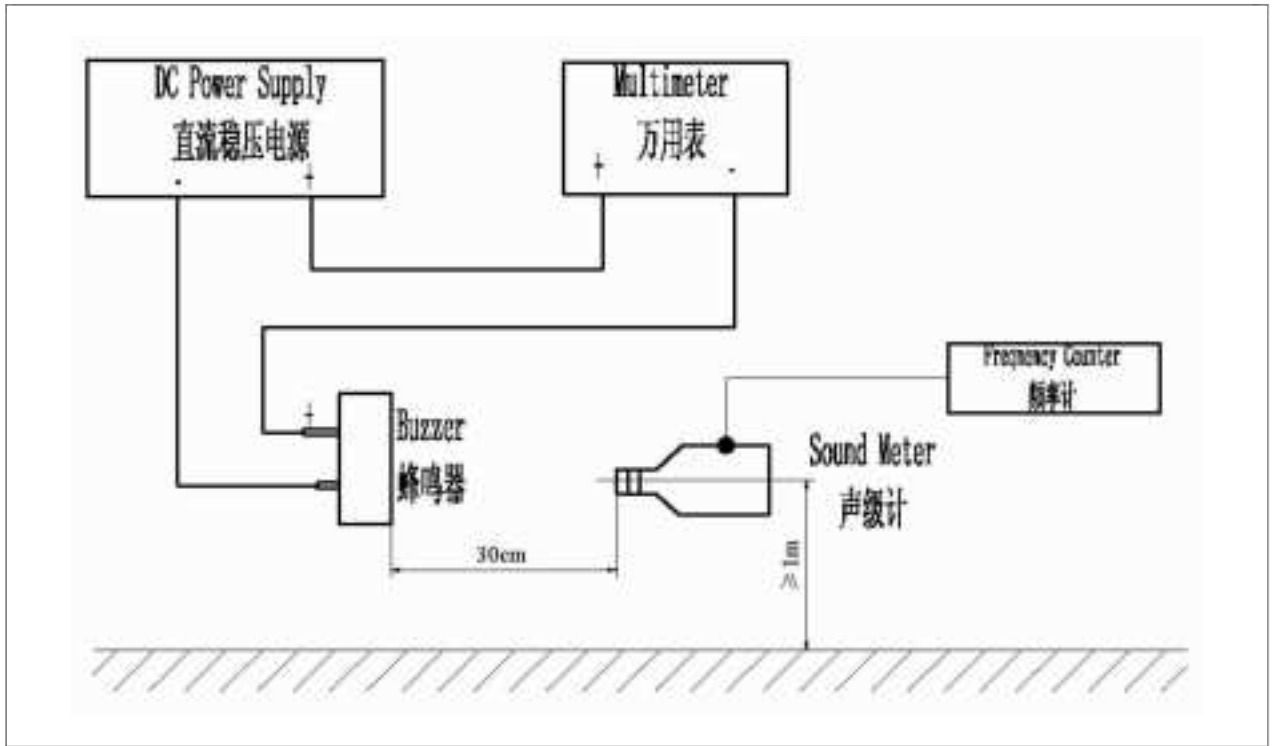
UNIT : mm  
Tolerance :  $\pm 0.5$

## 6. Structure

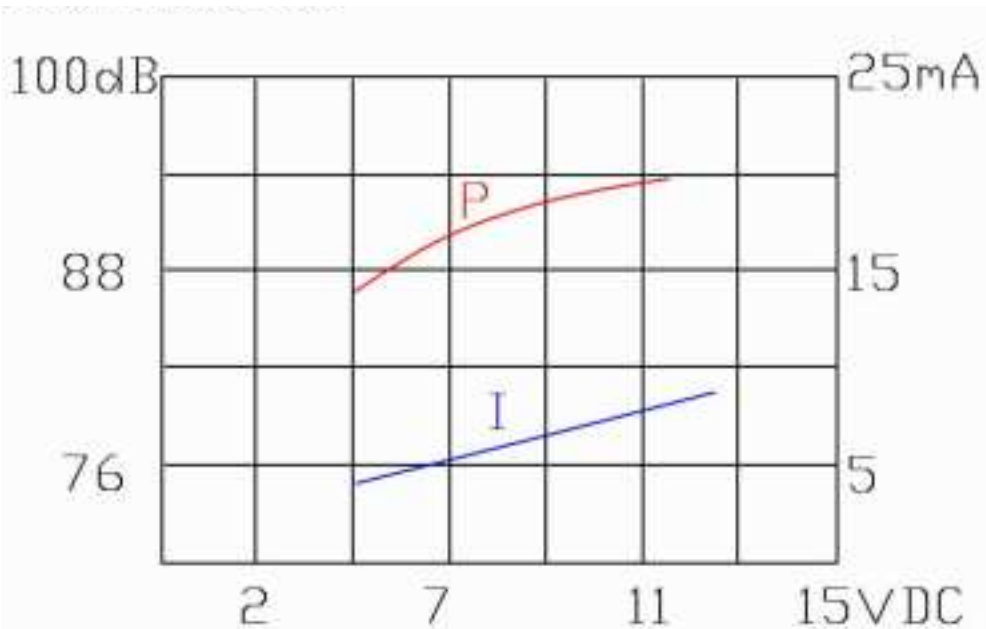


7	Component 元器件	/	/	
6	Case 殼體	1	PPO	
5	PCB 印製板	1	Fr-4	
4	Element 蜂鳴片	1	H65	
			Piezo Ceramic	
3	Cover 後蓋	1	PPO	
2	Pin 插針	2	H62	
1	Wire 引線	2	/	
No.	Part Name 型號	Q'TY	Material 材質	Remark 備註

### 5. Measurement Block Diagram & Response curve



#### FREQUENCY RESPONSE:



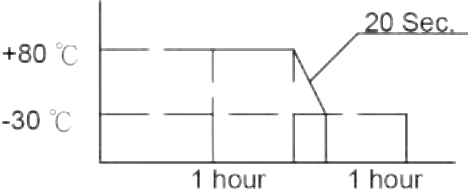
## 4. Reliability Test

	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 $3 \pm 0.5$ 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。

## 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、生鏽、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 24h 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 24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 24h 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 24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 24 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 24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 $-30^\circ\text{C}$ 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 

## 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. 本規格書適用於壓電式聲響器，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 : Ø23.5 mm

外徑：Ø 23.5 mm

2.2 Height : 16.0 mm

高度：16.0 mm

2.3 Weight : 8.0 g

重量：8.0 克

2.4 Operating Temperature range : -20~+60 °C without loss of function

工作溫度：-20~+60°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	12VDC
2	Max. Allowable Voltage 最大輸入電壓	8~15.0VDC
3	Rated Current(Max) 最大消耗功率	20mA at 3.3KHz/12VDC
4	Tone Nature 音調	Continuous
5	Resonant Frequency 諧振頻率	3.3± 0.5KHz
6	Min.Sound Pressure Level 額定聲壓	90dB / 12Vp-p Square Wave/30cm
7	Case Material/Color 殼體材質/顏色	PPO/BLACK

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尺寸

## 8. Revision

版本



# SPECIFICATION

Customer :

Applied To :

Product Name : Piezo Buzzer

Model Name : KWI-2316E12L-2E

Drawing No. : OEM1205317

Green Level :  Sn-Pb     RoHS     RoHS and HF