## 1.Scope

This specification is applied to Piezo Buzzer (Self-Drive Type)

The product describe below are used for buzzer in various alarm systems.

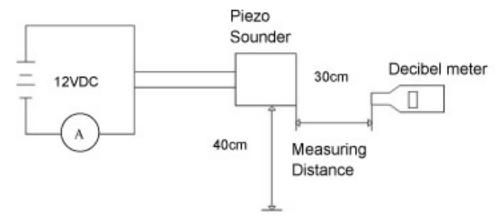
### 2.Basic Condition

- 2.1 Rated Voltage: 12VDC
- 2.2 Operating Voltage:3~28VDC
- 2.3 Operating Temperature Range:-20°C~+70°C
- 2.4 Storage Temperature Range: -30°C~+80°C

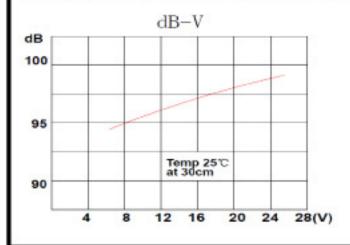
### 3.Electrical Characteristics

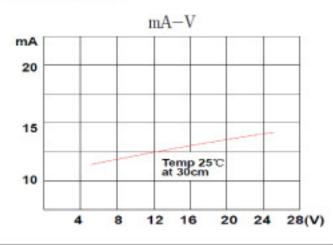
- 3.1 Sound Press Level: ≥95dB at 30cm / 12VDC
- 3.2 Consumption Current: ≤15mA at 12VDC
- 3.3 Resonate Frequency:3500Hz±500Hz
- 3.4 Tone Nature: Continuous Sound
- 3.5 Material: ABS

## 4.Measuring Method



## 5. Sound Press Level & Consumption Current Curve





# **TEST REPORT**

Product No:HPE-2910-12V

Date:2010-5-7

#	dB	mA	Hz	#	dB	mA	Hz
1	108	12.8	3858				
2	107	10.9	3752				
		以下空白					
							2
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				$\perp$			
				$\perp$			
				$\perp$			
							3
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4				$\perp$			
_							2
				$\perp$			
_				$\perp$			
$\perp$				$\perp$			7
$\perp$				$\perp$			
$\perp$				$\perp$			
$\perp$							7

#### Remark:

(1)Sound Press Level: ≥95dB at 30cm / 12VDC

(2)Consumption Current : ≤15mA at 12VDC

(3)Resonate Frequency: 3500Hz±500

Approved BY:陳毓宏

Auditing BY:陳逸閔

Checked BY: 李秋蓉

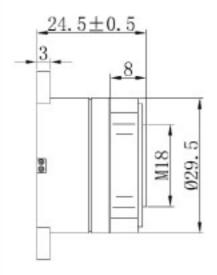
6.Environment Test Method					
NO.	ITEM	TEST CONDITION AND REQUIREMENT			
1	High Temperature Test (Storage)	After being placed in a chamber with 80±2°C for 96 hours and then being placed in normal condition for 2 hours.  Allowable variation of SPL after test: ±10dB.			
2	Low Temperature Test (Storage)	After being Placed in a chamber with -30±2°C for 96 hours and then being placed in normal condition for 2 hours.  Allowable variation of SPL after test: ±10dB.			
3	Humidity Test	After being Placed in a chamber with 90-95% R.H. at 40±2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: ±10dB.			
4	Temperature Cycle Test	The part shall be subjected to 5 cycles. One cycle shall be consist of:  +80°C  +25°C  -30°C  +25°C  -30°C  Allowable variation of SPL after test: ±10dB.			
5	Drop Test	Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 100cm. Allowable variation of SPL after test: ±10dB.			
6	Vibration Test	After being applied vibration of amplitude of 1.5mmwith 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours . Allowable variation of SPL after test: ±10dB.			
7	Solder ability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +300±5°C for 3±1 seconds.90% min. lead terminals shall be wet with solder (Except the edge of terminals).			
8	Terminal / Wire Strength Pulling Test	The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off.			

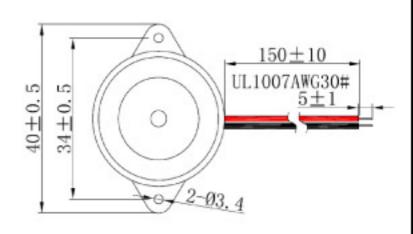
# 7. Reliability Test

Continuous life test: 250 Hours continuous operating at +70 °C with maximum rated voltage applied.

Intermittent life test:
Aduty cycle of 1 minute on, 5 minutes off,a minimum of 10000 times at temperature +25 °C±2

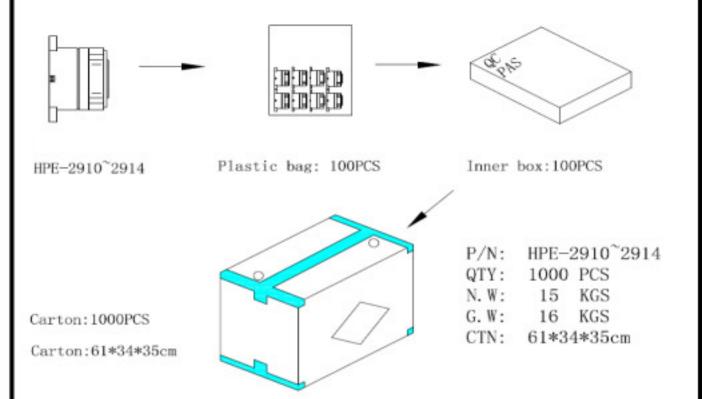
# 8.Dimension





Tolerance ±0.5mm

# 9.Packing List



## 1.Scope

This specification is applied to Piezo Buzzer (Self-Drive Type)

The product describe below are used for buzzer in various alarm systems.

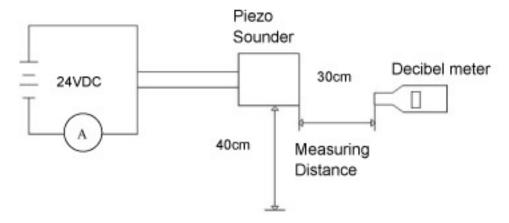
#### 2.Basic Condition

- 2.1 Rated Voltage:24VDC
- 2.2 Operating Voltage:3~28VDC
- 2.3 Operating Temperature Range: -20°C~+70°C
- 2.4 Storage Temperature Range: -30°C~+80°C

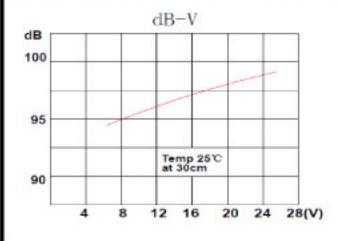
#### 3.Electrical Characteristics

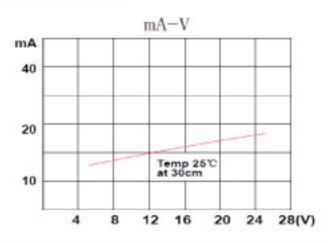
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- 3.2 Consumption Current: ≤20mA at 24VDC
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- 3.5 Material: ABS

### 4.Measuring Method



## 5. Sound Press Level & Consumption Current Curve





# TEST REPORT

# dB mA Hz # dB mA Hz

#	dB	mA	Hz	#	dB	mA	Hz
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$\vdash$	100						-
$\vdash$							
	9						

### Remark:

(1)Sound Press Level: ≥95dB at 30cm / 24VDC (2)Consumption Current: ≤20mA at 24VDC

(3)Resonate Frequency: 3500Hz±500

Approved BY:陳毓宏

Auditing BY:陳逸閔

Checked BY: 李秋蓉

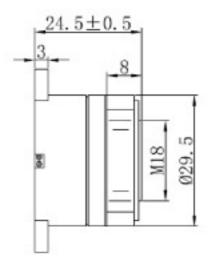
6.Environment Test Method					
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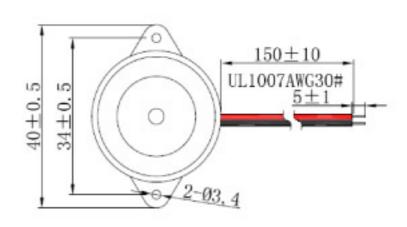
# 7. Reliability Test

Continuous life test: 250 Hours continuous operating at +70 °C with maximum rated voltage applied.

Intermittent life test:
Aduty cycle of 1 minute on, 5 minutes off,a minimum of 10000 times at temperature +25 °C±2

## 8.Dimension





Tolerance ±0.5mm

# 9.Packing List

