



请承认书

Version No.: V2.0

常州昊翔电子有限公司  
Changzhou HaoXiang Electronic Co., LTD

客户名称

CUSTOMER NAMER : \_\_\_\_\_

产品名称

COMMODITY : SMD MAGNETIC BUZZER

产品型号

MODEL NO : TDA-M50030D-0340

客户料号

PART NO : \_\_\_\_\_

审核	秦皓	主办	曹升薪 Nov.20,2018
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客户承认栏			
承认		拒收	

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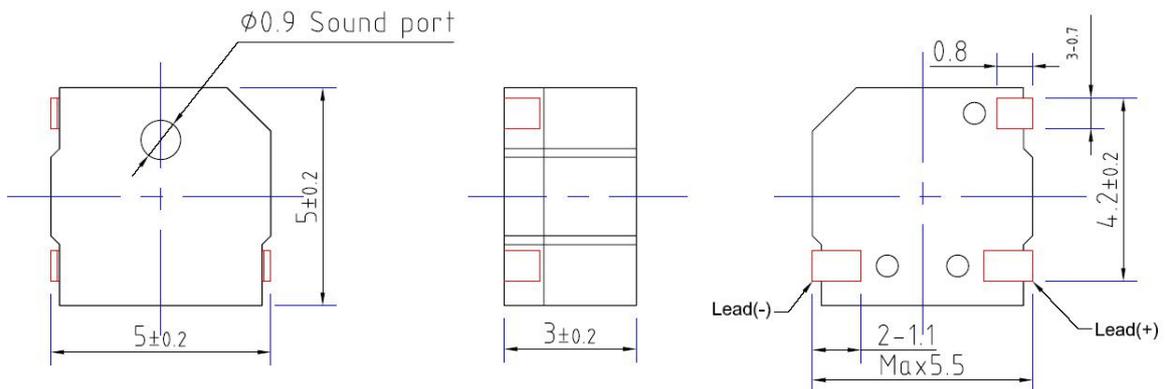
## A. SCOPE

This specification applies magnetic buzzer, **TDA-M50030D-0340**

## B. SPECIFICATION

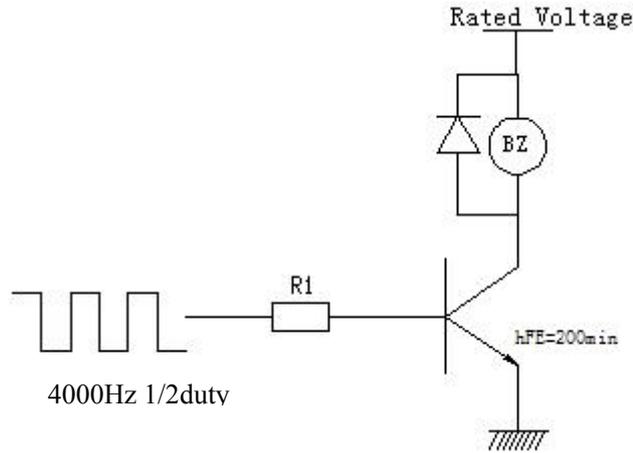
No.	Item	Unit	Specification	Condition
1	Oscillation Frequency	Hz	4000	Square Wave
2	Operating Voltage	Vo-p	2.0~4.0	
3	Rated Voltage	Vo-p	3	
4	Current Consumption	mA	MAX. 100	at Rated Voltage
5	Sound Pressure Level	dB	MIN. 75	at 10cm at Rated Voltage
6	Coil Resistance	$\Omega$	$12 \pm 2$	
7	Operating Temperature	$^{\circ}\text{C}$	-20 ~ +85	
8	Storage Temperature	$^{\circ}\text{C}$	-30 ~ +90	
9	Dimension	mm	5.0x5.0x H3.0	See appearance drawing
10	Weight (MAX)	gram	0.25	
11	Housing Material		LCP (Black)	
12	Leading Pin		Tin Plated Brass(Sn)	See appearance drawing
13	Environmental Protection Regulation		RoHS	

## C. APPEARANCE DRAWING

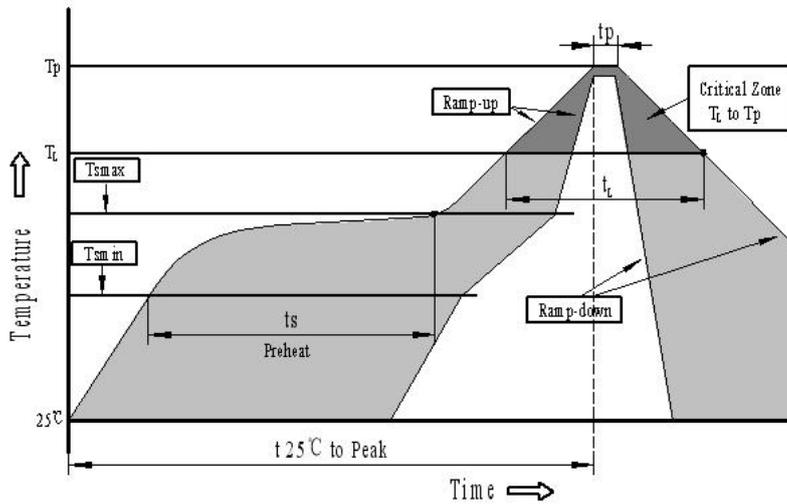


**Unit:mm Tolerance :  $\pm 0.5$ mm**

## D. RECOMMEND DRIVING CIRCUIT

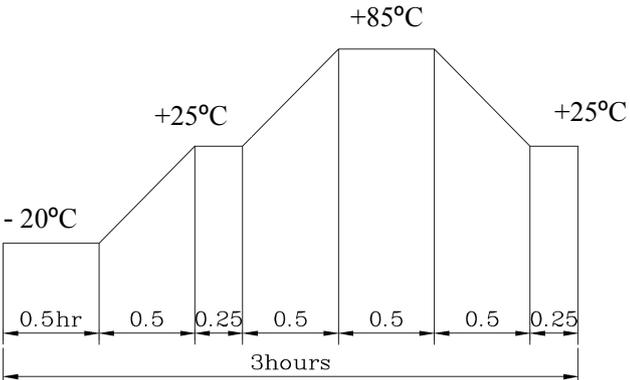


## E. RECOMMENDED TEMP. PROFILE FOR REFLOW OVEN



Profile Feature	Pb-Free Assembly
Average ramp-up rate( $T_L$ to $T_p$ )	3°C/second max.
Preheat	
-Temperature Min.( $T_{smin}$ )	150°C
-Temperature Min.( $T_{smax}$ )	200°C
-Temperature Min.( $t_s$ )	60~180 seconds
$T_{smax}$ to $T_L$	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
- Temperature( $T_L$ )	217°C
-Time( $T_L$ )	60~150 seconds
Peak temperature( $T_p$ )	245°C+0/-5°C
Time within 5°C of actual Peak temperature ( $t_p$ )	6 seconds max.
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

## F. RELIABILITY TEST

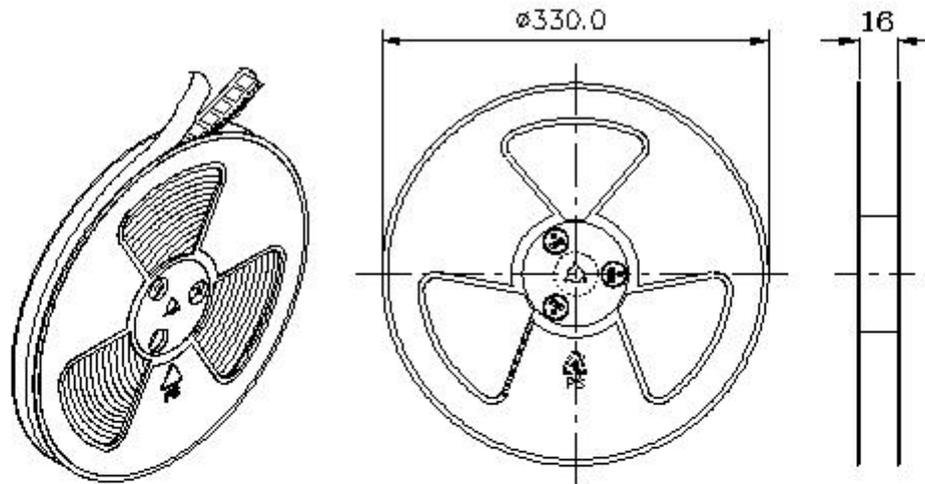
NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage)	After being placed in a chamber with $90\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
2	Low Temperature Test (Storage)	After being Placed in a chamber with $-30\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
3	Humidity Test	After being Placed in a chamber with 90-95% R.H. at $40\pm 2^{\circ}\text{C}$ for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: $\pm 10\text{dB}$ .
4	Temperature Cycle Test	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of:</p>  <p>The diagram shows a temperature cycle profile over a 3-hour period. It starts at <math>-20^{\circ}\text{C}</math> for 0.5 hours, then ramps up to <math>+25^{\circ}\text{C}</math> in 0.5 hours, holds at <math>+25^{\circ}\text{C}</math> for 0.25 hours, ramps up to <math>+85^{\circ}\text{C}</math> in 0.5 hours, holds at <math>+85^{\circ}\text{C}</math> for 0.5 hours, ramps down to <math>+25^{\circ}\text{C}</math> in 0.5 hours, holds at <math>+25^{\circ}\text{C}</math> for 0.25 hours, and finally ramps down to <math>-20^{\circ}\text{C}</math> in 0.5 hours. The total duration is 3 hours.</p> <p>Allowable variation of SPL after test: <math>\pm 10\text{dB}</math>.</p>
5	Drop Test	Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 75cm . Allowable variation of SPL after test: $\pm 10\text{dB}$ .
6	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours . Allowable variation of SPL after test: $\pm 10\text{dB}$ .
7	Solderability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+245\pm 5^{\circ}\text{C}$ for $3\pm 1$ seconds . 90% min. lead terminals shall be wet with solder (Except the edge of terminals).
8	Terminal Strength Pulling Test	The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off.

### TEST CONDITION

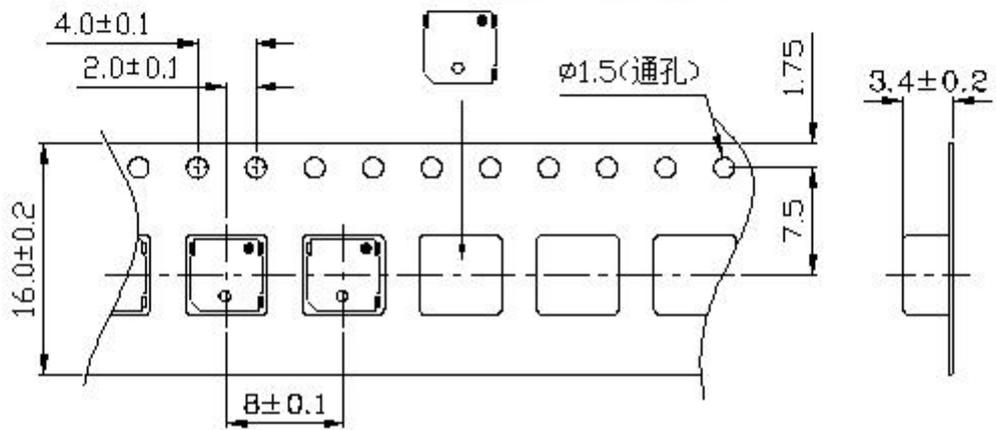
**Standard Test Condition :** a) Temperature :  $+5 \sim +35^{\circ}\text{C}$     b) Humidity : 45-85%    c) Pressure : 860-1060mbar

**Judgment Test Condition:** a) Temperature :  $+25\pm 2^{\circ}\text{C}$     b) Humidity : 60-70%    c) Pressure : 860-1060mbar

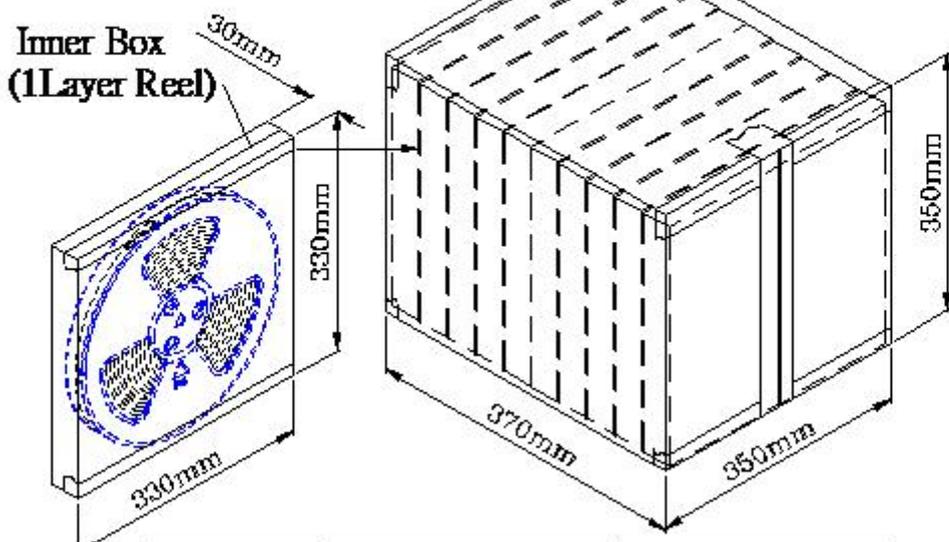
# G. PACKING STANDARD



1 Reel : 2000PCS



Carton Box  
(10 Inner Box)



Inner Box	330mmx330mmx30mm	1x2000PCS=2000PCS
Carton Box	350mmx350mmx370mm	10x2000PCS=20,000PCS

