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# Component Specification

Product : Magnetic Transducer  
Part Number : CA-M1209A-122485T  
Drawing No : DRW1103711

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## 1) General

This product is applied to our standard the magnetic transducer specification. Please contact us for customer specific solutions.

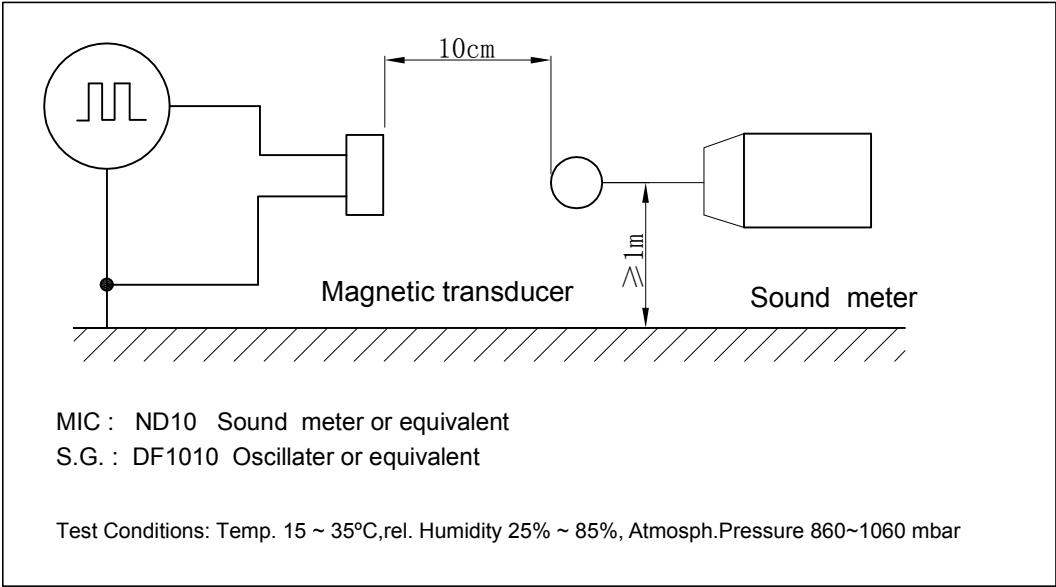
## 2) Electrical & Acoustical Specifications

	Type	Specification
1	Rated Voltage (Square Wave)	12V
2	Operating Voltage	8~16V
3	Max. Rated Current	50mA
5	Sound Pressure Level	≥85dB
6	Resonance Frequency	2400 Hz
7	Coil Resistance	140±21 Ω
8	Housing Material	Noryl
9	Operating Temperature Range	-30+70°C
10	Store Temperature Range	-40+85°C
11	Weight	2g
12	Hight	9.0mm
13	Diameter	Ø12mm

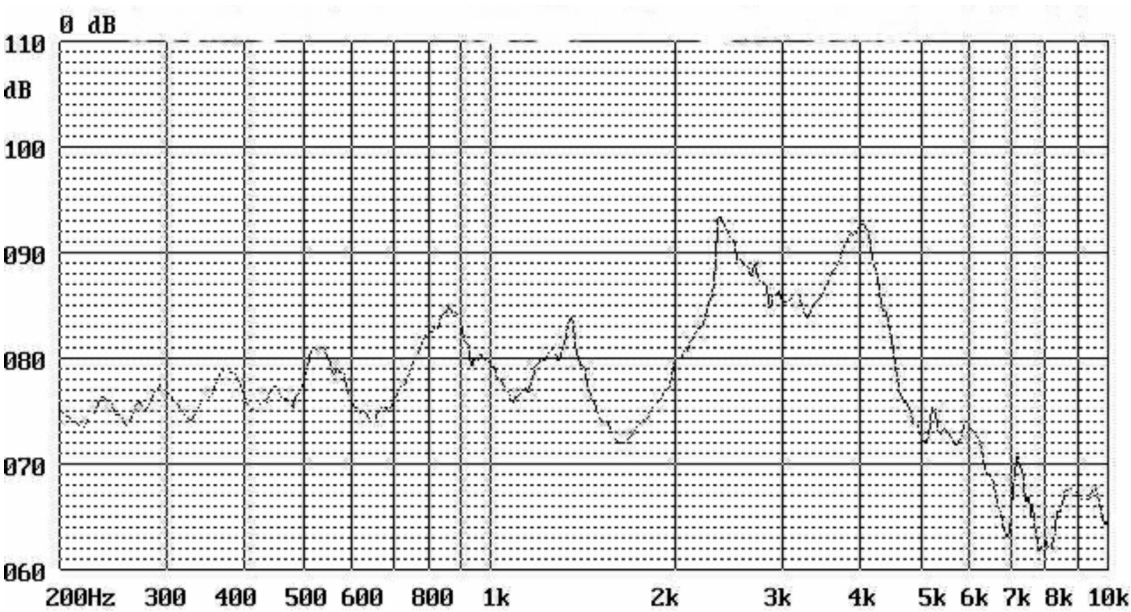
1.0	16.09.11		L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by

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3) Test Circuit



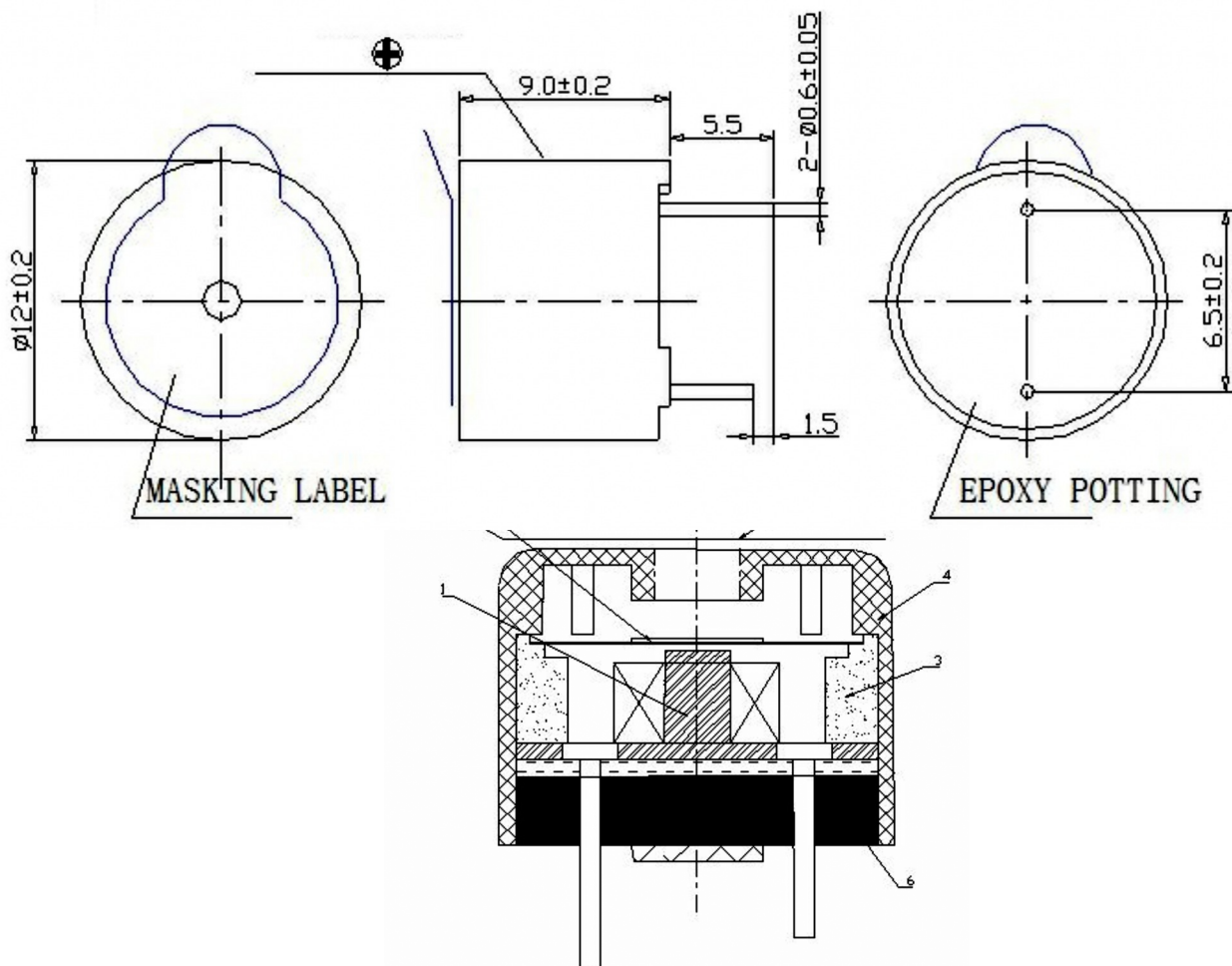
4. Frequency Characteristics



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## 5) Dimensions & Structure

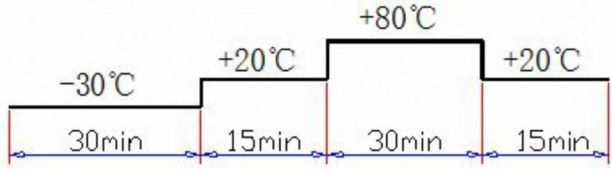
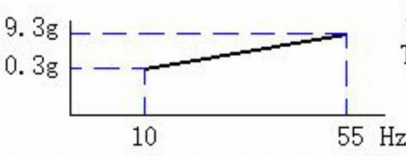


6	Potting		Exopy
5	Masking label	1	Paper
4	Housing	1	Noryl
3	Magentism	1	Ferrite
2	Diaphragm	1	Iron
1	Coil Part	1	Copper And Iron
Part No.	Part Name	Quantity	Material


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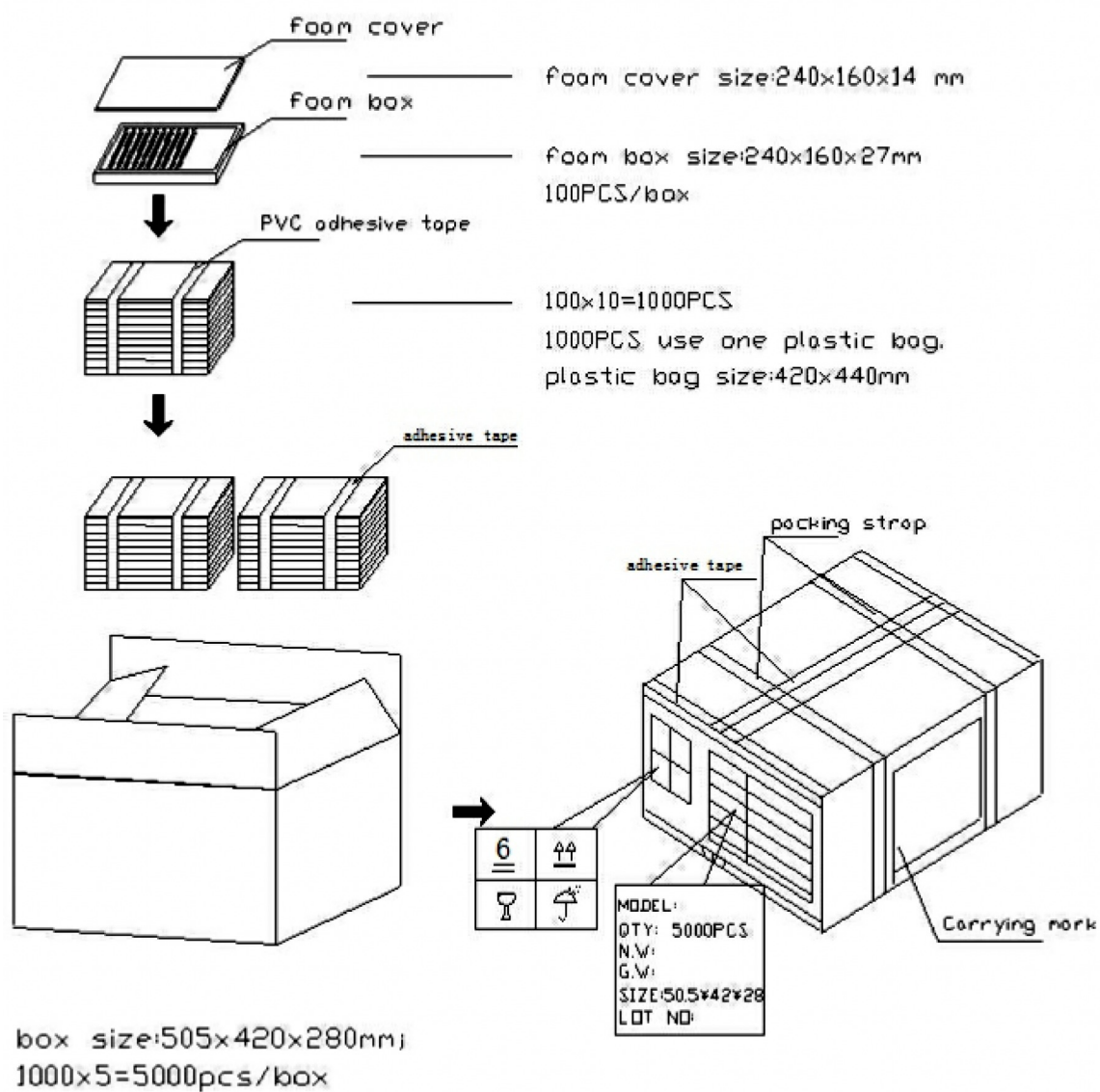
## 6) Reliability Test

No	Items	Specification
1	Heat Resistance (Storage)	Storage in $+85^{\circ}\text{C}\pm 2^{\circ}\text{C}$ test box for 96 hours then expose to the room temperature for 2 hours without applying power.
2	Cold Resistance (Storage)	After being placed in a chamber with $-40\pm 2^{\circ}\text{C}$ for 240 hours and then being placed in natural condition for 4 hours, diaphragm shall be measured
3	Thermal Cycle Test	 <p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>
4	Vibration Test	 <p>Make this test for the directions of X, Y, Z for 2 hours each (total 6 hours).</p>
5	Temp./Humidity Resistance	Storage in $+40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ 90-95%RH test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
6	Drop Test	Free drop a unit from the height 100cm to the surface of 10mm thick board, three directions (X, Y, Z).
7	Solderability Test	Soldering temp.: $260\pm 5^{\circ}\text{C}$ Heat applying time: $3\pm 0.5\text{sec}$ .
8	Test pass criteria	After above test the S.P.L deviation should be within $\pm 5\text{ dB}$


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## 7) Packing



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## 8) Revision

Rev. No	Date	Page	Description	Sign
10	16.09.2011	all	Production release	Wang.Xue

1.0	16.09.11		L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by