

	SPECIFICATIONS	MODEL NO. OBO-14C45PA
	PART NAME Piezoelectric Buzzer	SHEET 1 OF 8

ALTERNATION HISTORY							
Marking	Date	ECN NO.	REV.	Description	Page	PREPARE BY	APPROVE BY
--	NOV,30,15		暂定		8	曾梅梅	林建宏
--	MAY,12,16		A0		8	曾梅梅	林建宏

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
A0	MAY,12,2016	曾梅梅	林建宏	林建宏

MODEL NO : OBO-14C45PA

Features : Drive circuit built-in and lead pin type Wave solder and wash allowed.

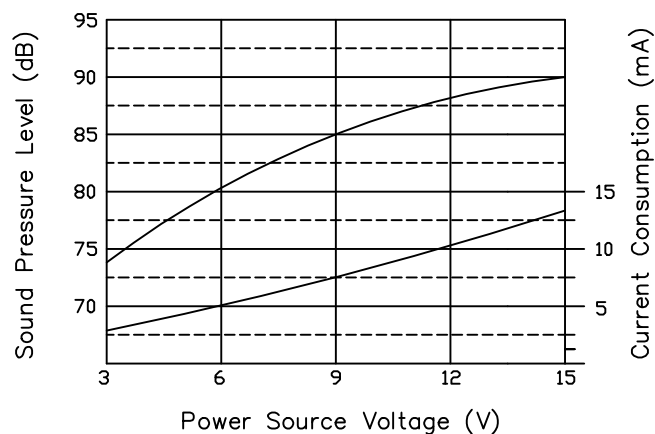
Conformity RoHS Directive (2011/65/EU) Requests.

— 、 General Specifications :

Items	Specification	
1.1	Sound Pressure Level	82dB min./10cm/DC9V
1.2	Oscillating Frequency	4.4 ± 0.5KHz
1.3	Current Consumption	7mA max./DC9V
1.4	Tone	Single Tone
1.5	Operating Voltage	DC 5 to 15V
1.6	Case Material	PBT (UL 94V-0)
1.7	Lead Pin Material	Brass (Plated of Sn)
1.8	Operating Temp. Range	-20°C to +70°C
1.9	Storage Temp. Range	-40°C to +85°C
1.10	Weight	1.2 gms
1.11	Voltage vs Sound Pressure vs Current Consumption Curve	As Per Fig.1

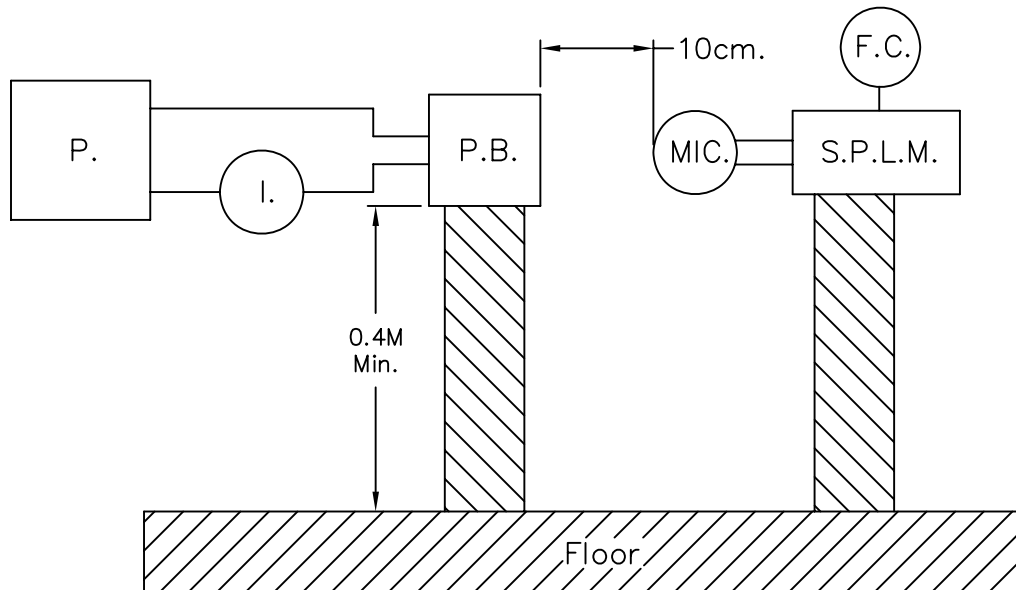
Fig.1:

Measurement distance : 10cm. / Current consumption by GDM-8145
Sound level meter by B&K-2232 / DC power supply by GPC-3030D



二、 Test Method :

2.1 Standard Test Diagram



- P. : DC Power Supply GPC-3030D or Equivalent
- S.P.L.M. : Sound Pressure Level Meter IEC651 TYPE2
- I. : GDM-8145 Multimeter or Equivalent
- F.C. : GFG-8016G or Equivalent
- P.B. : Piezoelectric Buzzer

2.2 Standard Test Condition

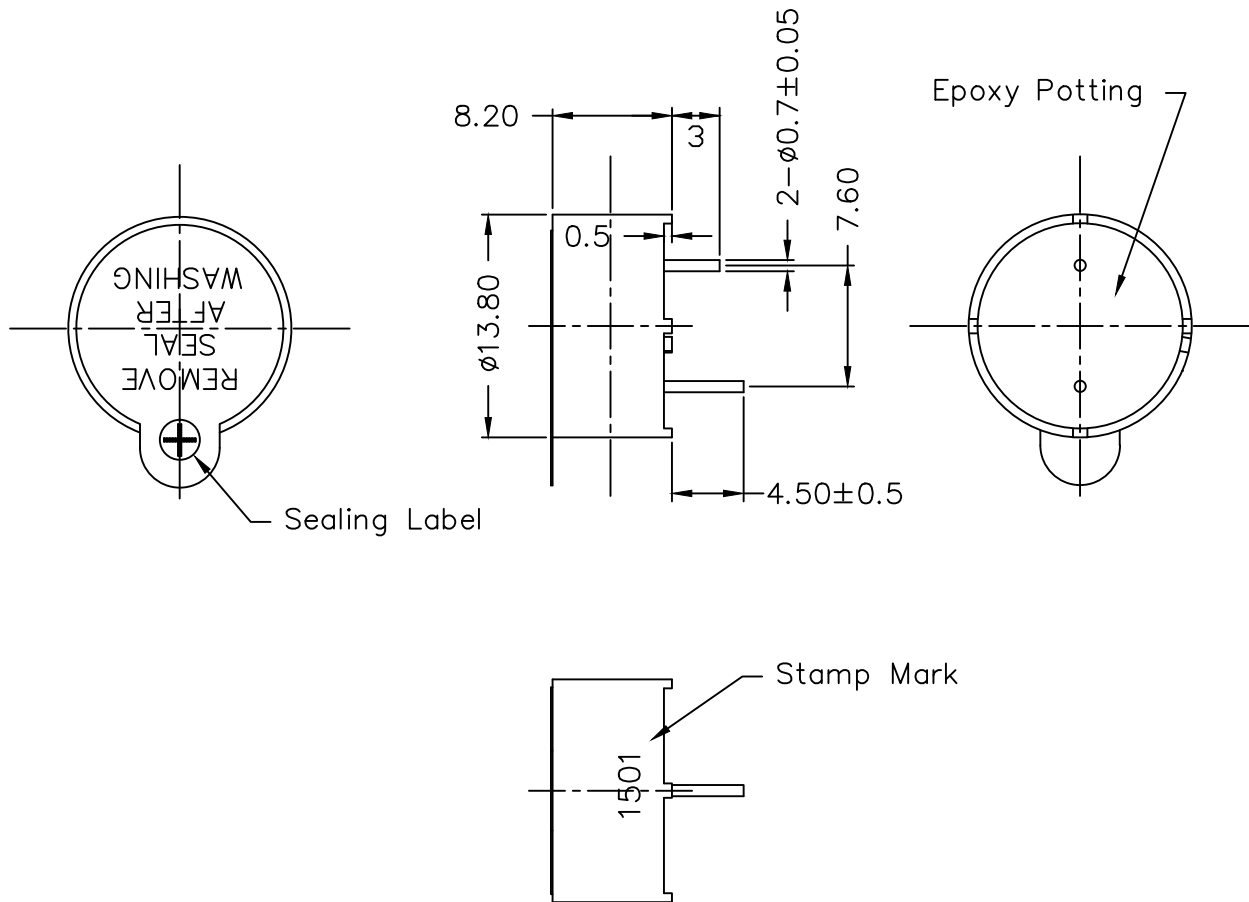
Part shall be measured under a condition
 (Temperature : +5 to +35°C, Humidity : 45% to 85%R.H.)
 unless the standard condition.(Temperature : +25±3°C,
 Humidity : 60±10%R.H.) is regulated to measure.

三、 **Mechanical Layout & Dimensions :**

3.1 Dimensions

Tolerance: ± 0.3 mm except specified

Unit: mm



Note : Meaning of Stamp Mark

1601 : Production Lot No.

16 : Year 2016 (last 1 figures of the year)

01 : Week (01 to 52)

四、Environment-related substances to be controlled

4.1 Piezoelectric Ceramic Disc.

RoHs Annex :

Application of lead, mercury, cadmium and hexavalent chromium, which are exempted from the requirement of article 4(1).

* Lead in electronic ceramic parts.(e.g. piezoelectronic devices).

五、Soldering Condition :

5.1 Wave Soldering

Peak temperature	Dipping time	Soldering
+ 260°C	5 seconds	1 time

5.2 Hand Soldering

Iron Tip Temperature	Soldering time
+ 380°C	Duration 3 seconds Max.

六、Reliability Test Conditions :

6.1 Mechanical Sequence

	Test Items	Test Conditions	Performance Requirements
1	Vibration	10 – 55 –10Hz, Sinewave sweep 15 minutes. X,Y,Z 3 direction 2 hours each, Total 6 hours	The measured values shall meet Remarks 1,2
2	Resistance to Soldering Heat	Lead terminal are immersed up to 1.5m/m from sounder's body in solder bath of 300±5°C for 5±0.5 seconds.	
3	Free Drop Test	Free fall from a hight of 100 cm. Onto the 10 m/m thick hardwood board, 9 times, any directions	
4	Solderability	Lead terminals are immered in rosin for 5 seccods and then immered in solder bath of 260±5°C for 5±0.5 seconds.	90% min. lead terminals shall be wet with solder. (Except the edge of terminal.)
5	Terminal Strength Pushing	The force 10 seconds of 1.0Kg is applied to each terminal in axial direction.	No visible damage and cutting off.

6.2 Environmental Sequence

	Test Items	Test Conditions	Performance Requirements
1	Humidity Test	+70±2°C, 90 ~ 95%RH,96 hrs.	The measured values shall meet Remarks 1,2
2	High Temp. Sotorage	+85±2°C,96 hrs.	
3	Low Temp. Sotorage	-40±2°C,96 hrs.	
4	Thermal Shock	-40±2°C(30min.) → +85±2°C (30min.) 50 cycle. Transfer Time : 10 minutes	



SPECIFICATIONS

MODEL NO.
OBO-14C45PA

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Piezoelectric Buzzer

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6.3 Operating Life Sequence

	Test Items	Test Conditions	Performance Requirements
1	Ordinary Temp. Operating Test	Continuous sound generation for 96 hrs. at rated voltage and $+25\pm 10^{\circ}\text{C}$	The measured values shall meet Remarks 1,2
2	High Temp. Operating Test	Continuous sound generation for 96 hrs. at rated voltage and $+70\pm 2^{\circ}\text{C}$	
3	Low Temp. Operating Test	Continuous sound generation for 96 hrs. at rated voltage and $-20\pm 2^{\circ}\text{C}$	

REMARKS:

1. Sounder shall be measured after being placed in natural condition for 4 hours.
2. After the test the part shall meet specifications without any degradation in appearance and performance except SPL: Initial $\pm 10\text{dB}$

七、Packing Information :

