

## 请承认书

Version No.: <u>V2.0</u>

常	引州	昊	剃	电	子	有	足	公	司
Ch	angzho	ou <i>H</i>	laoXid	ang	Elect	ronic	C	o., l	LTD
	产户名								
Cl	JSTOME	ER NAM	MER:						_
产	品名	名 称							
COMMODITY : SMD MAGNETIC BUZZER						_			
产品型号									
M	ODEL N	0	:	T	)A-M5(	10EOC	)-0	340	_
客	子户米	斗 号							_
PA	ART NO		:						
			_						-
审	核		秦皓		主	办		曹升薪	Nov.20,2018
		客	户	序	认认	栏			
	承	认				拒		收	
		_							
常	州	昊	翔	电	子	有	限		司

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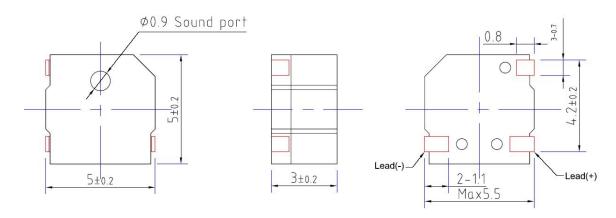
## A. SCOPE

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

## **B. SPECIFICATION**

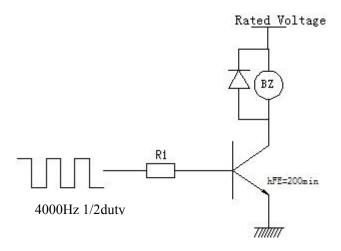
No.	Item	Unit	Specification	Condition	
1	Oscillation Frequency	Hz	4000	Square Wave	
2	Operating Voltage	Vo-p	2.0~4.0		
3	Rated Voltage	Vo-p	3		
4	Current Consumption	mA	MAX. 100	at Rated Voltage	
5	Sound Pressure Level	dB	MIN. 75	at 10cm at Rated Voltage	
6	Coil Resistance	Ω	12±2		
7	Operating Temperature	$^{\circ}\! \mathbb{C}$	-20 ~ +85		
8	Storage Temperature	$^{\circ}\!\mathbb{C}$	-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**

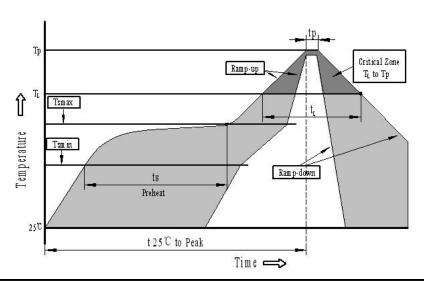


Unit:mm Tolerance: ±0.5mm

## D. RECOMMEND DRIVING CIRCUIT



## **E.RECOMMENDED TEMP. PROFILE FOR REFLOW OVEN**



Profile Feature	Pb-Free Assembly
Average ramp-up rate(T <sub>L</sub> to Tp)	3°C/second max.
Preheat	
-Temperature Min.(Ts <sub>min</sub> )	150℃
-Temperature Min.(Ts <sub>max</sub> )	200℃
-Temperature Min.(ts)	$60{\sim}180$ seconds
Ts <sub>max</sub> to T <sub>L</sub>	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
- Temperature(T <sub>L</sub> )	217℃
-Time(T <sub>L</sub> )	$60{\sim}150$ seconds
Peak temperature(Tp)	245℃+0/-5℃
Time within 5℃of actual Peak temperature (tp)	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				
	High Temperature	After being placed in a chamber with 90±2°C for 96 hours and then				
1		being placed in normal condition for 2 hours.				
	Test (Storage)	Allowable variation of SPL after test: ±10dB.				
	Low Temperature	After being Placed in a chamber with -30±2°C for 96 hours and then				
2	Test (Storage)	being placed in normal condition for 2 hours.				
		Allowable variation of SPL after test: ±10dB.				
		After being Placed in a chamber with 90-95% R.H. at 40±2°C for 96				
3	Humidity Test	hours and then being placed in normal condition for 2 hours.				
		Allowable variation of SPL after test: ±10dB.				
		The part shall be subjected to 5 cycles. One cycle shall be consist of:				
		+85°C				
	Temperature Cycle Test	+25°C +25°C				
4		- 20°C				
		0.5hr 0.5 0.25 0.5 0.5 0.25 0.25 3hours				
		Allowable variation of SPL after test: ±10dB.				
_	Duan Took	Drop on a hard wood board of 4cm thick, any directions ,6 times,				
5	Drop Test	at the height of 75cm.				
		Allowable variation of SPL after test: ±10dB.				
		After being applied vibration of amplitude of 1.5mmwith 10 to 55 Hz				
6	Vibration Test	band of vibration frequency to each of 3 perpendicular directions for 2 hours .				
		Allowable variation of SPL after test: ±10dB.				
		Lead terminals are immersed in rosin for 5 seconds and then				
	Solderability	immersed in solder bath of +245±5°C for 3±1 seconds .				
7	Test	90% min. lead terminals shall be wet with solder				
		(Except the edge of terminals).				
		The force of 9.8N(1.0kg) is applied to each terminal in axial direction for				
8	Terminal Strength	10 seconds.				
	Pulling Test	No visible damage and cutting off.				
		110 Holoro dalliago and oatting on.				

## **TEST CONDITION**

**Standard Test Condition :** a) Temperature :  $+5 \sim +35 ^{\circ}$ C b) Humidity : 45-85% c) Pressure : 860-1060mbar **Judgment Test Condition:** a) Temperature :  $+25\pm 2 ^{\circ}$ C b) Humidity : 60-70% c) Pressure : 860-1060mbar

# **G. PACKING STANDARD** ø330.0 16 1 Reel:2000PCS 4.0±0.1 $2.0 \pm 0.1$ ø1.5(通孔) $3.4 \pm 0.2$ 16.0±0.2 $8 \pm 0.1$ Carton Box (10 Inner Box) Inner Box (1Layer Reel)

330mmx330mmx30mm

350mmx350mmx370mm

1x2000PCS=2000PCS

10x2000PCS=20,000PCS

Inner Box

Carton Box

## **H.NOTE CAUTIONS**

- **a.** Please pay attention in welding process, don't let soldering flux invasion into the sound chamber , otherwise flux can cause defect conduction ∘
- b. Use should handle with care, avoiding direct pressure contact, or inadvertently falling down, to prevent the occurrence of fault, or the generation characteristics of abnormal movements.
  - **C**. This product is not dustproof, not waterproof, not resistance to dropping.

#### I.NOTICE ON PRODUCT STORAGE

**a**. Please store the products in room where the temperature / humidity is stable. And avoid such places where there are large temperature changes. Please store the products under the following conditions :

Temperature: -10 to +40 (degree C)

Humidity: 15 to 85% R.H.

- b. Expire date (Shelf life) of the products is 6 months after delivery under the conditions of a sealed and an unopened package. Please use the products within 6 months after delivery. If you store the products for a long time (more than 6months), use carefully because the products may be degraded in the solder-ability and/or rusty. Please confirm solder-ability and characteristics for the products regularly.
- C. Please use the products immediately after the package is opened, because the characteristics may be reduced in quality, and/or be degraded in the solder-ability due to storage under the poor condition.

## J.REVISION

No.	DATE	DESCRIPTION	REMARK	VERSION
1	2017.06.15	Initial condition	TDA-M50030	V1.0
2	Nov.20,2018	Version upgrade	TDA-M50030D-0340	V2.0
3				
4				