

MODEL NO : OBO-100UN1**Features :Conformity RoHS Directive (2002/95/EC) Requests.****1. General Specifications :**

	Items	Specification
1.1	Rated Voltage	DC 12.0V
1.2	Operating Voltage	DC 8–16V
1.3	Resonant Frequency	2400±300Hz
1.4	Sound Pressure Level	85dB min.
1.5	Average Current Consumption	30mA max.
1.6	Operating Temp. Range	-20°C ~ +70°C
1.7	Storage Temp. Range	-30°C ~ +80°C
1.8	Housing Material	PPS(Gray)
1.9	Pin Material	Tin Plated Brass(Sn)
1.10	Weight	2.5g

2. Standard test Conditions :

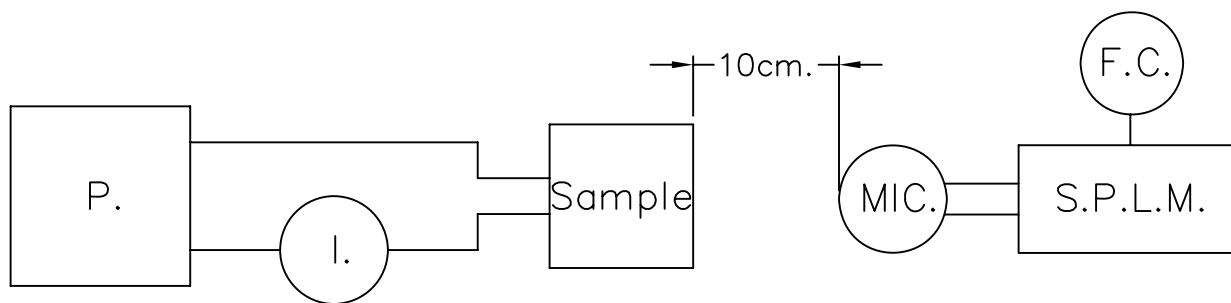
2.1 Standard State	Ordinary Temperature	15°C to 35°C
	Ordinary Humidity	45% to 85%
	Ordinary air pressure	860 to 1060hPa

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 Test Diagram

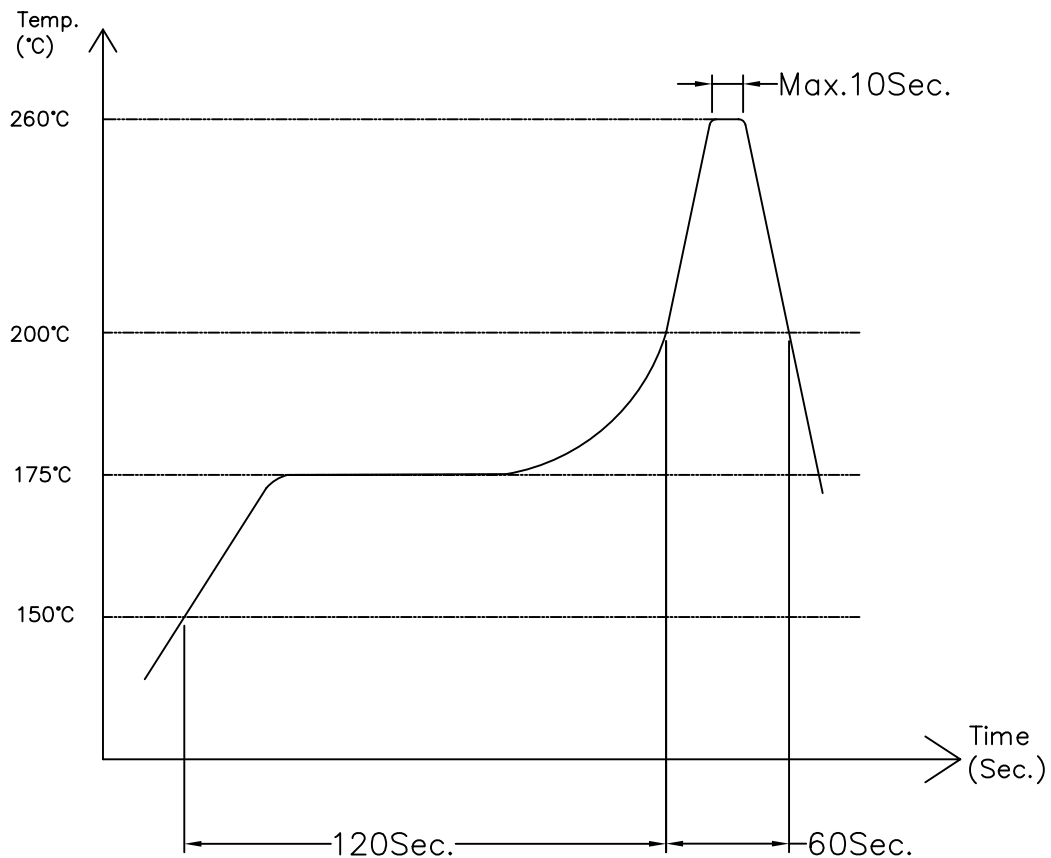


- P. : DC Power Supply GPC-3030D or Equivalent
S.P.L.M. : Sound Pressure Level Meter IEC651 TYPE2
I. : Multimeter GDM-8145 or Equivalent
F.C. : Function Generator GFG-8016G or Equivalent
Sample : SMD-Electromagnetic Transducer

4. Soldering Condition :

4.1 Reflow Soldering

Recommendable reflow soldering condition is as follows.



Note :

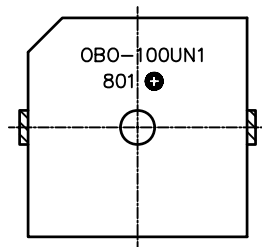
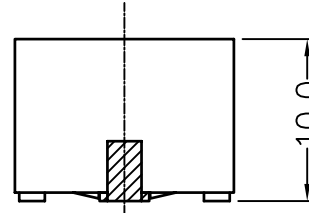
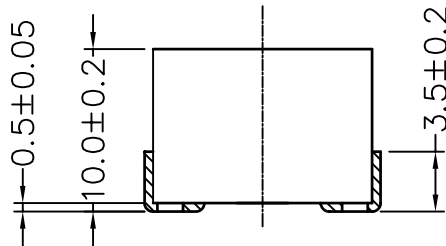
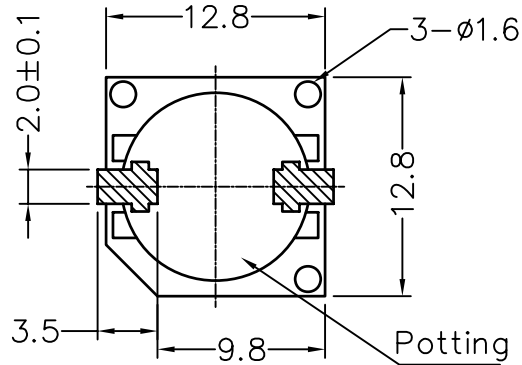
It is requested that second reflow soldering should be executed after heat of product goes down to normal temperature.

4.2 Hand Soldering

Soldering iron temperature 350°C less than 5 second.

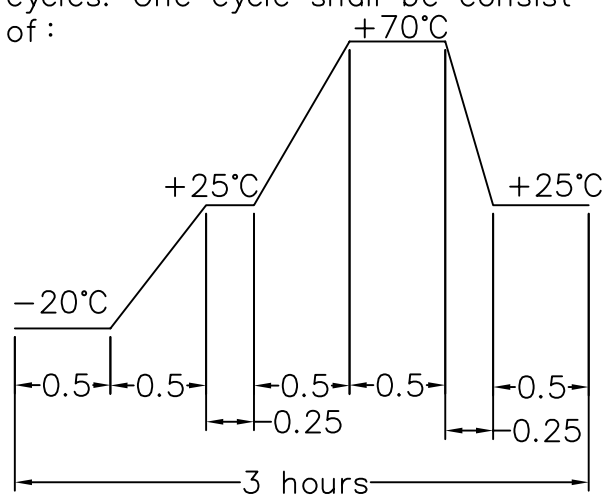
5. Mechanical Layout and Dimensions

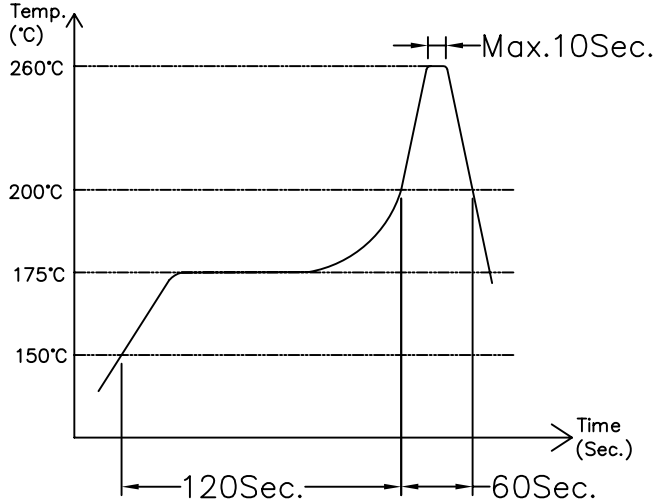
Unit : mm Tolerance : $\pm 0.3\text{mm}$



Note : Meaning of Stamp Mark
 801 : Production Lot No.
 8 : Year 200**8** (last 1 figures of the year)
 01 : week (01 55)
 OBO-100UN1 : Model No.
 ⊕ : Polarity indentification mark

6. Reliability test :

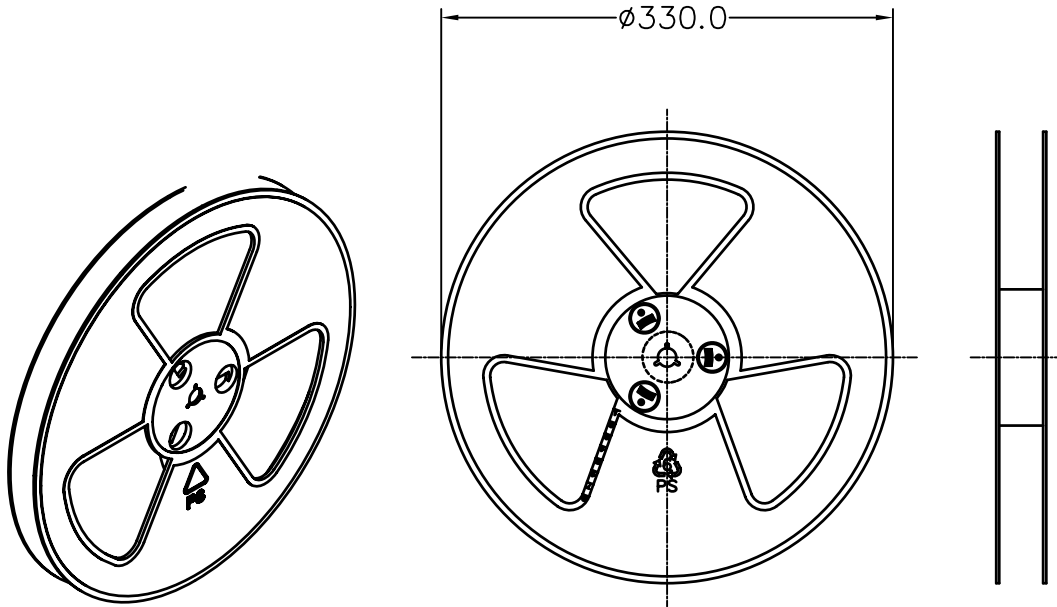
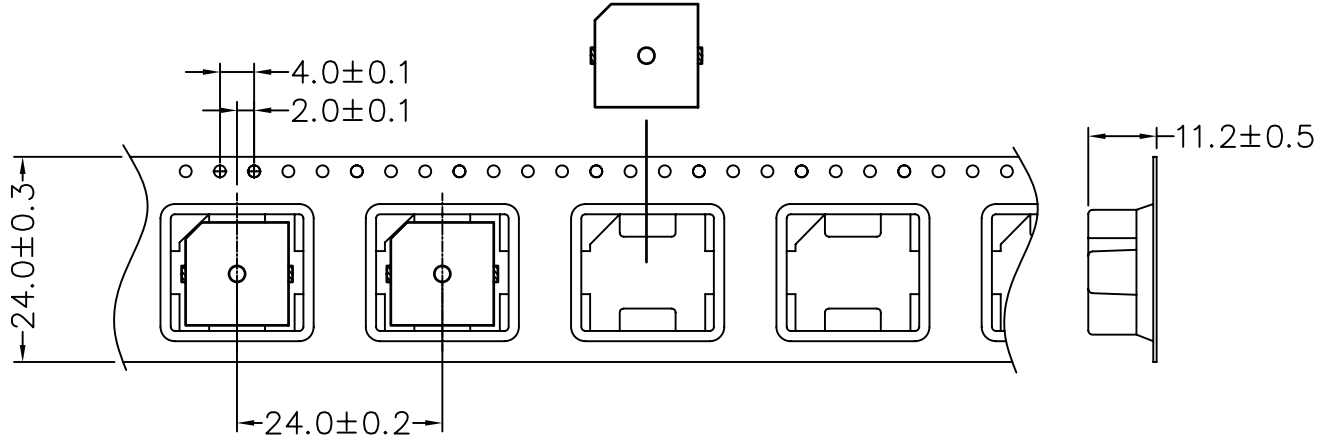
NO.	Items	Test Conditions	Evaluation Criteria
6.1	High Temp. Storage	The part shall be capable of withstanding a storage temperature of +80°C for 96 hours.	After the test the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall be 80dB or more.
6.2	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>  <p>The diagram shows a temperature profile over 3 hours. It starts at -20°C, ramps up to +25°C (0.5h dwell), ramps up to +70°C (0.25h dwell), ramps down to +25°C (0.25h dwell), and finally dwells at +25°C (0.5h). The total cycle time is 3 hours.</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 cools down to 175°C, which is maintained for 60 seconds before the end of the test.</p>	<p>a. No abnormality should be found after the test</p> <p>b. Good soldering to meet soldering requirements</p>

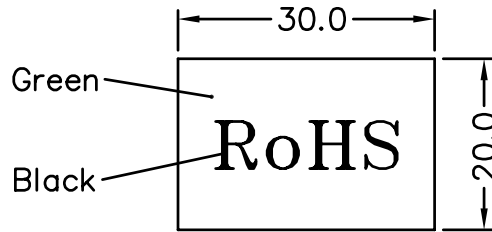
Notes :

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.

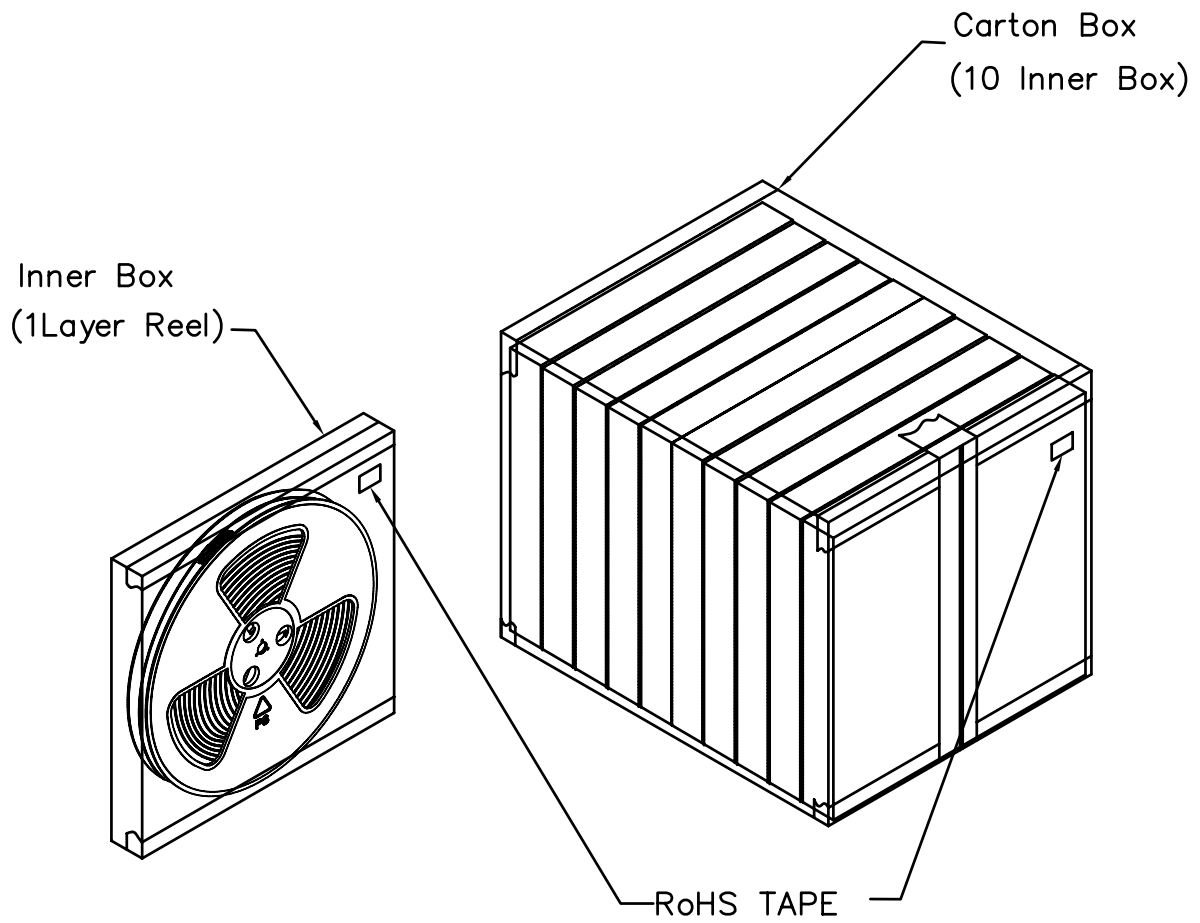
7.Packing



1 Reel : 250PCS



RoHS Tape
(30*20 mm)



Inner Box	330mmx330mmx30mm	1x250PCS=250PCS
Carton Box	350mmx350mmx370mm	10x250PCS=2,500PCS