

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
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OBO PRO 2 INC.
2000 MAR 25
文件发行

OBO Pro.2®	SPECIFICATIONS	MODEL NO. OBO-13240SA
	PART NAME Piezoelectric Buzzer	SHEET 2 OF 6

MODEL NO : OBO-13240SA

Features : External drive

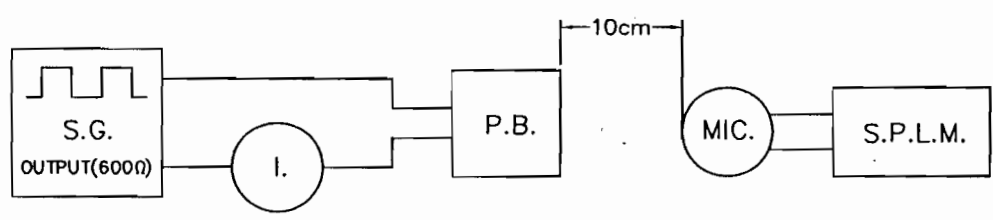
Conformity RoHS Directive (2002/95/EC) Requests.

1. General Specifications :

Items	Specification
Sound Pressure Level	75dB Min. at 4.0KHz/5.0Vp-p Square Wave/10cm.
Capacitance	16,000pF $\pm$ 30% at 1.0KHz
Current Consumption	3mA Max. at 4.0KHz/5.0Vp-p Square Wave
Allowable Input Voltage	25Vp-p Max.
Case Material	LCP(Black)
Lead Pin Material	Plated Brass(Au)
Operating Temp. Range	-20°C to +70°C
Storage Temp. Range	-30°C to +80°C
Weight	0.5 gms

2. Test Method :

2.1 Standard Test Diagram



- S.G. : GAG-808G Audio Ggenerator or Equivalent
- S.P.L.M. : Sound Pressure Level Meter IEC651 TYPE2
- I. : GDM-8145 Multimeter or Equivalent
- P.B. : Piezoelectric Buzzer

Note: please pay attention never to be applied DC voltage to piezo sounder

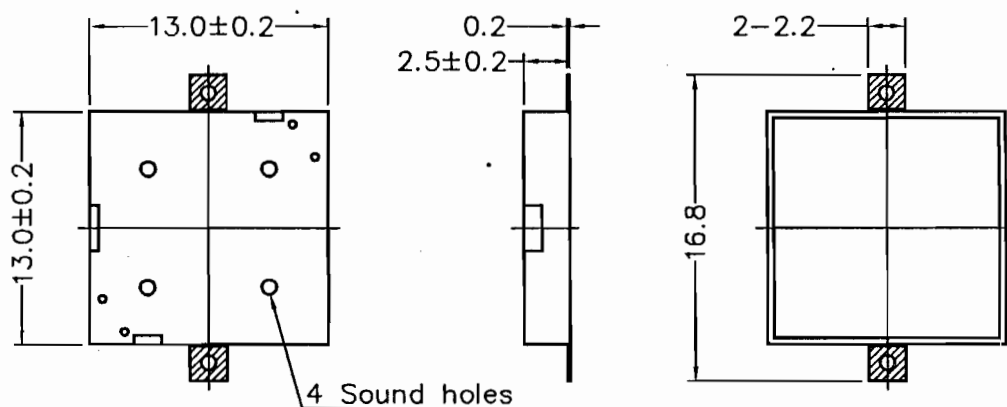
OBO Pro.2®**SPECIFICATIONS****MODEL NO.**
OBO-13240SA**PART NAME**
Piezoelectric Buzzer**SHEET**
3 OF 6**2.2 Standard Test Condition**

Part shall be measured under a condition

(Temperature : +5 to +35°C, Humidity : 45% to 85%R.H.)

unless the standard condition. (Temperature : +25±2°C,
Humidity : 60%% to 70%%R.H.) is regulated to measure.**3. Dimensions :**

Unit : mm Tolerance : ±0.3



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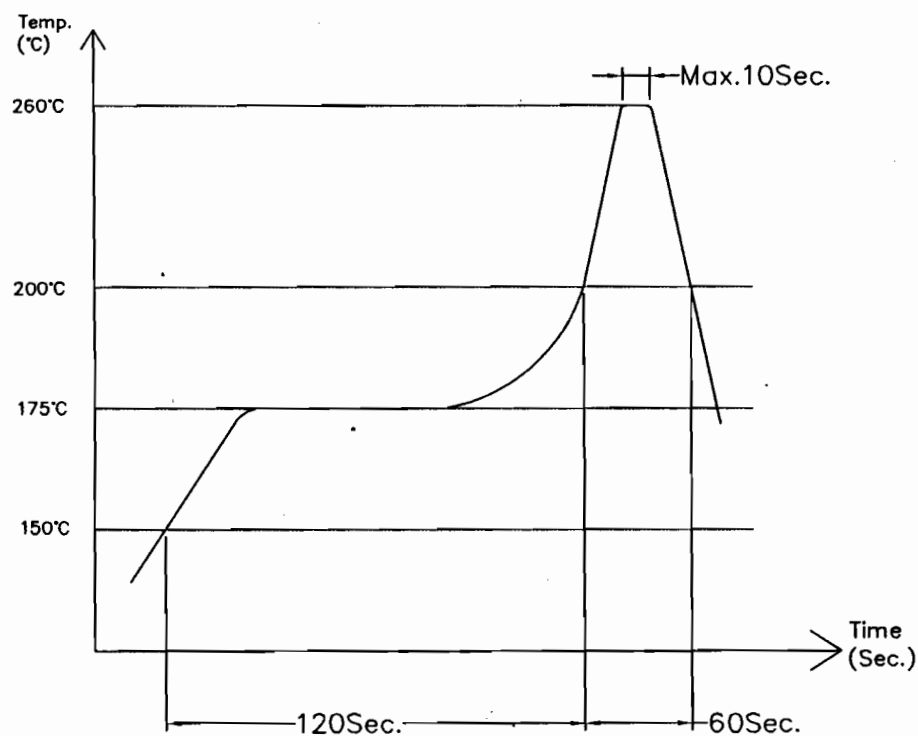
4. Soldering Condition :

4.1 Reflow Soldering

Recommendable reflow soldering condition is as follows.
(Reflow soldering is twice)

Note :

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

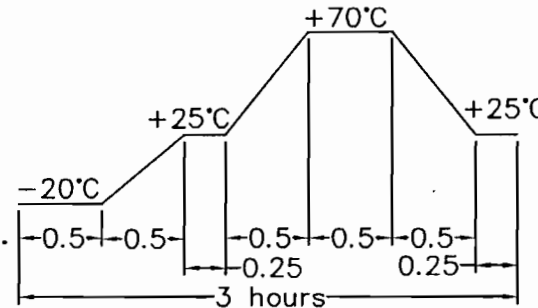


4.2 Hand Soldering

Soldering iron temperature 350°C less than 5 second.

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	PART NAME Piezoelectric Buzzer	SHEET 5 OF 6

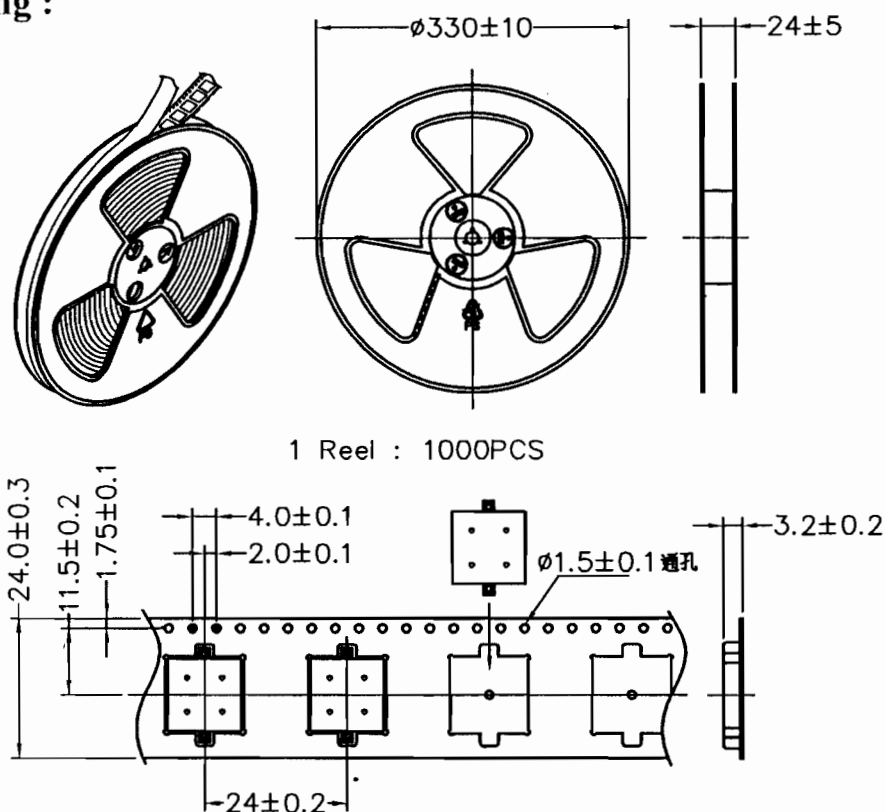
5. Reliability test :

NO.	Items	Test Conditions	Evaluation Criteria
5.1	High Temp. 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: $\pm 10\text{dB}$.	
5.2	Low Temp. 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: $\pm 10\text{dB}$.	
5.3	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: $\pm 10\text{dB}$.	
5.4	Thermal Shock	The part shall be subjected to 5 cycles. One cycle shall be consist of:  The diagram shows a temperature profile over 3 hours. It starts at -20°C, ramps up to $+25^{\circ}\text{C}$ (0.5h), holds at $+25^{\circ}\text{C}$ (0.5h), ramps up to $+70^{\circ}\text{C}$ (0.25h), holds at $+70^{\circ}\text{C}$ (0.5h), ramps down to $+25^{\circ}\text{C}$ (0.25h), and holds at $+25^{\circ}\text{C}$ (0.5h). The total cycle time is 3 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$.	
5.5	Drop test	Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 75cm . Allowable variation of SPL after test: $\pm 10\text{dB}$.	
5.6	Vibration	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: $\pm 10\text{dB}$.	
5.7	Solderability	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).	
5.8	Pin Strength Pulling	The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off.	

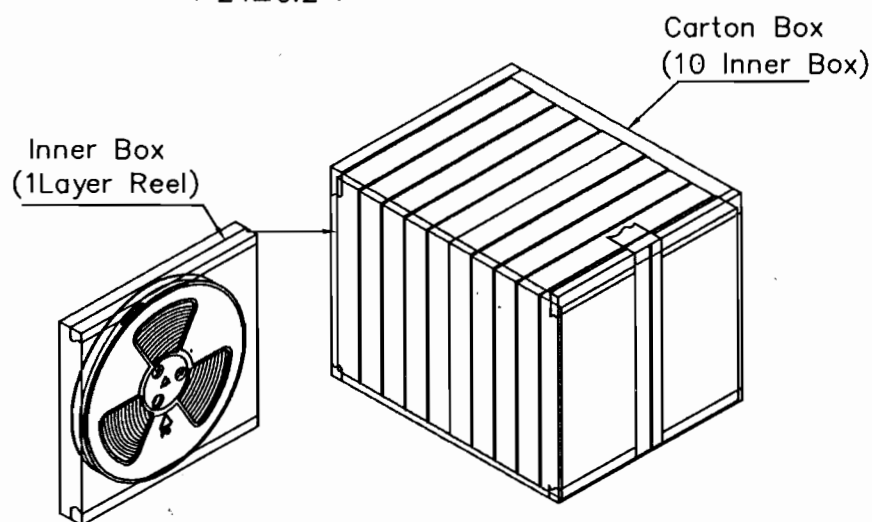
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Piezoelectric Buzzer**SHEET**
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1 Reel : 1000PCS



Inner Box	330*330*30mm	1*1000PCS=1000PCS
Carton Box	350*350*370mm	10*1000PCS=10,000PCS