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# Component Specification

Product : Magnetic Transducer  
Part Number : CA-M858540C-362785ES  
Drawing No : DRW10594R

## Content

1. General
2. Electrical & Acoustical Characteristics
3. Test Circuit
4. Frequency Characteristics
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## 1) General

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

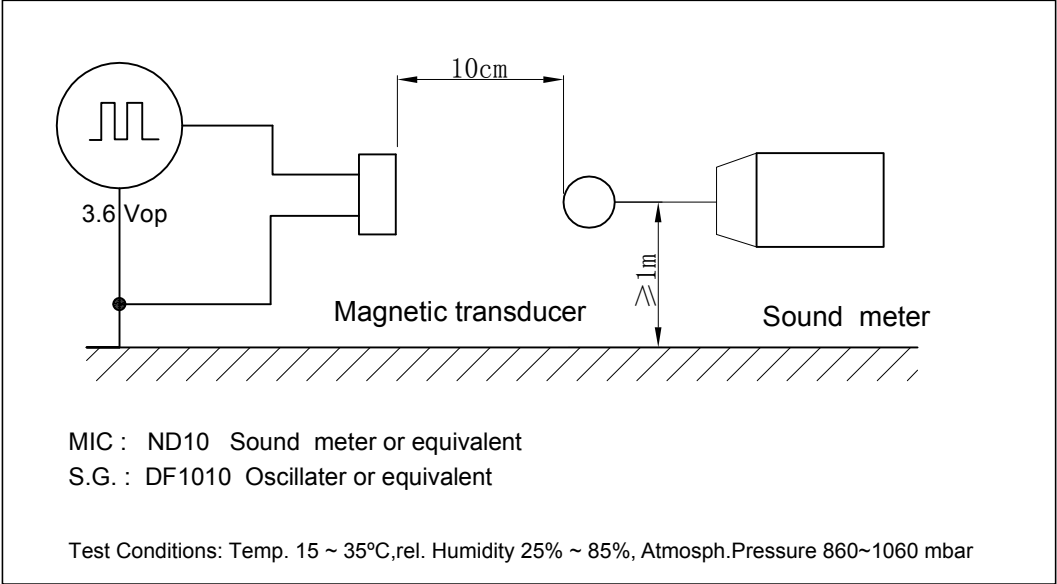
## 2) Electrical & Acoustical Specifications

	Type	Specification
1	Rated Voltage	3.6V
2	Operating Voltage	2~5V
3	Max. Rated Current	90mA /3.6V
4	Resonance Frequency	2670 Hz
5	Min. Sound Pressure Level	85dB/3.6V/1 0cm
6	Coil Resistance ( R )	16± 3Ω
7	Operating Temperature Range	-40~+85°C
8	Store Temperature Range	-40~+85°C
9	Weight	0.40g
10	Dimension	8.5x8.5x4.0 mm
11	Housing Material	LCP

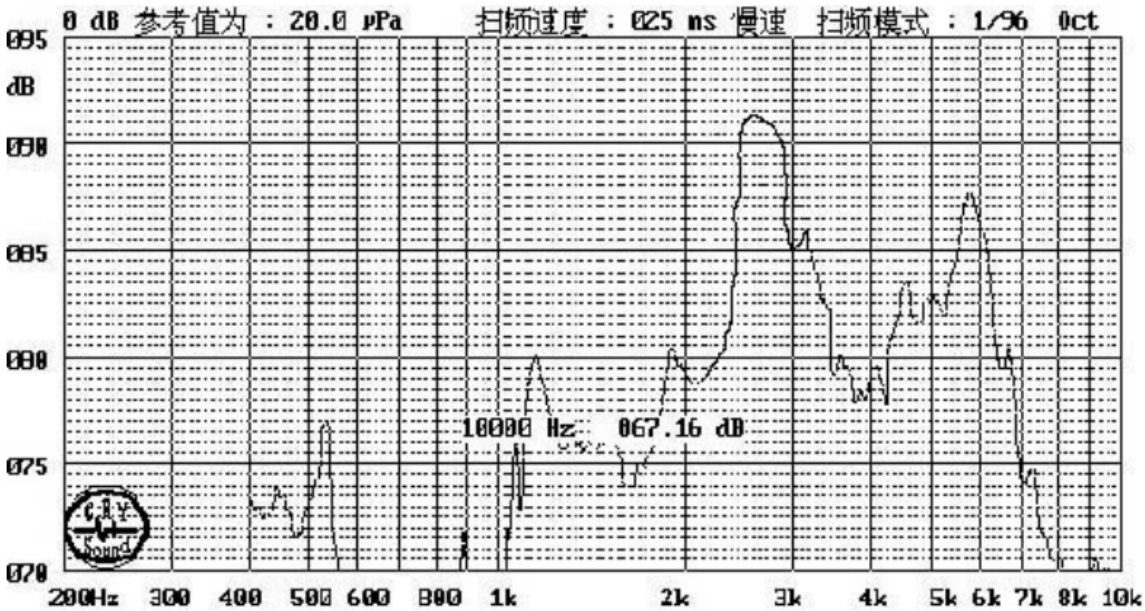
1.0	15.05.15		L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by

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3) Test Circuit



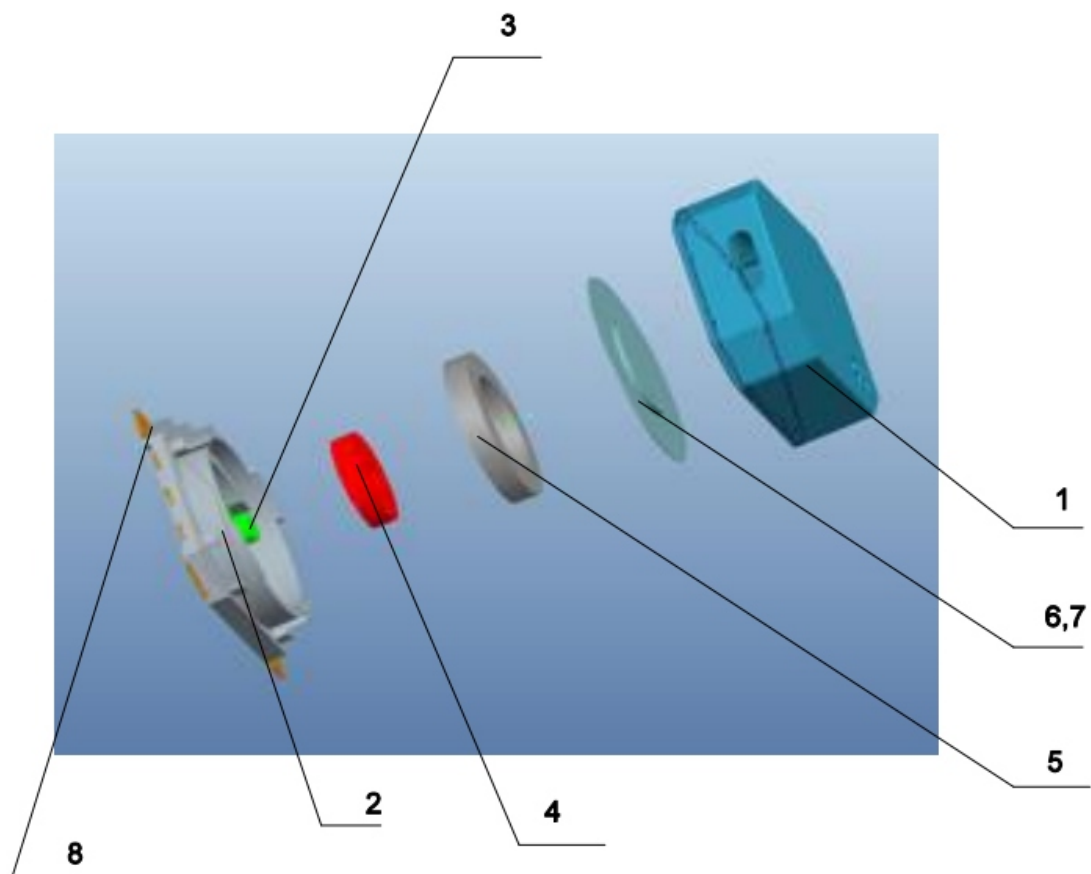
4) Frequency Characteristics



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## 5) Structure

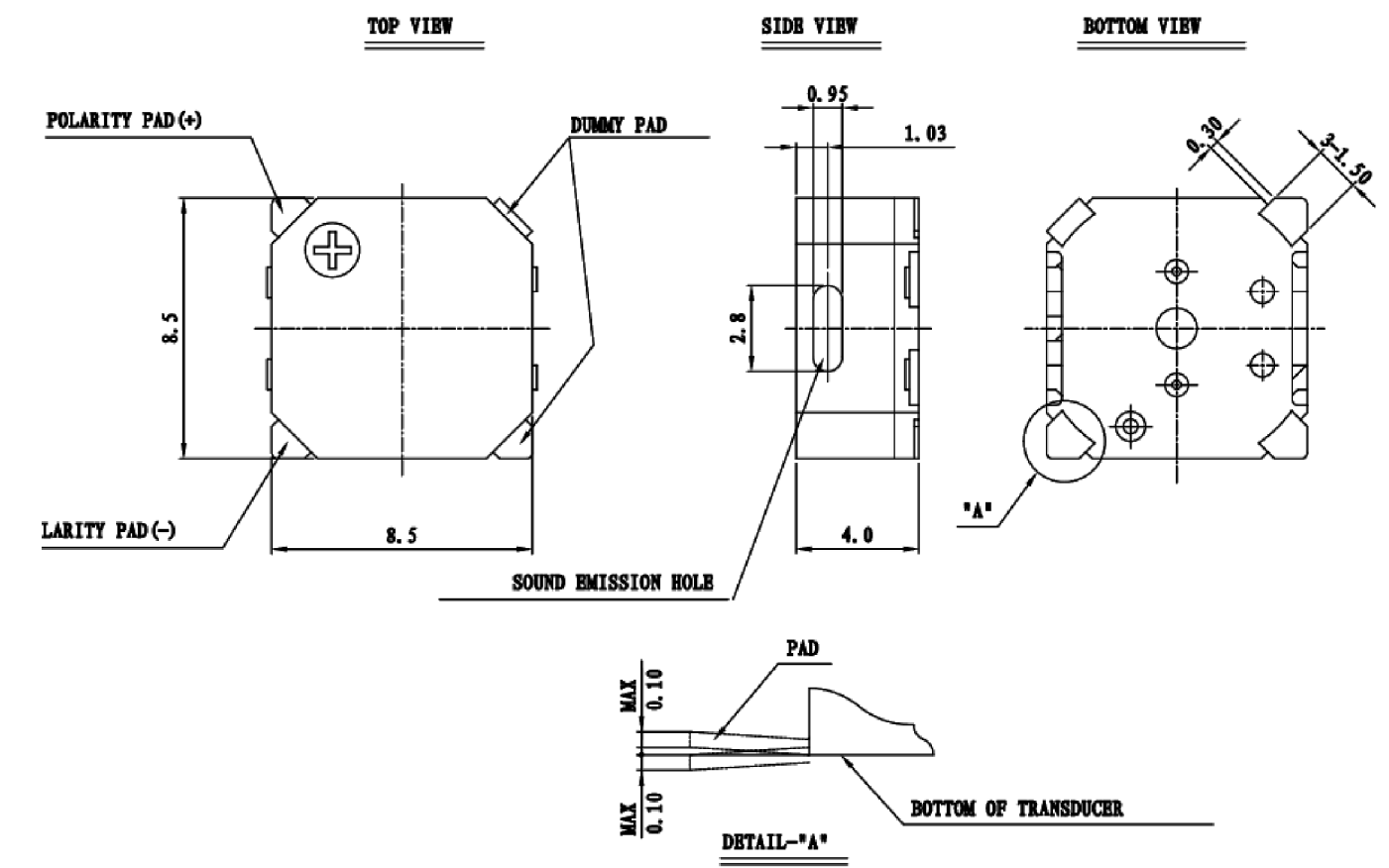


No	Part Name	Unit	Material
1	UPPER CASE	EA	LCP 6130
2	LOWER CASE	EA	LCP 6130
3	YOKE	EA	Fe
4	COIL	EA	Cu
5	MAGNET	EA	/
6	RESONATOR	EA	IJ50
7	MAGNET PLATE	EA	Spcc
8	TERMINAL	EA	Cu

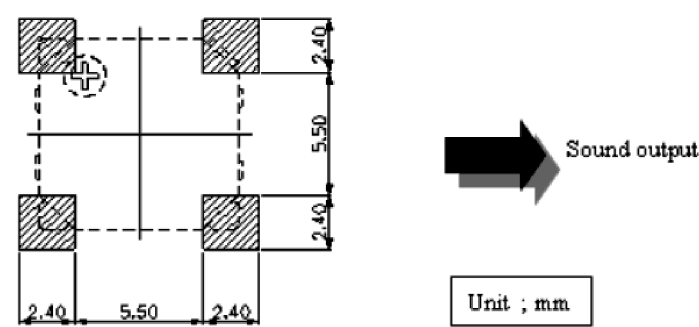
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6) Dimension



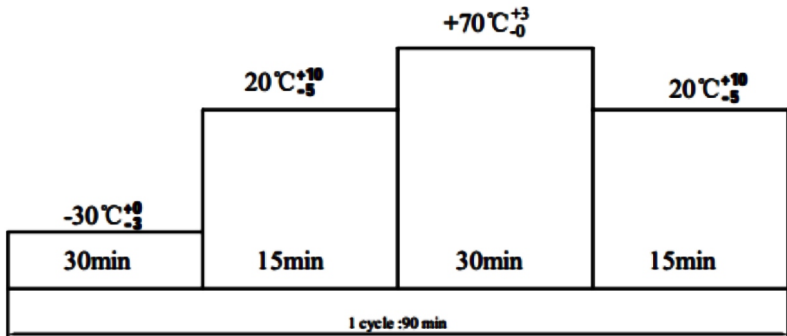
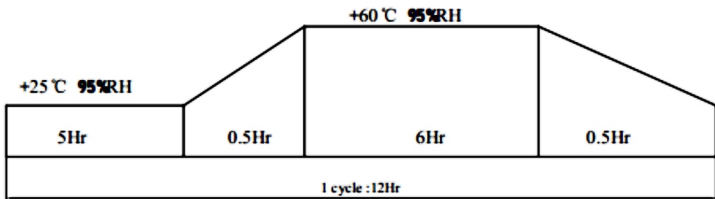
Recommend Pattern Land PCB




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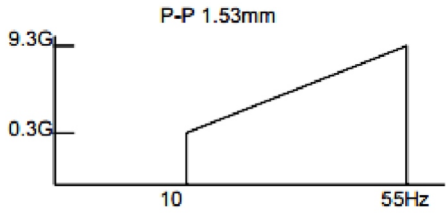
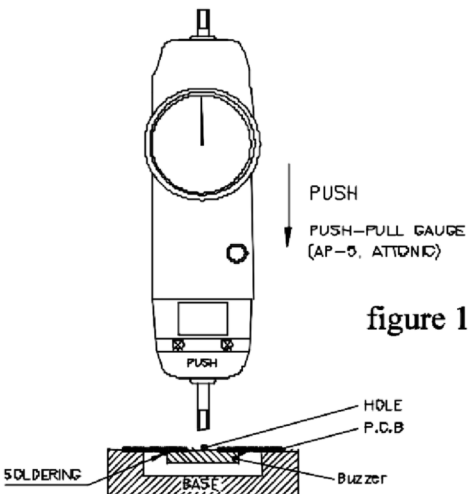
## 7) Continued

No	Items	Specification
1	Heat Resisance	Exposure the specimen to the $+85\pm 3^{\circ}\text{C}$ for 240 hours then expose to the room temperature for 2 hours.
2	Cold Resistance	Exposure the specimen to the $-40\pm 3^{\circ}\text{C}$ for 240 hours then expose to the room temperature for 2 hours.
3	Lifetime test	Specimen must be soldered onto test PCB trough the last reflow process, after that the part shall be subjected to room temperature continuously with 1 minute ON, 1 minute OFF rated voltage, 50% duty squarewave, resonance frequency applied for 1000 hours.
4	Temperature Cycle	<p>Make this test for 5 cycle without applying power ,then expose to the room temperature for 2 hours.</p>  <p>1 cycle :90 min</p>
5	Temp./Humidity Resistance	<p>Maki this test for 10 cycles without applying power,then expose to the room temperature for 2 hours.</p>  <p>1 cycle :12Hr</p>


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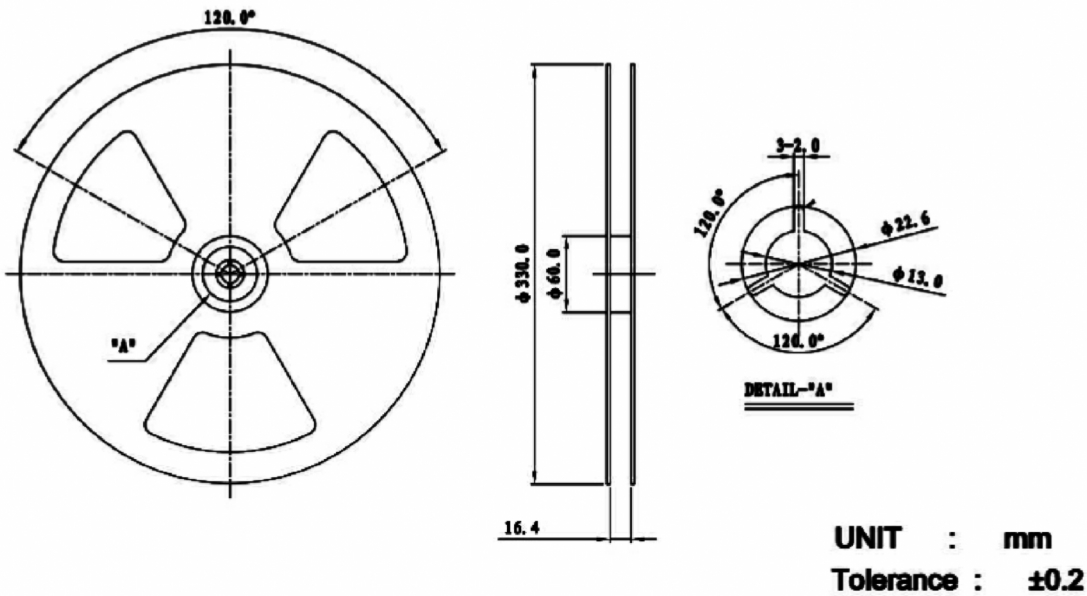
## Reliability Test

No	Items	Specification
6	Vibration test	<p>Make this test for the directions of X,Y and Z.for 2 hours each (total 6 hours). To-and-fro sweep time is 1 minute. Dimension of PCB:60X90X1.6t(mm)</p> 
7	Free drop	Fix specimen on test PCB, then drop from 1m height to the concrete floor 6 directions ( X-Y-Z-coordinate system ), 1 time each, total 6 times.
8	Solderability	<p>The specimen shall be dipped into the soldering bath conditioned as follows; Solder temp: 260± 5°C Soaking time:2± 0.5sec surface of lead pins must be covered with fresh solder and no soldering balls should be found.</p>
9	Pad Test	<p>Test Standard: (JIS C0050) Dont be the pad omission &amp; the quake. To satisfy the electronic performance. Pad Tensile Strength Test Condition In the pad direction, push the buzzer for 10sec. With tensile strength of 1.0kg .Refer to the following figure 1</p>  <p style="text-align: center;">figure 1</p>

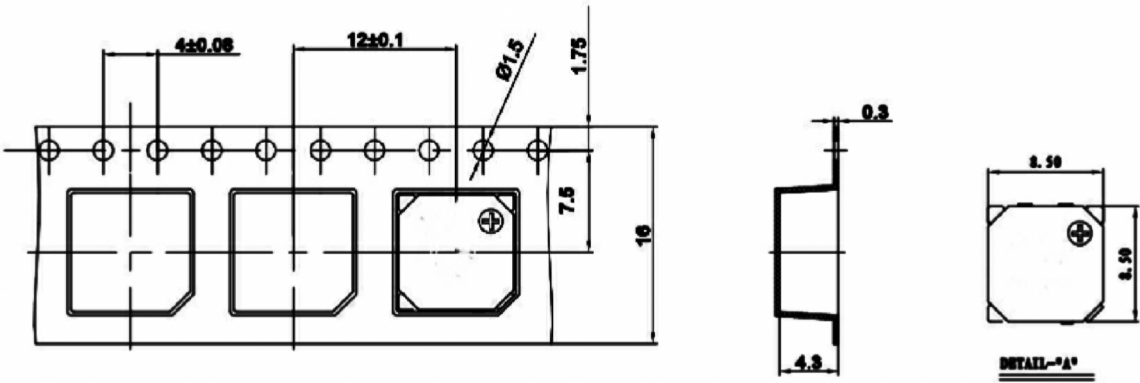
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8) Packing




8-1-2. Carrier Tape



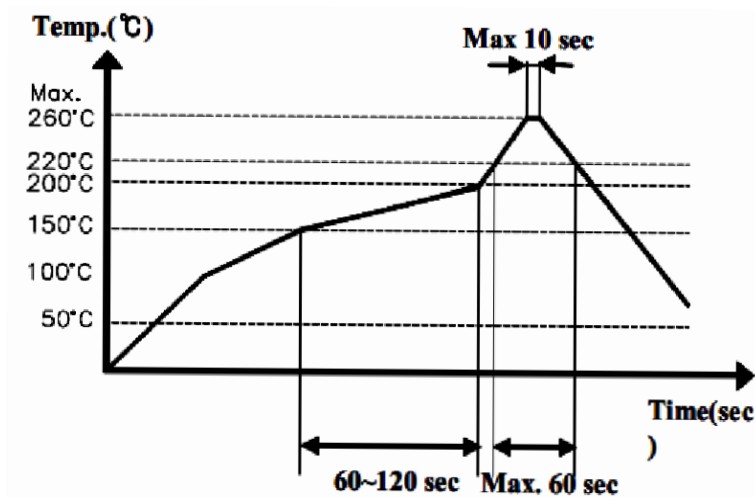
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## 9) Soldering Condition

### Reflow Soldering




### Manual Soldering

In case of using solder iron for soldering, the top of soldering iron's temperature should be kept less than +350°C. Moreover the soldering time should be also kept with in 3 seconds.

### Cautions for use

Please contact us before using our products for the undermentioned applications requiring especially high Reliability in order to prevent defects which might directly cause damage to other party's life, body or Property. Aircraft equipment, Aerospace equipment, Undersea equipment, Medical equipment, Transportation equipment, Traffic signal equipment, Disaster prevention equipment

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## 8) Revision

Rev. No	Date	Page	Description	Sign
10	15/05/15	all	production release	Wang.Xue

1.0	15.05.15		L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by