

请承认书

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

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Ch	angzho	ou H	laoXid	ang	Elect	ronic	Co	., L7	ΓD
客	产户名	名 称							
Cl	JSTOME	ER NAM	ΛER:						
产	品名	名 称							
COMMODITY : SMD PIEZO BUZZER									
产	品型	12 号							
M	ODEL N	0	:	<u></u>	DA-M	0924	-0		
客	产户米	斗号							
PA	ART NO		:						
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审	核		秦皓		主	办	曹	升薪 No	v.21,2018
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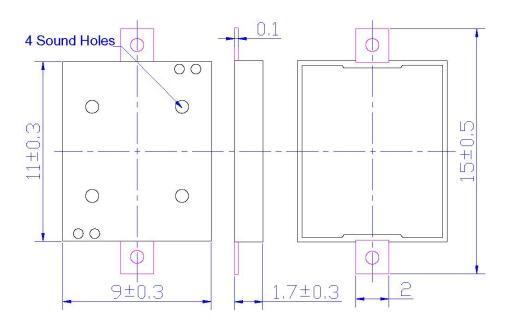
A. SCOPE

This specification applies piezo buzzer, TDA-M09240

B. SPECIFICATION

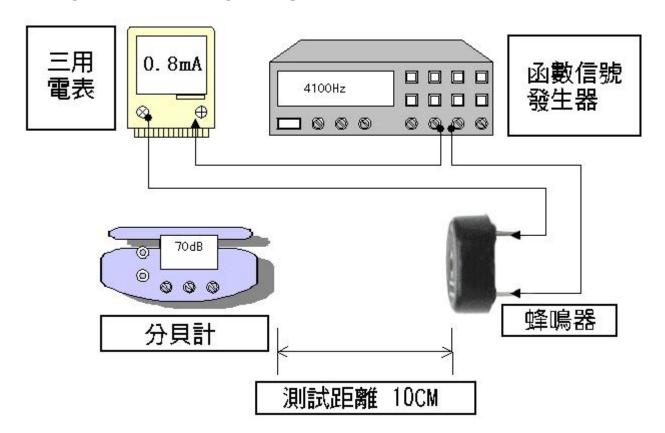
No.	Item	Unit	Specification	Condition
1	Oscillation Frequency	Hz	4100	square wave
2	Operating Voltage	Vp-p	25max	square wave
3	Current Consumption	mA	MAX. 2	at 5Vp-p ,4000Hz
4	Sound Pressure Level	dB	MIN. 70	at 10cm 5Vp-p 4000Hz
5	Operating Temperature	$^{\circ}\!\mathbb{C}$	-20 ~ +85	
6	Storage Temperature	$^{\circ}\!\mathbb{C}$	-30~ +90	
7	Dimension	mm	11.0x9.0xH1.7	See appearance drawing
8	Weight (MAX)	gram	0.5	
9	Housing Material		LCP(Black)	
10	Leading Pin		Tin Plated Brass(Sn)	See appearance drawing
11	Environmental Protection Regulation		RoHS	

C. APPEARANCE DRAWING

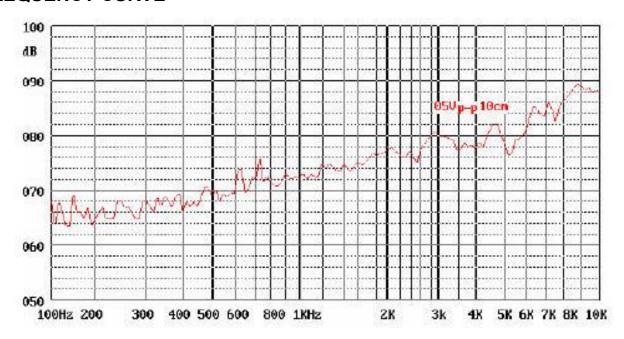


Unit:mm Tolerance: ±0.5mm

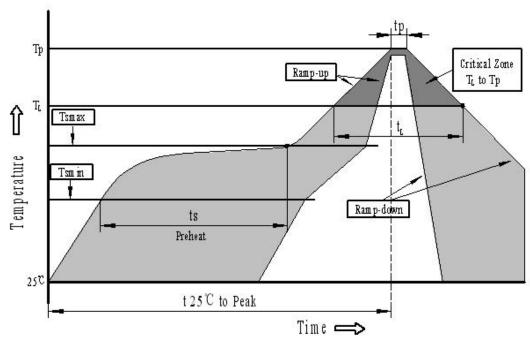
D. RECOMMEND DIRVING CIRCUIT



E.FREQUENCY CURVE



F.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)	$60{\sim}180$ seconds
Ts _{max} to T _L	
-Ramp-up Rate	3℃/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.

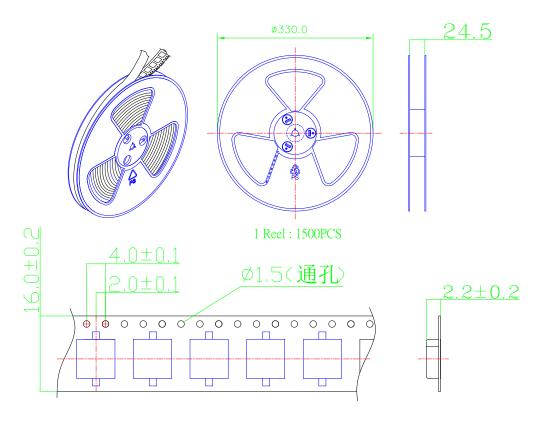
G. RELIABLY TEST

NO.	ITEM	TESTING CONDITION	VARIANCE AFTER TEST		
1	High temp. storage life	The part shall be capable of withstanding a storage temperature is +90℃ for 96 hours			
2	Low temp. storage life	The part shall be capable of withstanding a storage temperature is -30 °C for 96hours			
3	Temp. Cycle	The part shall be subjected to 5 cycles. One cycle shall be consist of: +89°C +29°C +25°C +25°C -40°C 0.5hr 0.5 0.5 0.5 0.5 0.5 0.5	Being placed for 4 hours at 25°C, buzzer shall be measured. The value of oscillation frequency and current consumption should be in ±10% compared with initial one. The SPL should be in ±10dB compared with initial one.		
4	Humidity Test	40±2℃, 90∼95% RH, 96hours			
5	Vibration Test	After being applied vibration of amplitude of 1.5mmwith 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours . Allowable variation of SPL after test: 10dB.	The value of oscillation frequency and current consumption should be in±10%compared with initial ones. The SPL should be in ±10dB compared with initial one.		
6	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: 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 1 seconds . 90% min. lead terminals shall be wet with solder (Except the edge of terminals).	After the test part shall meet specifications without any		
8	Terminal Strength Pulling Test	The part shall be pushed with a force of 9.8N for 10±1 seconds behind the part.	degradation in appearance and performance.		

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

H.PACKING STANDARD



I. NOTE CAUTIONS

- **a.** Can not be applied DC bias voltage and a sounding body or pronunciation elements, otherwise its insulation resistance will decrease and the use of performance degradation.
- b. Can not be imposed over pronunciation body or pronunciation components allows the use of voltage range of the voltage on the.
- **C.** Please pay attention in welding process, don't let soldering flux invasion into the sound chamber, otherwise flux can cause defect conduction.
- **d.** 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.

J. 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.

K. REVISION

No.	DATE	DESCRIPTION	REMARK	VERSION
1	Nov.15,2011	Initial condition	TDA-M09240	V1.0
2	Nov.21,2018	Version upgrade	TDA-M09240	V2.0