

MODEL NO OBO-30AX1 SHEET

PART NAME SMD-Electromagnetic Transducer

SHEET 1 OF 6

	ALTERNATION HISTORY						
Marking	Date	ECN NO.	REV.	Description	Page	PREPARE BY	APPROVE BY
	OCT.18,2010		暫定	New document	6	王志偉	謝明福

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
暫定	OCT.18,2010	王志偉	謝明福	謝明福



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# PART NAME

SMD-Electromagnetic Transducer

**MODEL NO: OBO-30AX1** 

Features:

Conformity RoHS Directive(2002/95/EC) Requests.

## 1. General Specifications

	Items	Specification
1.1	*Sound Pressure Level	70 dB min./10cm/DC 3.0V
1.2	Rated Voltage	DC 3.0V
1.3	Resonant Frequency	4000Hz
1.4	*Rated Current	100 mA max./DC 3.0V
1.5	Coil Resistance	12 ± 2 Ω
1.6	Operating Voltage	DC 2 to 5 V
1.7	Housing Material	LCP
1.8	Leading Pin Material	Tin Plated Brass(Sn)
1.9	Operating Temp. Range	-40°C to +85°C
1.10	Storage Temp Range	-40°C to +85°C
1.11	Weight	0.3 gms

### 2. Standard State

2.1 Standard State

Ordinary Temperature  $15^{\circ}$ C to  $35^{\circ}$ C Ordinary Humidity 60% to 70% Ordinary air pressure 860 to 1060hPa

2.2 Basic State

Temperature  $20\pm2^{\circ}$ C

Humidity 60% to 70% Ordinary air pressure 860 to 1060hPa



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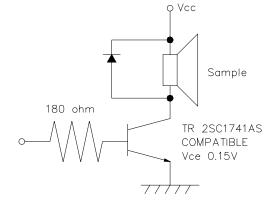
## PART NAME SMD-Electromagnetic Transducer

### 3. Test method

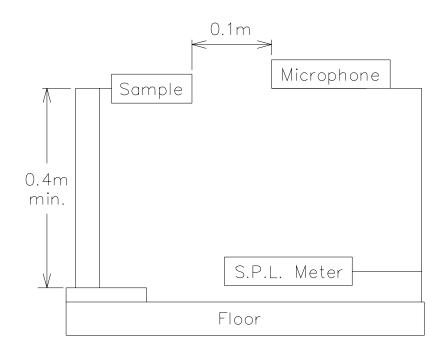
#### 3.1 Standard Drive Circuit

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





### 3.2 Standard Test Fixture





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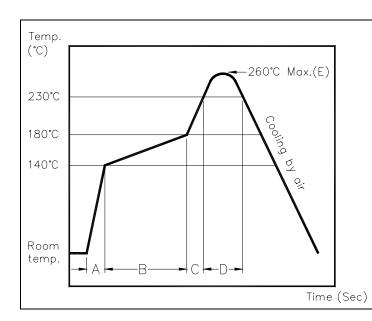
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### 4. Soldering Condition

### 4.1 Reflow Soldering

Recommendable reflow soldering condition is as follows.



NO.	Items	Condition	Uint
A	Temp.rise gradient	1~4	$^{\circ}\!\mathbb{C}$
В	Heating time	50~150	sec
	Heating temperature	140~180	$^{\circ}\!\mathbb{C}$
С	Temp.rise gradient 1~4		°C/sec
D	Time over 230°C	48 Max.	sec
Е	Peak temperature	260°C Max	$^{\circ}\!\mathbb{C}$
	Peak-temp.hold time	Momentary	sec
Soldering		2	times

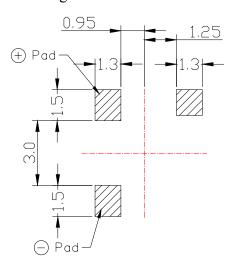
#### Note:

It is requested that second reflow solering should be executed after heat of product goes down to normal temperature.

### 4.2 Hand Soldering

Soldering iron temperature 380°C less than 3 second.

### 4.3 Soldering Pattern





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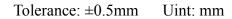
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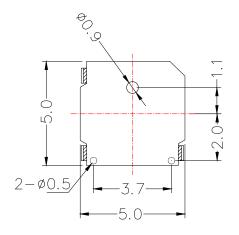
# PART NAME

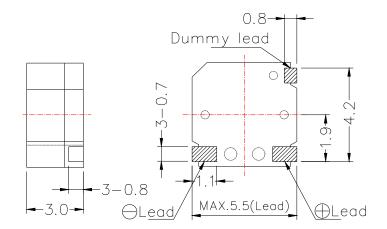
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## 5. Mechanical Layout and Dimensions

#### 5.1 Dimensions









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