



# SPECIFICATION FOR PIEZO ELECTRIC BUZZER

TOTAL PAGE 07

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RoHS

Customer		Model Name	BPT4512H18.4 LF
Customer P/N	H57-0100-110	Product No.	034302
Date	10 Jun. 09	Issue No.	BS/TEP01.340D
Page	01 of 07	Issue Date	09/06/10

- 1.Description
- 2.Notice
- 3.Dimension
- 4.Reliability Test
- 5.Packing
- 6.History change record

Drawn by	Checked by	Approved by	Customer approved

## **BESTAR ELECTRONICS INDUSTRY CO.,LTD**

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# BPT4512H18.4 LF

## 1. Description

1.1 The specification relates to the piezoelectric sounder intended to be used in alarm systems. Please contact us before using any of the products in the applications not described above.



Colour: black

## 1.2 Electrical and Mechanical Characteristics

No.	Item	Specification
1.	Rated Voltage	Using Phone Test System Input Voltage 120VAC
2.	S.P.L measured at 10cm by Phone Test System	≥105dB see test set up FIG 1
3.	Static Capacitance	170± 30% nF at 120Hz
4.	Rated Current consumption	max.80mA (by multimeter(Fluke model 189DVM) connected with the phone test system to form series circuit)
5.	Housing Material	Poly Carbonate IR1900
6.	Weight	10± 25%g
7.	Operating Temperature	-30...+70°C
8.	Storage Temperature	-30...+80°C

## 1.3 Standard Output Measurement Setup



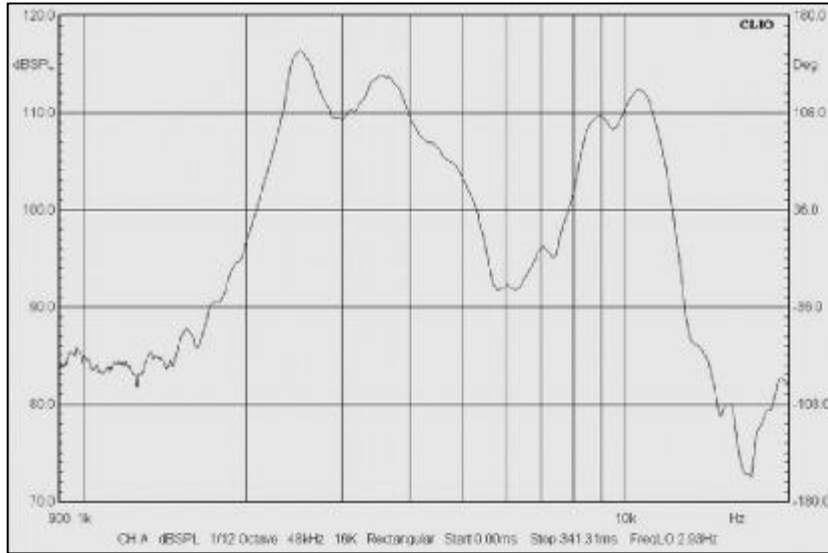
FIG1. test setup

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				Checked by:	邱 俊	Piezo Element Sounder
Rev.	Date	Drawn	Note	Approved by:	李红元	
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## 1.4 Frequency Response



Frequency(Hz)

## 2. Notice

2.1 The products mustn't be washed

### 2.2 Storage Condition

The products should be stored in the room, where the temperature/humidity is stable. And avoid such places where there are large temperature changes. Please store the products at the following conditions:

Temperature: -10 to + 40 °C Humidity: 15 to 85% R.H.

### 2.3 Expire Date on Storage

Expire date (Shelf life) of the products is six months after delivered under the conditions of a sealed and an unopened package. Please use the products within six months after delivered.

If you store the products for a long time (more than six months), use carefully because the products may be degraded in the solderability and/or rusty. Please confirm solderability and characteristics for the products regularly.

### 2.4 Notice on Product Storage

(1) Please do not store the products in a chemical atmosphere (Acids, Alkali, Bases, Organic gas, Sulfides and so on), because the characteristics may be reduced at quality, and/or be degraded in the solderability due to the storage in a chemical atmosphere.

(2) Please use the products immediately after the package is opened, because the characteristics may be reduced at quality, and/or be degraded in the solderability due to storage under the poor condition.

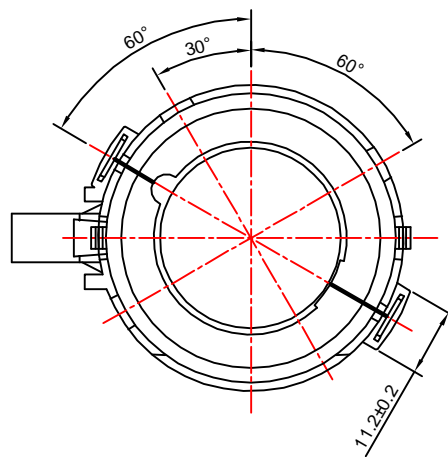
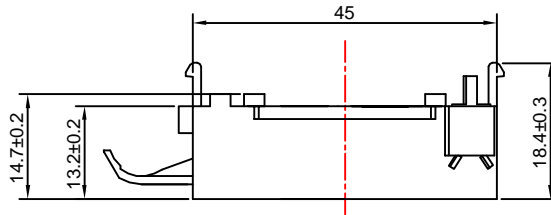
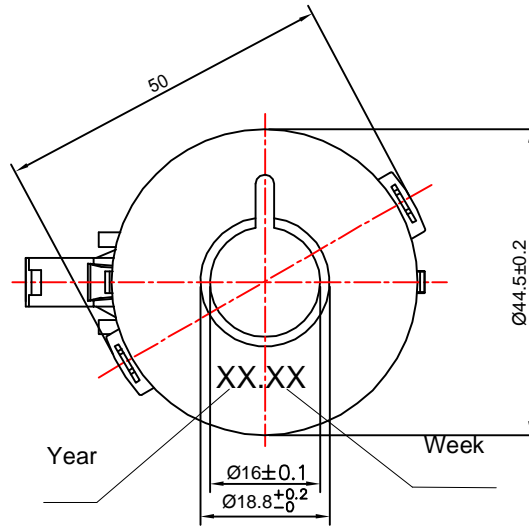
(3) Please do not drop the products to avoid cracking of ceramic element.

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## 3.Dimension



Tolerance :±0.5

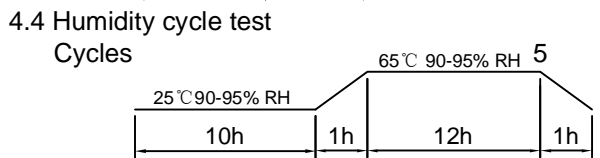
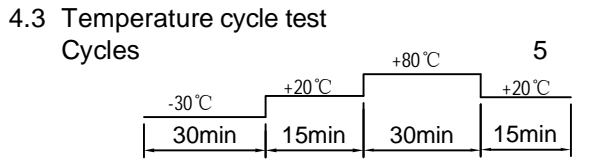
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## 4. Reliability test

- 4.1 Life test at high temperature
  - Temperature +80°C
  - Duration 500hrs
- 4.2 Life test at low temperature
  - Temperature -30°C
  - Duration 500hrs



All these tests above should be measured after leaving normal temperature for 2hrs.

- 4.5 Vibration Test
  - Vibration Frequency 10~55Hz
  - Amplitude 1.53mm
  - Direction 3(x.y&z)
  - Duration 2hrs each direction (total 6 hrs)
- 4.6 Drop test
  - Height 100cm
  - (to 10mm thickness woodenboard)
  - Direction 3(x.y&z)
- 4.7 Solderability Test
  - Soldering Temperature 235°C
  - Duration 3 sec

4.8 Accelerated Life Test (ALT)  
Thermal Cycling :  
Thermal Cycling consists of temperature ramping components for 30 minutes in the Testing oven from -20 ° C to 70 ° C. The components are then exposed for 1 hour at The extremes and the cycle is repeated for a total of 15 cycles..  
Thermal Soak:  
Thermal soak consists of exposing a powered unit to 70 ° C and 85% relative humidity for 45 days.

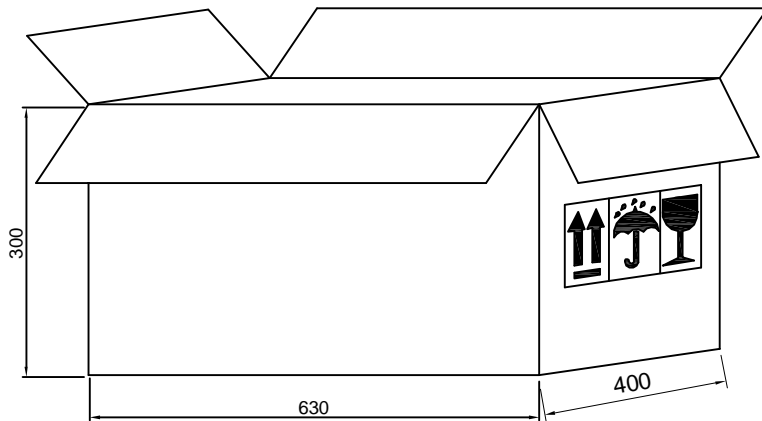
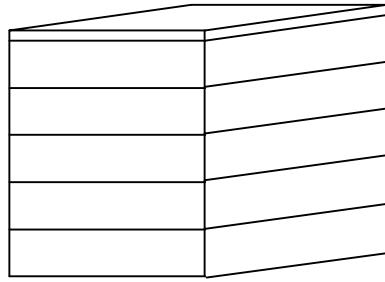
Notice: All specifications must be satisfied in this condition.

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## 5.Packing



**Remark:**

30 pcs per tray  
 20 trays per carton  
 Total 600pcs per carton  
 Size: 63X40X30cm

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## 6. History change record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			05/01/28	姜文金	郭敏
B	capacitance:280nF ± 30%	capacitance:150nF ± 30%	06/05/11	姜文金	郭敏
C	capacitance:150nF ± 30%	capacitance:170nF ± 30% changing the test condition	07/07/10	杨红焯	程久生
D	Packing Quantity:300Pcs/Carton	Packing Quantity:600Pcs/Carton	09/06/10	赵 崢	李红元

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