

承 認 書

SPECIFICATION APPROVAL SHEET

Product Description : 壓電自激式蜂鳴器
產品名稱 : _____
Promover Product No. : HPE-2910
我方型號 : _____
Company Name : 宏原國際有限公司
公司名稱 : _____
Customer Product No. : _____
客戶型號 : _____
Sample No. : PMC-23879
樣品單號 : _____

Customer Approved Signature 客戶簽認

DATE :	DATE :	DATE :
--------	--------	--------



澄源松實業有限公司

ISO9001:2000 Certificate



Approved By 確 認	Check By 審 核	Assumed By 擔 當
 DATE :	 DATE :	 DATE :

1.Scope

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

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

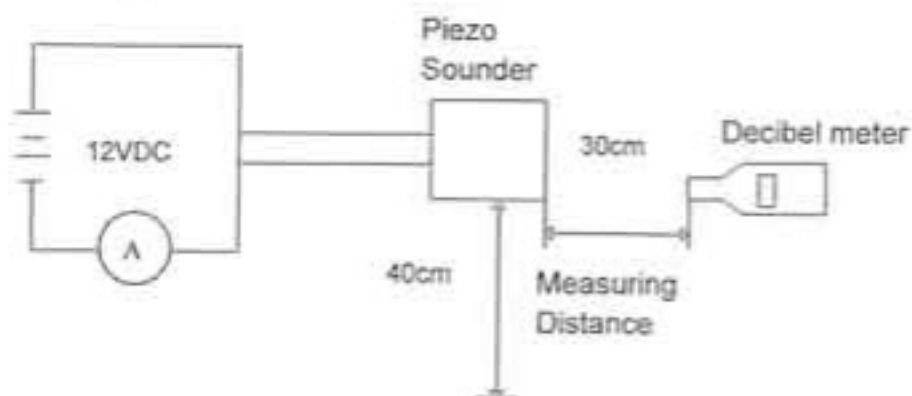
2.Basic Condition

- 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

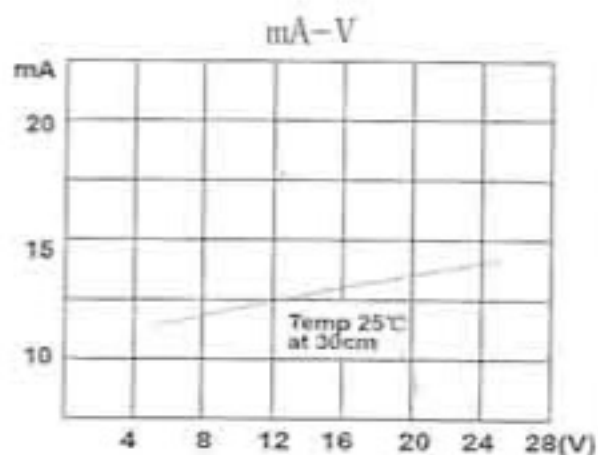
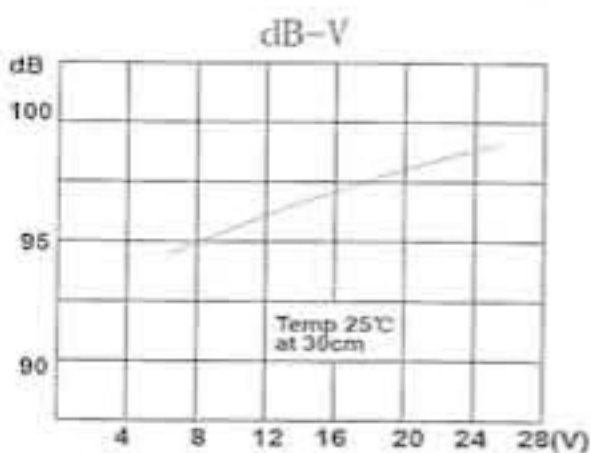
3.Electrical Characteristics

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

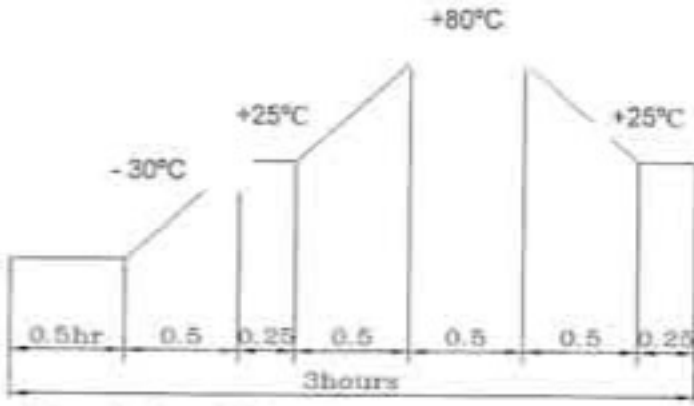
4.Measuring Method



5.Sound Press Level & Consumption Current Curve



6.Environment Test Method

NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage)	After being placed in a chamber with $80\pm 2^{\circ}\text{C}$ 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: $\pm 10\text{dB}$.</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 $+300\pm 5^{\circ}\text{C}$ 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

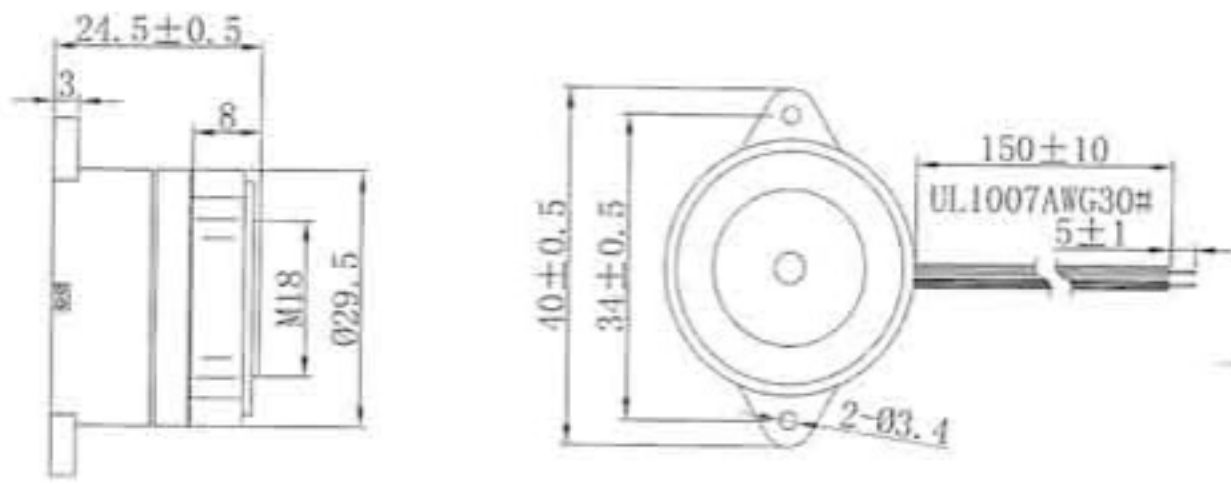
Continuous life test:

250 Hours continuous operating at $+70^{\circ}\text{C}$ 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 $\pm 0.5\text{mm}$

9.Packing List



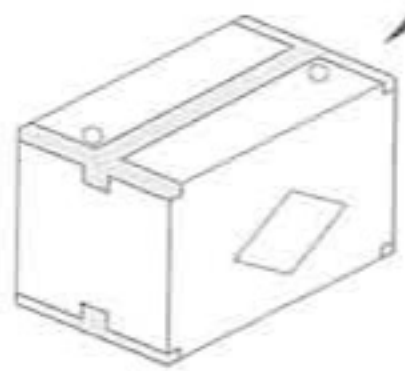
HPE-2910~2914

Plastic bag: 100PCS

Inner box: 100PCS

Carton: 1000PCS

Carton: 61*34*35cm



P/N: HPE-2910~2914
 QTY: 1000 PCS
 N.W: 15 KGS
 G.W: 16 KGS
 CTN: 61*34*35cm