

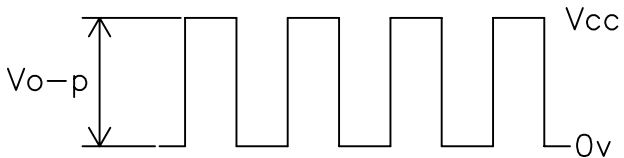


**MODEL NO :OBO-45BP1**

**Features :Conformity RoHS Directive ( 2002/95/EC ) Requests.**

### 1. General Specifications :

Items	Specification	Conditions
1.1	Rated Voltage	3.0 Vo-p
1.2	Operating Voltage	2-4 Vo-p
1.3	Resonant Frequency	2700Hz
1.4	Sound Pressure Level	min. 85dB
1.5	Average Current Consumption	max. 100mA
1.6	Coil Resistance	16±3Ω
1.7	Operating Temp. Range	-20°C ~ +60°C
1.8	Storage Temp. Range	-30°C ~ +80°C
1.9	Housing Material	PPS(Black)
1.10	Weight	0.8g



Squarewave 1/2 Duty

## 2. Standard test Conditions :

2.1 Standard State	Ordinary Temperature	15°C to 35°C
	Ordinary Humidity	45% to 85%
	Ordinary air pressure	860 to 1060hPa

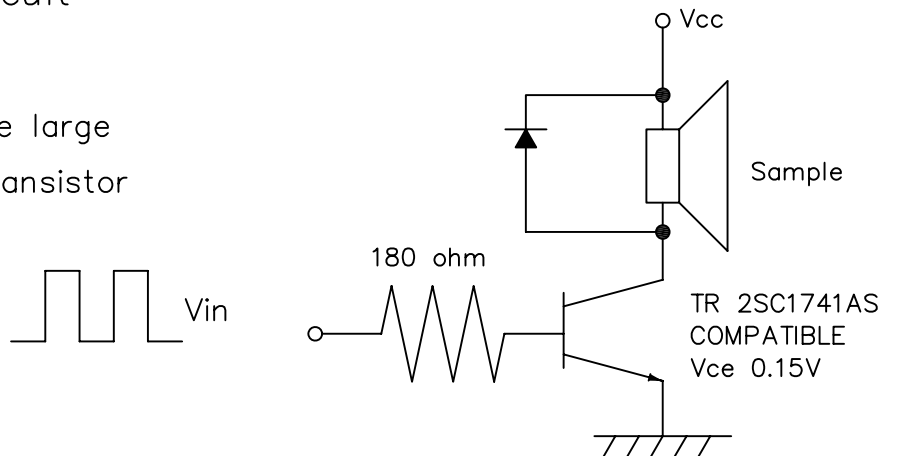
In case of doubtful judgment, the test is re-performed under Basic State.

2.2 Basic State	Temperature	25±2°C
	Humidity	60% to 70%
	Ordinary air pressure	860 to 1060hPa

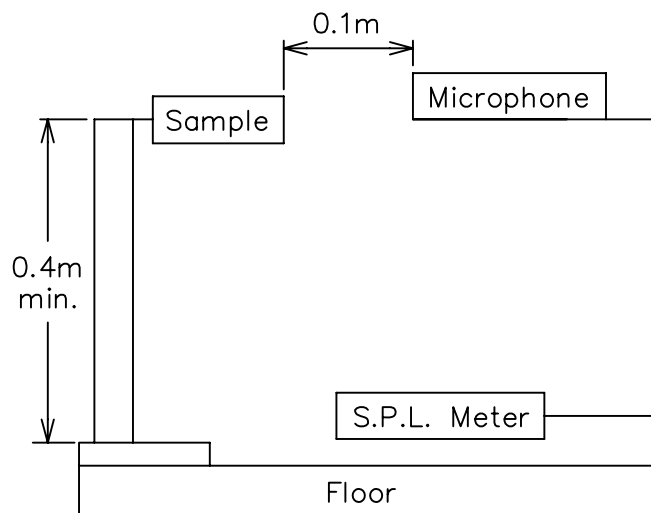
## 3. Test method :

### 3.1 Standard Drive Circuit

Signal amplitude should be large enough to saturate the transistor which drives the buzzer.



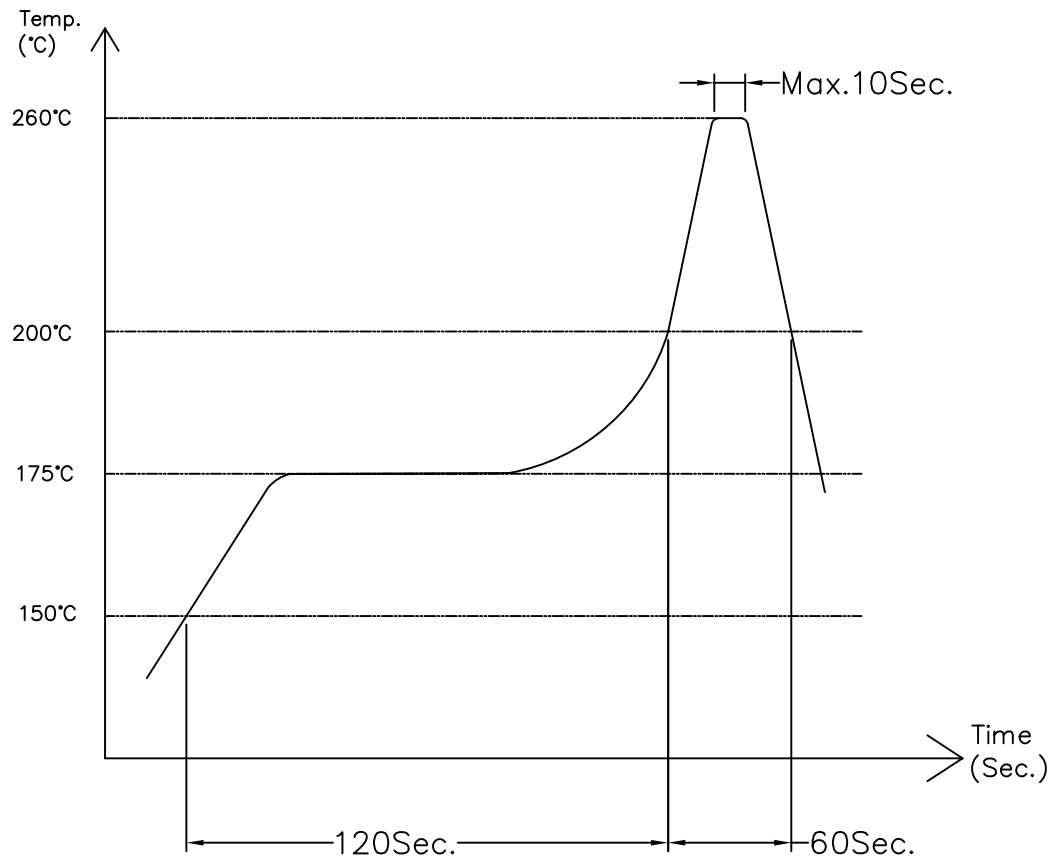
### 3.2 Standard Test Fixture



#### 4. Soldering Condition :

##### 4.1 Reflow Soldering

Recommendable reflow soldering condition is as follows.



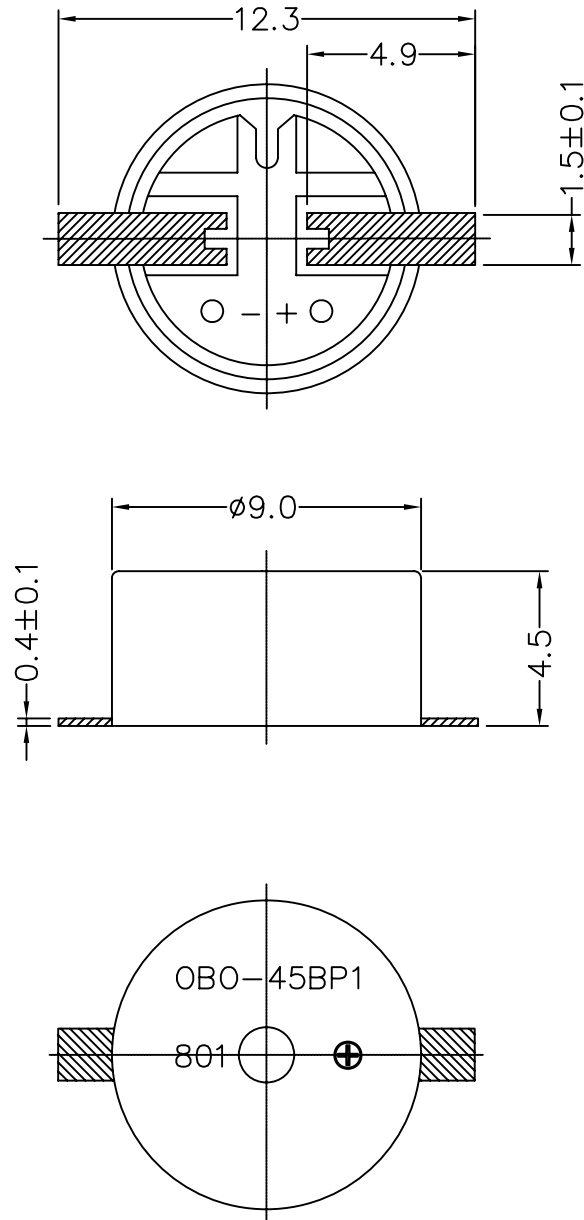
Note :

It is requested that second reflow soldering should be executed after heat of product goes down to normal temperature.

##### 4.2 Hand Soldering

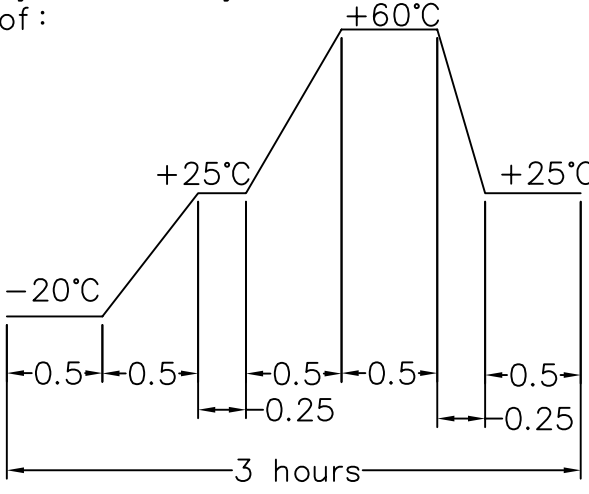
Soldering iron temperature 350°C less than 5 second.

## 5. Mechanical Layout and Dimensions

Unit : mm    Tolerance :  $\pm 0.5\text{mm}$ 

Note :    Meaning of Stamp Mark  
801 : Production Lot No.  
8 : Year 200**8** (last 1 figures of the year)  
01 : week (01~55)  
OBO-45BP1 : Model No.  
⊕ : Polarity identification mark

## 6. Reliability test :

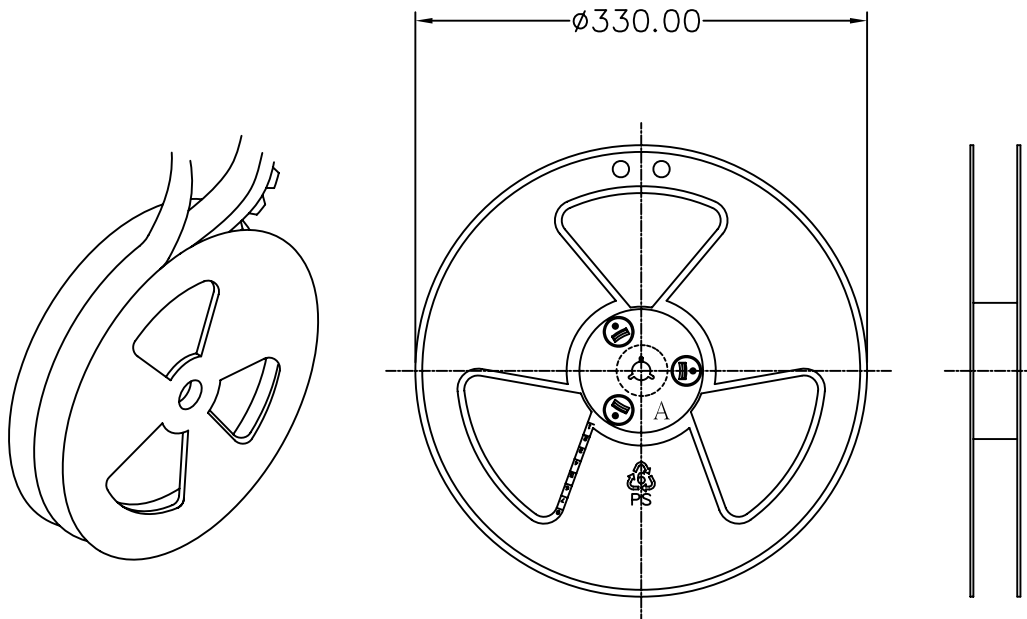
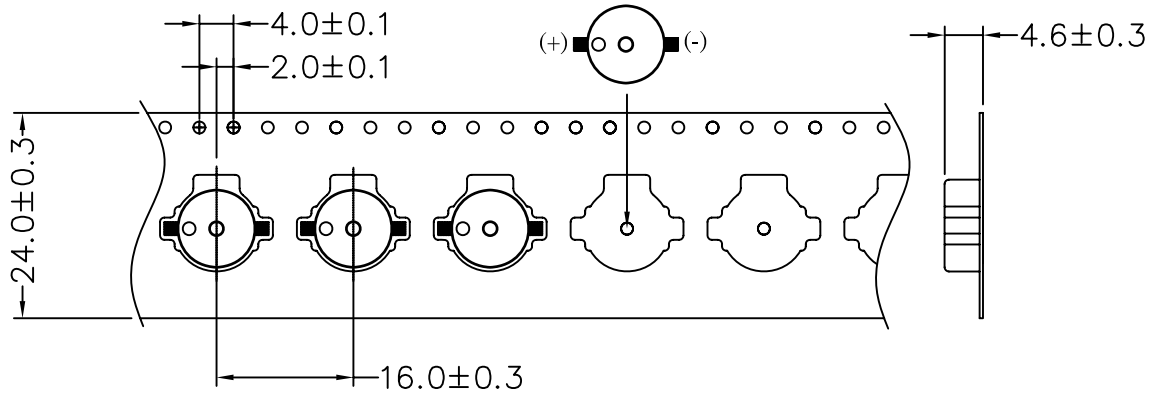
NO.	Items	Test Conditions	Evaluation Criteria
6.1	High Temp. Storage	The part shall be capable of withstanding a storage temperature of +80°C for 96 hours.	After the test the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall be 80dB or more.
6.2	Low Temp. Storage	The part shall be capable of withstanding a storage temperature of -30°C for 96 hours.	
6.3	Thermal Shock	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of :</p> 	
6.4	Humidity Test	The part shall be subjected to +40°C, 90~95% RH for 96 hours, and expose to room temperature for 6 hours.	
6.5	Vibration	10 – 55 – 10Hz, Sinewave Sweep 15 min. X,Y,Z 3 Direction 2 hours each, Total 6 hours.	
6.6	Drop test	Drop on hard wood board of 5cm. thick, any direction, 6 times, at the height of 75cm.	

NO.	Items	Test Conditions	Evaluation Criteria
6.7	Reflow	<p>The graph shows a reflow temperature profile. The y-axis is labeled 'Temp. (°C)' with values 150, 175, 200, and 260. The x-axis is labeled 'Time (Sec.)'. The profile starts at 150°C, rises to 175°C, and remains constant for 120 seconds. It then rises to a peak of 260°C, which is maintained for a maximum of 10 seconds. Finally, it falls back to 175°C, where it remains constant for 60 seconds before cooling further.</p>	<p>a. No abnormality should be found after the test</p> <p>b. Good soldering to meet soldering requirements</p>

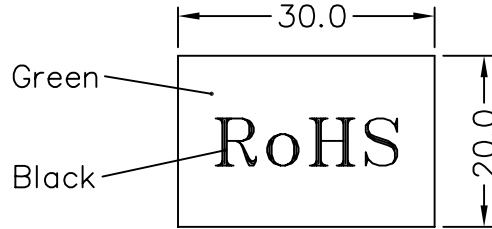
**Notes :**

As this product is not protected from foreign material entering, please make sure that any foreign materials (e.g. magnetic powder, washing solvent, flux, corrosive gas) do not enter this product in your production processes. The functional degradation (e.g. SPL down ) may occur if foreign material enter it.

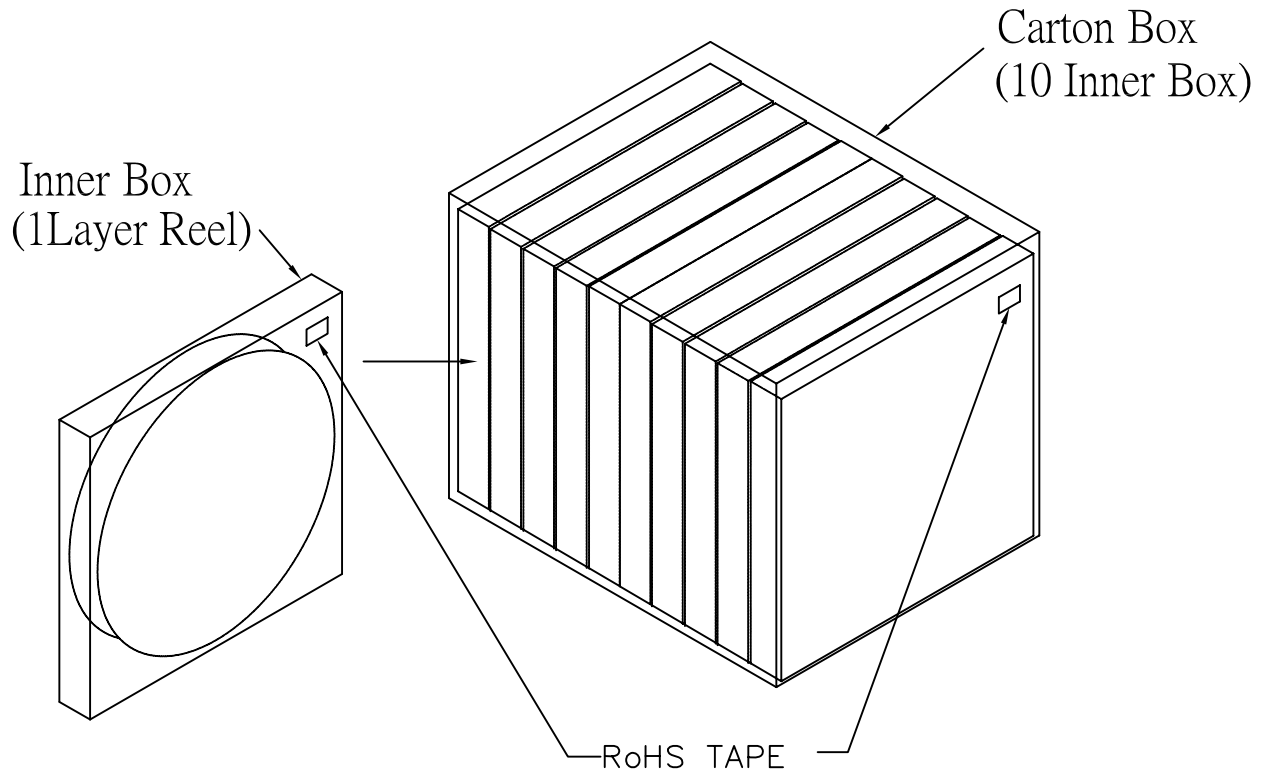
**7.Packing**



1 Reel : 800PCS



RoHS Tape  
(30\*20 mm)



Inner Box	330mmx330mmx30mm	1x800PCS=800PCS
Carton Box	350mmx350mmx370mm	10x800PCS=8,000PCS