

## 1.Scope

This specification is applied to Piezo Siren

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

## 2.Basic Condition

2.1 Rated Voltage:12VDC

2.2 Operating Voltage:8~16VDC

2.3 Operating Temperature Range:-20 °C~+70 °C

2.4 Storage Temperature Range:-30°C~+85 °C

## 3.Electrical Characteristics

3.1 Sound Press Level: $\geq 100$ dB at 100cm / 12VDC

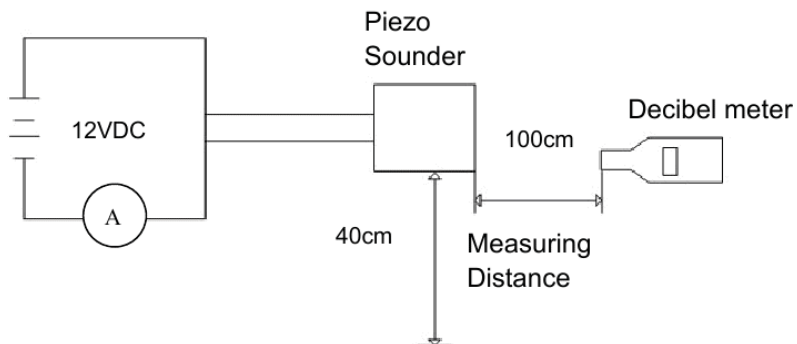
3.2 Consumption Current: $\leq 200$ mA at 12VDC

3.3 Resonate Frequency:2900Hz $\pm$ 500Hz

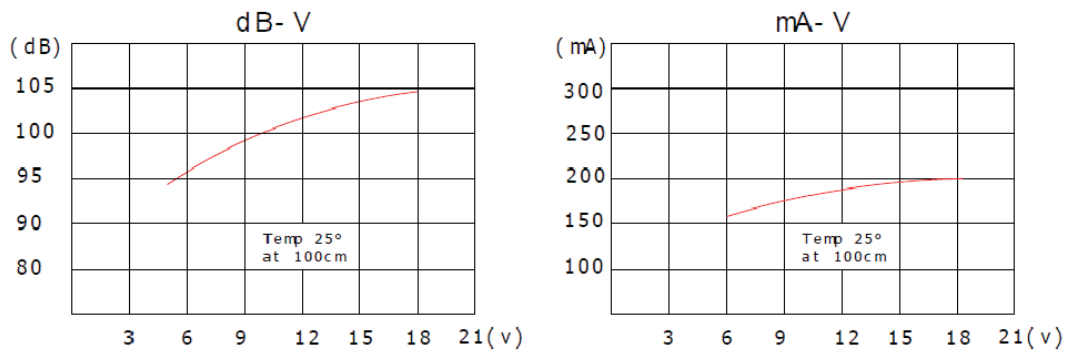
3.4 Tone Nature: Siren Sound

3.5 Material: ABS

## 4.Measuring Method



## 5.Sound Press Level & Consumption Current Curve



# TEST REPORT

Product No:HPE-107-12V

Date:11<sup>th</sup> December 2012

#	dB	mA	Hz	#	dB	mA	Hz
1	105	73	3152	28			
2	105	88	3167	29			
3	106	76	3241	30			
4				31			
5				32			
6				33			
7				34			
8				35			
9				36			
10				37			
11				38			
12				39			
13				40			
14				41			
15				42			
16				43			
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20				47			
21				48			
22				49			
23				50			
24				51			
25				52			
26				53			
27				54			

**Remark:**

(1)Sound Press Level :  $\geq 100$ dB at 100cm /12VDC

(2)Consumption Current :  $\leq 200$ mA at 12VDC

(3)Resonate Frequency : 2900Hz $\pm$ 500

Approved BY: 陳錦宏

Auditing BY: 游惠豐

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 $85\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
2	Low Temperature Test (Storage)	After being placed in a chamber with $-30\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
3	Humidity Test	After being placed in a chamber with 90-95% R.H. at $40\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
4	Temperature Cycle Test	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of:</p> <p>Allowable variation of SPL after test: <math>\pm 10\text{dB}</math>.</p>
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: $\pm 10\text{dB}$ .
6	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours . Allowable variation of SPL after test: $\pm 10\text{dB}$ .
7	Solder ability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+270\pm 5^{\circ}\text{C}$ for $5\pm 1$ seconds.90% min. lead terminals shall be wet with solder. Hand Soldering $360\pm 5^{\circ}\text{C}$ for 1.5 Sec. Recommend using constant searing-iron
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

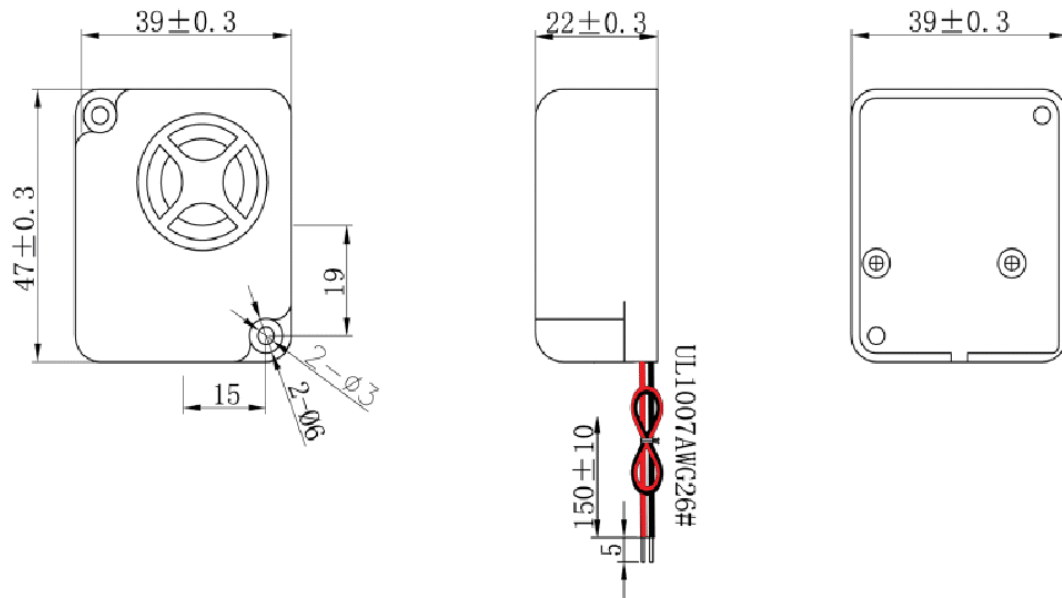
### Continuous life test:

250 Hours continuous operating at  $+70^{\circ}\text{C}$  with maximum rated voltage applied .

### Intermittent life test:

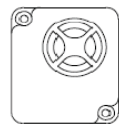
Aduty cycle of 1 minute on, 5 minutes off,a minimum of 10000 times at temperature  $+25^{\circ}\text{C}\pm 2$

## 8.Dimension

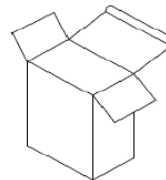


Tolerance  $\pm 0.5$ mm

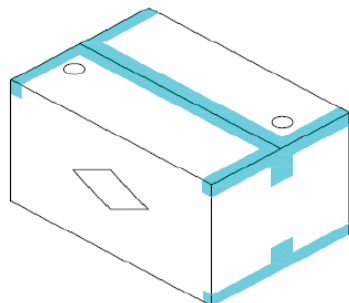
## 9.Packing List



HPE-107



Package : 4. 5\*3. 0\*5. 5cm



P/N: HPE-107  
QTY: 500 PCS  
N. W: 17 KGS  
G. W: 18 KGS  
CTN: 48\*34\*31cm