

OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-0905A-A2
	PART NAME Magnetic Transducer	SHEET 1 OF 8

ALTERNATION HISTORY							
Marking	Date	ECN NO.	REV.	Description	Page	PREPARE BY	APPROVE BY
※2	MAR,30'07	0612015	F	Conformity RoHS Directive (2002/95/EC) Requests.	8	林子慧	陳建合

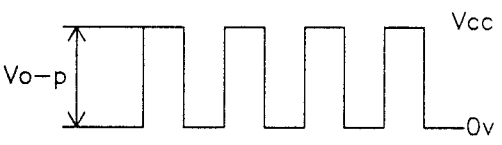
REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
F	MAR,30,2007	Eileen	陳建合	陳建合

OBO Pro.2	SPECIFICATIONS	MODEL NO. OBO-0905A-A2
	PART NAME Magnetic Transducer	SHEET 2 OF 8

MODEL NO : OBO-0905A-A2

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

1、General Specifications :

	Items	Spec.	Conditions
1.1	Rated Voltage	5.0 Vo-p	 <p style="text-align: center;">Square wave 1/2 Duty</p>
1.2	Operating Voltage	4-6 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	30±5Ω	
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 :

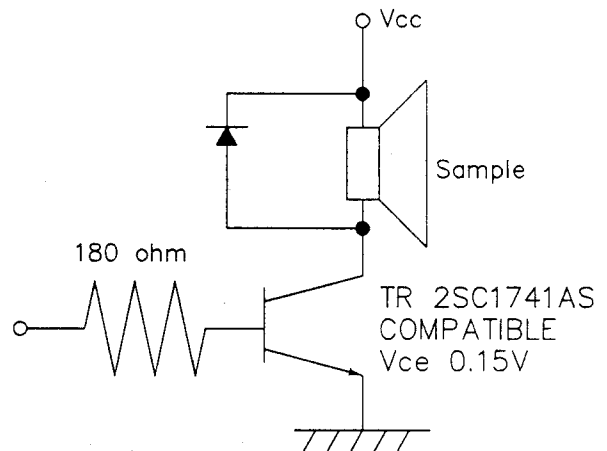
2.1 Standard State Ordinary Temperature 15°C to 35°C
 Ordinary Humidity 25% to 85%
 Ordinary air pressure 860 to 1060hPa

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

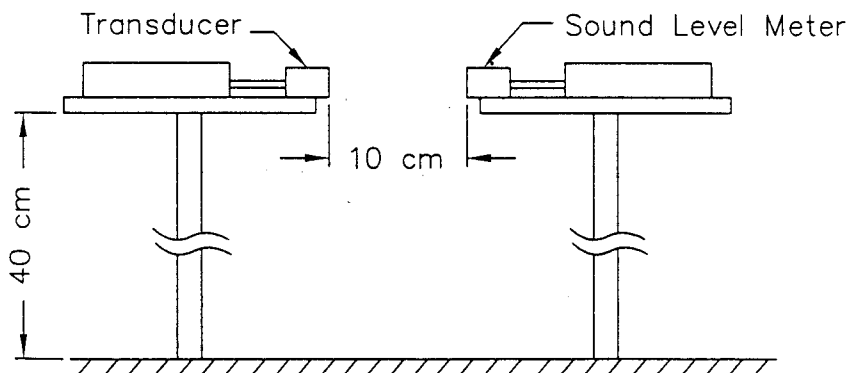
2.2 Basic State Temperature 20±2°C
 Humidity 60% to 70%
 Ordinary air pressure 860 to 1060hPa


3 · Test method :

3.1 Standard Drive Circuit



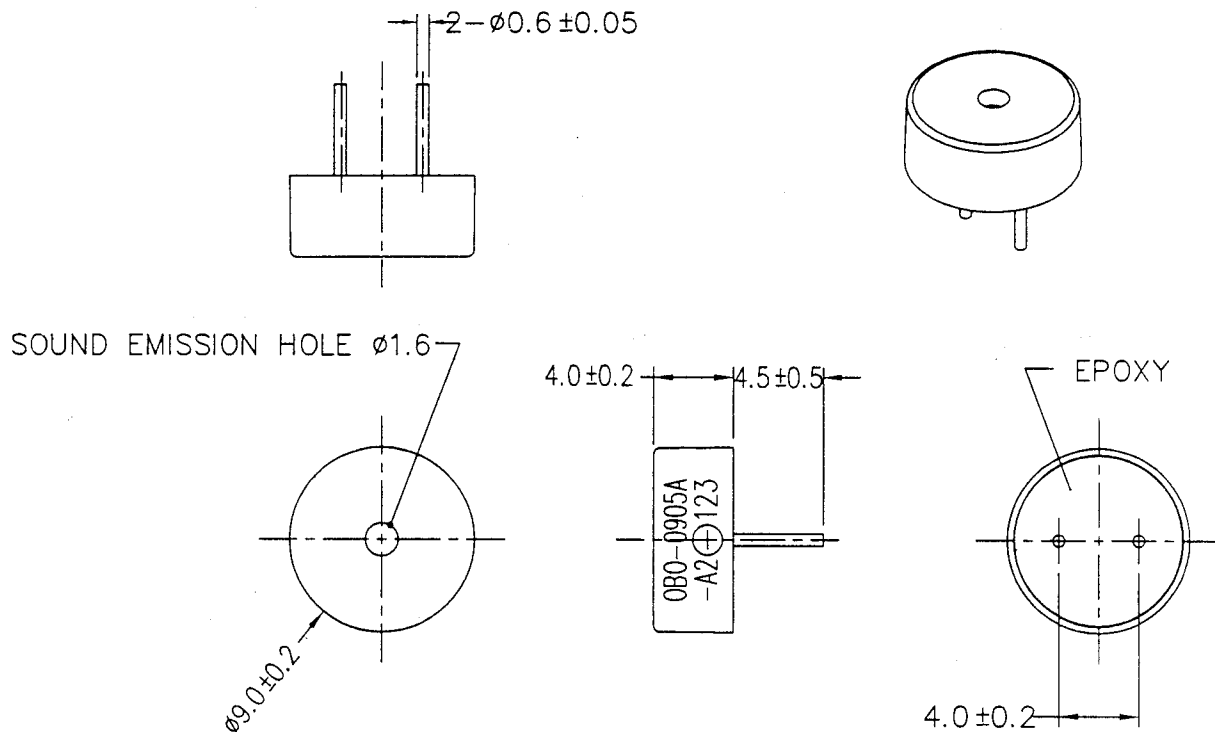
3.2 Standard Test Fixture



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4、Mechanical Layout and Dimensions :

UNIT : mm



Note : Meaning of Stamp Mark
 123 : Production Lot No.
 1 : Year 2001 (last 1 figures of the year)
 23 : week (01 ~ 55)
 0905A-A2 : Model No.
 ⊕ : Polarity identification mark

5、Soldering Condition :

5.1 Wave Soldering

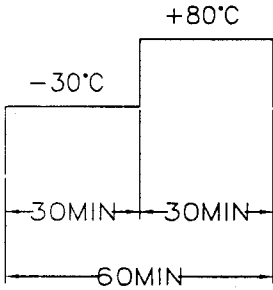
Peak temperature	Dipping time	Soldering
+ 260°C	5 seconds	1 time

5.2 Hand Soldering

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

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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 style="text-align: center;">Transfer Time : 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.	

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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 5.0 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 5.0 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 5.0 Vo-p Squarewave 1/2 duty 2730Hz	
10	Solder ability (for lead pin unit)	Melting solder temp. $260\pm 10^{\circ}\text{C}$ 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.

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7、Packing Information :

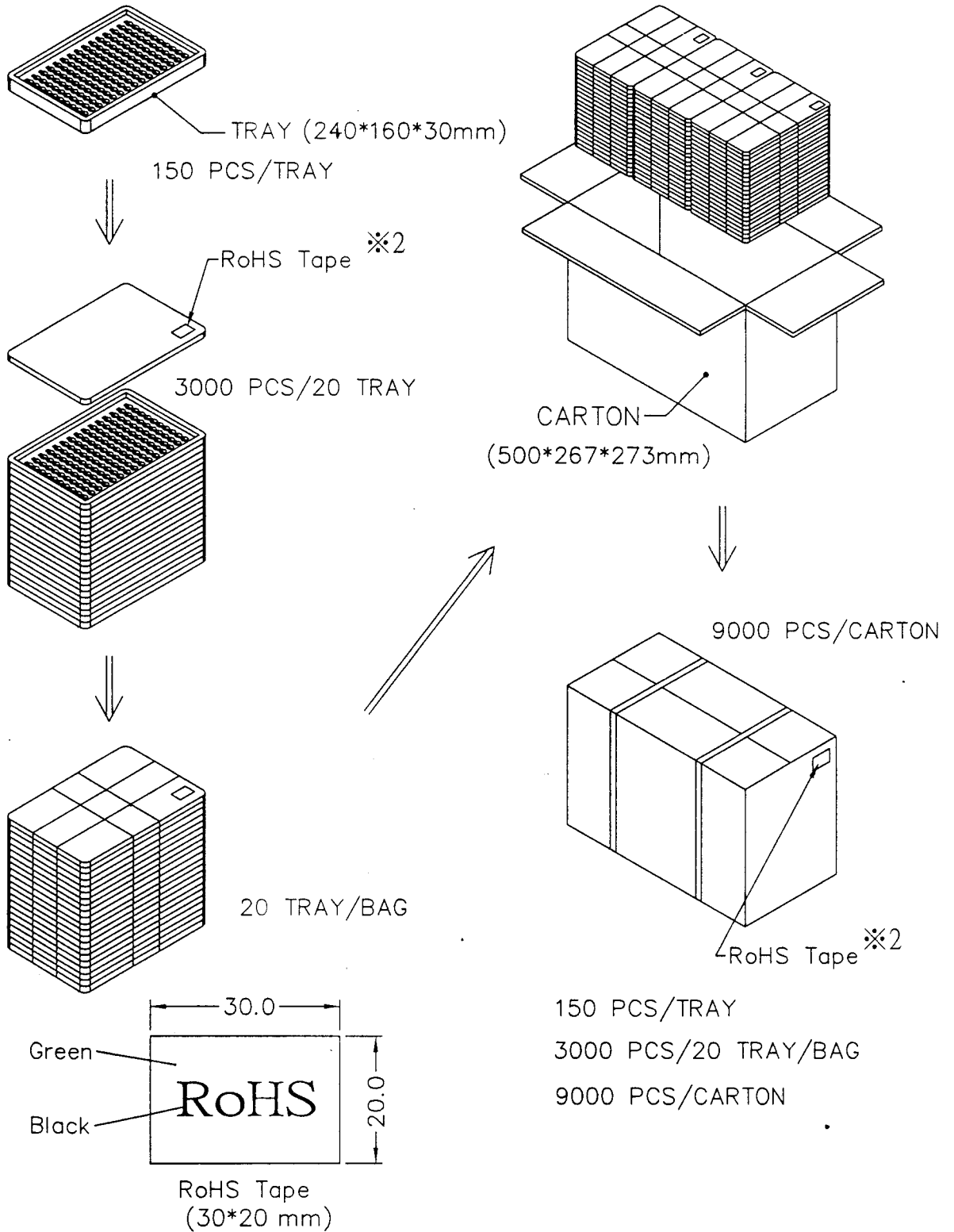


Fig. 1 Frequency Response, Magn dB re 20.00µPa

