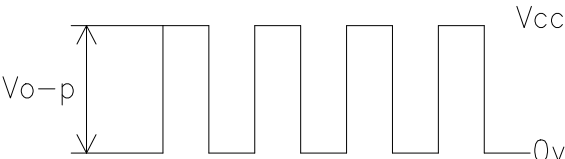


REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
C	OCT.09,2002	--	--	--

MODEL NO : OBO-0901A-A2**1. General Requirements**

	Items	Spec.	Conditions
1.1	Rated Voltage	1.5 Vo-p	 Square wave 1/2 Duty
1.2	Operating Voltage	1-2 Vo-p	
1.3	Resonant Frequency	2730Hz	
1.4	Sound Pressure Level at 10cm	min. 85dB	Standard State, Standard Drive circuit, Rated Voltage, Distance at 0.1m(A-weight) 2730Hz Squarewave 1/2 Duty.
1.5	Average Current Consumption	max. 80mA	
1.6	Coil Resistance	5.5±1Ω	
1.7	Operating Temp. Range	-20℃~+60℃	SPL ≥ 80dB at "1.4"
1.8	Storage Temp. Range	-40℃~+85℃	
1.9	Housing Material	PBT	
1.10	Weight	0.7g	
1.11	Frequency Response	As per Fig.1	

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

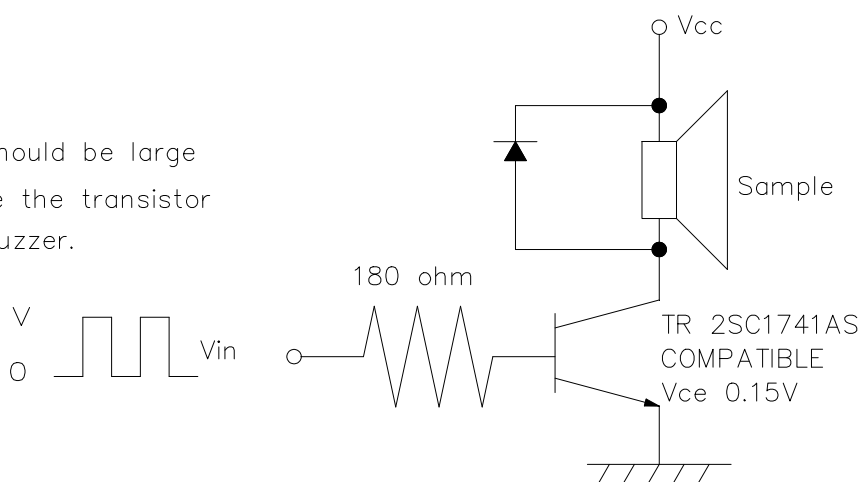
In case of doubtful judgment, the test is re-performed under Basic State.

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

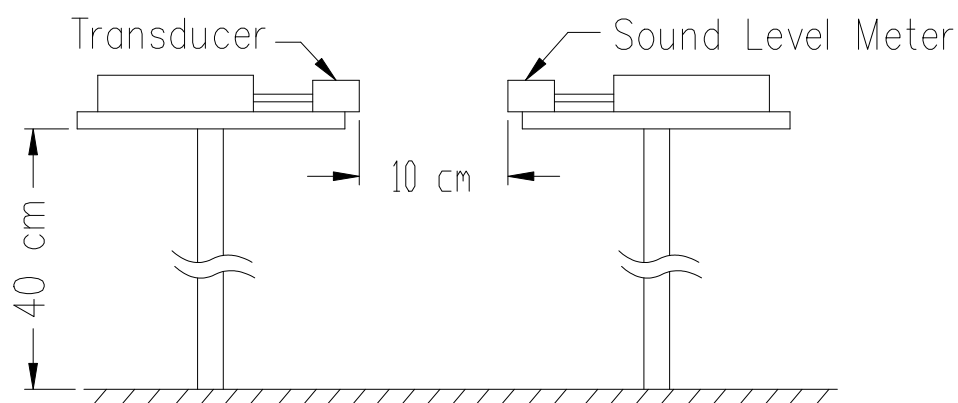
3.Test method

3.1 Standard Drive Circuit

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



3.2 Standard Test Fixture

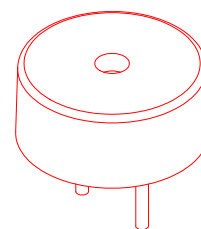
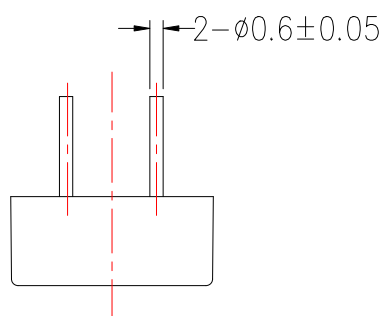
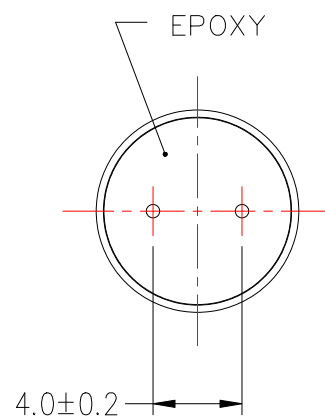
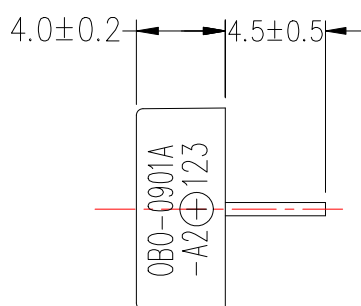
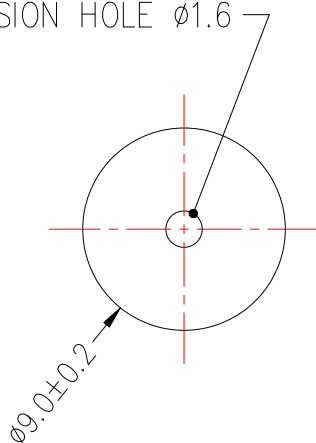


OBO[®] Pro.2[®]	SPECIFICATIONS	MODEL NO MT0901A-A2
	PART NAME Magnetic Transducer	SHEET 4 OF 7

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4. Mechanical Layout and Dimensions

UNIT : mm


 SOUND EMISSION HOLE $\phi 1.6$


Note : Meaning of Stamp Mark

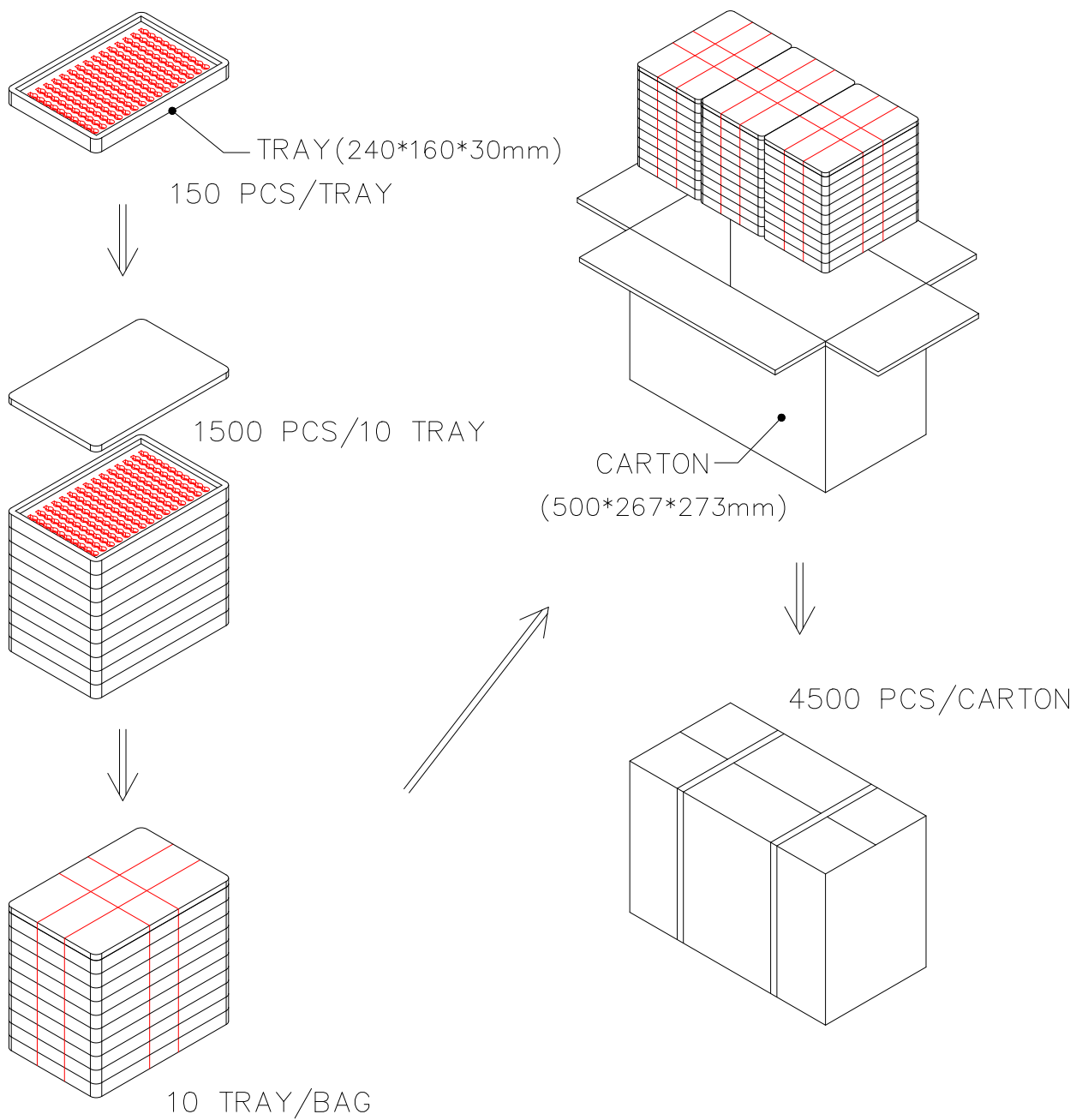
123 : Production Lot No.

1 : Year 200**1** (last 1 figures of the year)

23 : week (01 ~ 55)

0901A-A2 : Model No.

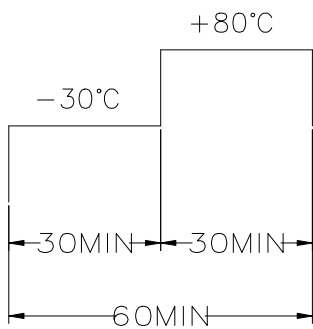
⊕ : Polarity identification mark

5 . Packing

150 PCS/TRAY
1500 PCS/10 TRAY/BAG
4500 PCS/CARTON

OBO® Pro.2®	SPECIFICATIONS	MODEL NO MT0901A-A2
	PART NAME Magnetic Transducer	SHEET 7 OF 7

6 . Reliability Test

No	Items	Test Conditions	Evaluation Criteria
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.
2	Low Temp. Storage	The part shall be capable of withstanding a storage temperature of $-40\pm 2^{\circ}\text{C}$ for 96 hours	
3	Thermal Shock	<p>The part shall be subjected to 50 cycle. One cycle shall consist of :</p>  <p>Transfer Time : 10 minutes</p> <p>The diagram shows a thermal shock cycle. It starts at -30°C for 30 minutes, then rises to $+80^{\circ}\text{C}$ for 30 minutes. The total cycle time is 60 minutes. The transfer time between the two temperature levels is 10 minutes.</p>	
4	Humidity Test	The part shall be subjected to $+60\pm 2^{\circ}\text{C}$, 90° 95% R.H. for 96 hours and expose to room temperature for 6 hours.	
5	Vibration	10 – 55 – 10Hz, Sinewave , Sweep 15 min. X,Y,Z 3 Direction 2 hours each, Total 6 hours.	
6	Free Drop	The part only shall be dropped from a height of 100cm onto the 10m/m thick hardwood board 10 times, any directions.	

No	Items	Test Conditions	Evaluation Criteria
7	Ordinary Temp. Operating Test	The part shall be subjected to 96 hours at $25\pm 10^{\circ}\text{C}$. Input 1.5 Vo-p Squarewave 1/2 duty 2730Hz	
8	High Temp. Operating Test	The part shall be subjected to 96 hours at $+60\pm 2^{\circ}\text{C}$. Input 1.5 Vo-p Squarewave 1/2 duty 2730Hz	
9	Low Temp. Operating Test	The part shall be subjected to 96 hours at $-20\pm 2^{\circ}\text{C}$. Input 1.5 Vo-p Squarewave 1/2 duty 2730Hz	
10	Solderability (for lead pin unit)	Melting solder temp. $230\pm 10^{\circ}\text{C}$ Soaking time: $5\pm 0.5\text{sec}$.	95% new solder shall be covered with the surface of lead pins.

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.