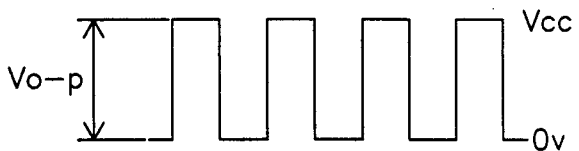


OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-0903A-A2
	PART NAME Magnetic Transducer	SHEET 2 OF 8

MODEL NO : OBO-0903A-A2

Features : Conformity RoHS Directive (2002/95/EC) Requests. ※2

1、General Specifications :

	Items	Specification	Conditions
1.1	Rated Voltage	3.0 Vo-p	 <p>Squarewave 1/2 Duty</p>
1.2	Operating Voltage	2-4 Vo-p	
1.3	Resonant Frequency	2730Hz	
1.4	Sound Pressure Level	85dB min.	Standard State, Standard Drive circuit, Rated Voltage, Distance at 0.1m(A-weight) 2730Hz Squarewave 1/2 Duty.
1.5	Average Current Consumption	80mA max.	
1.6	Coil Resistance	15±3Ω	
1.7	Operating Temp. Range	-20° C~+60° C	SPL ≥ 80dB at "1.4"
1.8	Storage Temp. Range	-40° C~+85° C	
1.9	Housing Material	PBT	
1.10	Weight	0.7g	
1.11	Frequency Response	As per Fig.1	

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2、Standard test Conditions :

2.1 Standard State	Ordinary Temperature	15°C to 35°C
	Ordinary Humidity	25% to 85%
	Ordinary air pressure	860 to 1060hPa

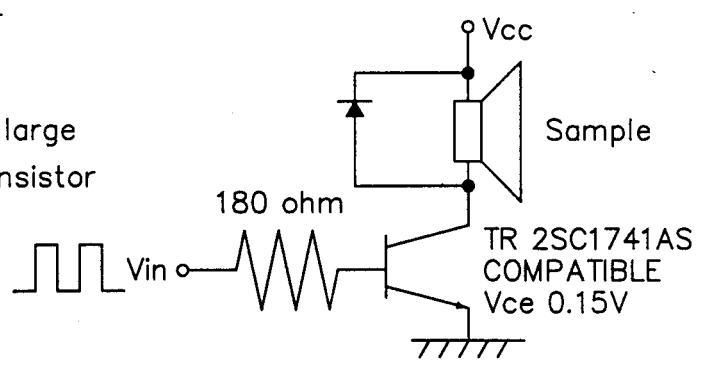
In case of doubtful judgment, the test is re-performed under Basic State.

2.2 Basic State	Temperature	20±2°C
	Humidity	60% to 70%
	Ordinary air pressure	860 to 1060hPa

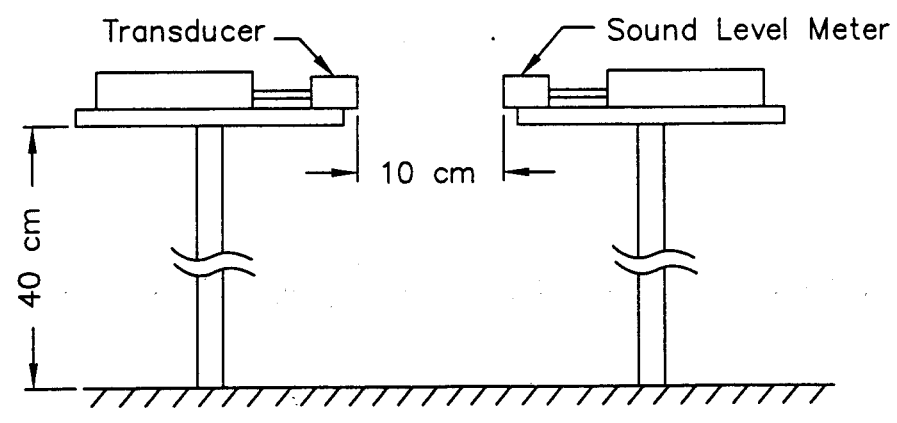
3、Test method :

3.1 Standard Drive Circuit

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



3.2 Standard Test Fixture



OBO Pro.2

SPECIFICATIONS

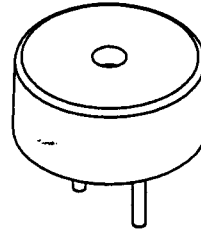
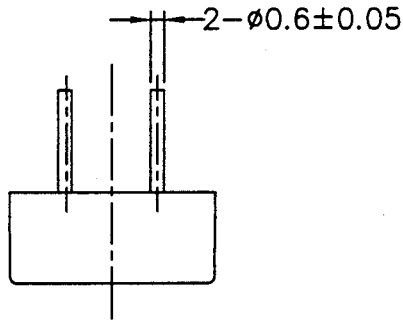
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PART NAME
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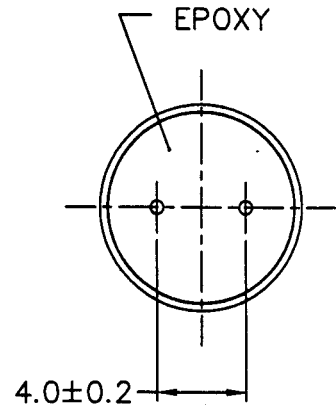
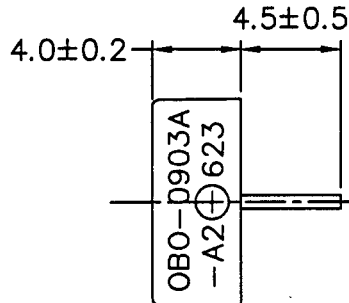
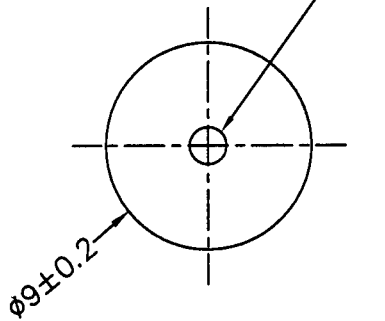
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4 Mechanical Layout and Dimensions :

Unit: mm



SOUND EMISSION HOLE ø1.6



Note : Meaning of Stamp Mark
 623 : Production Lot No.
 6 : Year 2006 (last 1 figures of the year)
 23 : week (01 ~ 55)
 0903A-A2 : Model No.
 ⊕ : Polarity identification mark

5 Soldering Condition : ※2

5.1 Wave Soldering

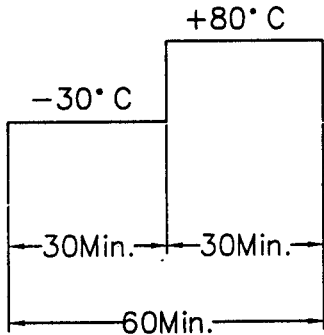
Peak temperature	Dipping time	Soldering
+ 260°C	5 seconds	1 time

5.2 Hand Soldering

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

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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 $+85\pm 2^{\circ}\text{C}$ 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 $-40\pm 2^{\circ}\text{C}$ for 96 hours.	
6.3	Thermal Shock	<p>The part shall be subjected to 50 cycle. One cycle shall consist of : transfer time : 10 minutes</p>  <p style="text-align: center;"> -30°C $+80^{\circ}\text{C}$ 30Min. 30Min. 60Min. </p>	
6.4	Humidity Test	The part shall be subjected to $+60\pm 2^{\circ}\text{C}$, 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 10mm thick, any direction, 10 times, at the height of 100cm.	

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NO.	Items	Test Conditions	Evaluation Criteria
6.7	Ordinary Temp. life	The part shall be subjected to 96 hours at $25 \pm 10^{\circ}\text{C}$. Input 3.0Vp-p Squarewave 1/2duty 2730Hz	
6.8	High Temp. life	The part shall be subjected to 96 hours at $+60 \pm 2^{\circ}\text{C}$. Input 3.0Vp-p Squarewave 1/2duty 2730Hz	
6.9	Low Temp. life	The part shall be subjected to 240 hours at $-20 \pm 2^{\circ}\text{C}$. Input 3.0Vp-p Squarewave 1/2duty 2730Hz	

Notes :

As this product is not protected from foreign material entering, please make sure that 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.

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7 - Packing Information :

