

请承认书

Version No.: V2.0

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Changzho	u HaoXid	ang	Electr	ronic	Co.,	LTD	
客户名	3 称						
CUSTOME	R NAMER :					_	
产品名	3 称						
COMMODITY : SMD MAGNETIC BUZZER							
产品型	일 号						
MODEL NO	o :	TD	A-M90	025-03	327	_	
客户米	斗号						
PART NO	:_					-	
审核	秦皓		主	办	唐俐雅	Aug.8,2018	
审核	秦皓		主	办	唐俐雅	Aug.8,2018	
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	客户	承		栏		Aug.8,2018	
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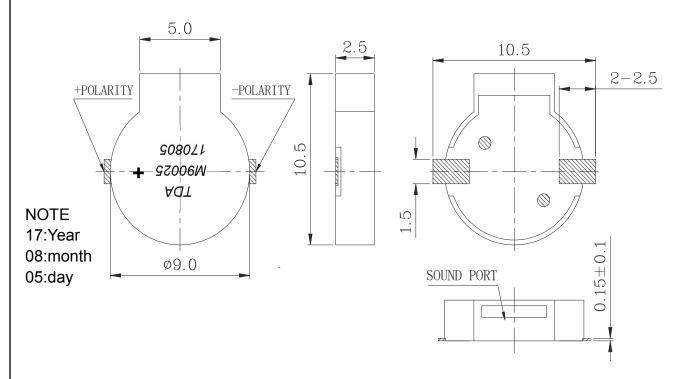
A. SCOPE

This specification applies magnetic buzzer, TDA-M90025-0327

B. SPECIFICATION

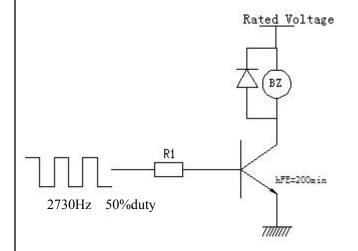
No.	Item	Unit	Specification	Condition
1	Oscillation Frequency	Hz	2730	Square Wave
2	Operating Voltage	Vdc	2.5~4.5	
3	Rated Voltage	Vdc	3.6	
4	Current Consumption	mA	MAX.110	at Rated Voltage
5	Sound Pressure Level	dB	MIN. 83	at 10cm , Rated Voltage,1/2duty
6	Coil Resistance	Ω	16±3	
7	Operating Temperature	$^{\circ}$	-30 ~ +70	
8	Storage Temperature	$^{\circ}\!\mathbb{C}$	-40 ~ +85	
9	Dimension	mm	Ф9.0x H2.5	See appearance drawing
10	Weight (MAX)	gram	0.5	
11	Housing Material		LCP(Black)	
12	Leading Pin		Tin Plated Brass(Sn)	See appearance drawing
13	Environmental Protection Regulation		RoHS	

C. APPEARANCE DRAWING

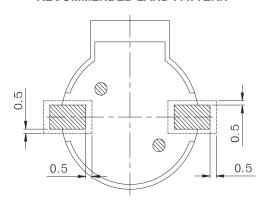


Unit:mm Tolerance: ±0.5mm

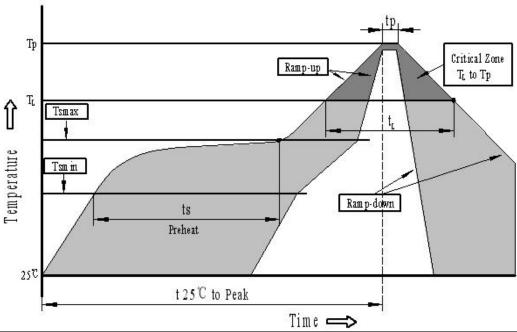
D. RECOMMEND DRIVING CIRCUIT



RECOMMENDED LAND PATTERN



E.RECOMMENDED TEMP. PROFILE FOR REFLOW OVEN



Profile Feature	Pb-Free Assembly		
Average ramp-up rate(T _L to Tp)	3°C/second max.		
Preheat			
-Temperature Min.(Ts _{min})	150℃		
-Temperature Min.(Ts _{max})	200℃		
-Temperature Min.(ts)	60∼180 seconds		
Ts _{max} to T _L			
-Ramp-up Rate	3°C/second max.		
Time maintained above:			
- Temperature(T∟)	217℃		
-Time(T _L)	60∼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.		

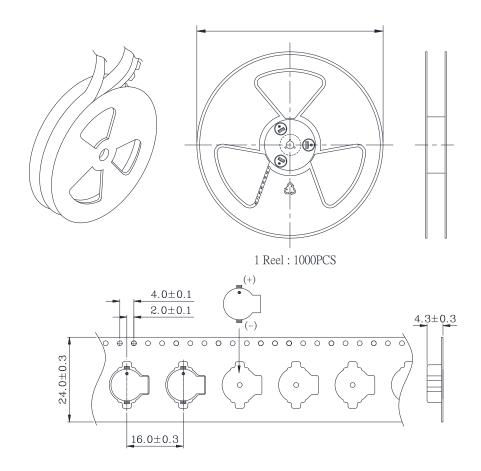
F.RELIABILTY TEST

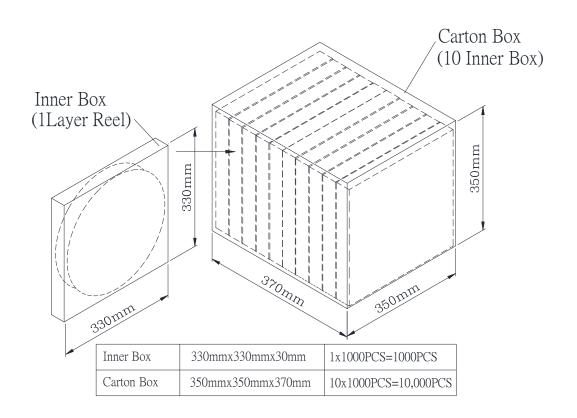
NO.	ITEM	TEST CONDITION AND REQUIREMENT		
	High Temperature	After being placed in a chamber with +85°C for 96 hours and then		
1	Test (Storage)	being placed in normal condition for 2 hours.		
	Test (Storage)	Allowable variation of SPL after test: ±10dB.		
	Low Temperature	After being Placed in a chamber with -40°C for 96 hours and then		
2	Test (Storage)	being placed in normal condition for 2 hours.		
		Allowable variation of SPL after test: ±10dB.		
3	Thermal shock	The part shall be subjected to 10 cycles. One cycle shall consist of: +85°C 30 min 60 min Allowable variation of SPL after test: ±10dB.		
		The part shall be subjected to 10 cycles. One cycle shall be consist of:		
4	Temperature Cycle Test	#85% a,b:90~98%RH c:80~98%RH 3hrs 12±0.5hrs Bars c 24hours Allowable variation of SPL after test: ±10dB.		
		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.		
6	Vibration Test	The part shall be subjected to a vibration cycle of 10Hz to 55Hz to 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm(9.3G). The vibration test shall consist of 2 hours per axis in each three axes(X,Y,Z), Total 6 hours. Allowable variation of SPL after test: ±10dB.		
7	Solderability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +245±5°C for 3±0.5 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 terminal for 10 seconds. No damage and cutting off		

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 : $+25\pm2^{\circ}$ C b) Humidity : 60-70% c) Pressure : 860-1060mbar

G. PACKING STANDARD





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	Aug.5,2018	Version upgrade	TDA-M90025-0327	V2.0