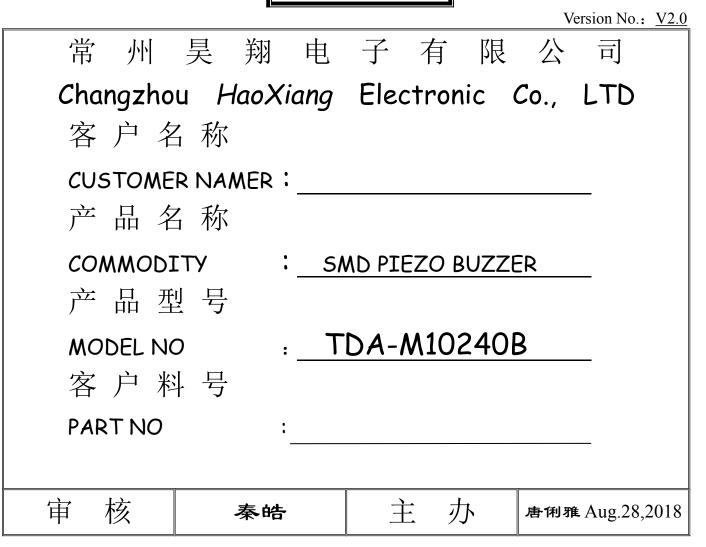


请承认书



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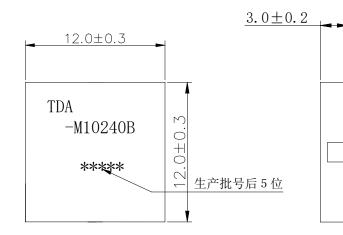
# A. SCOPE

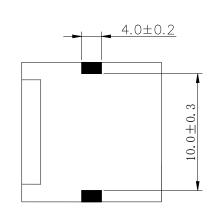
This specification applies piezo buzzer, TDA-M10240B

## **B. SPECIFICATION**

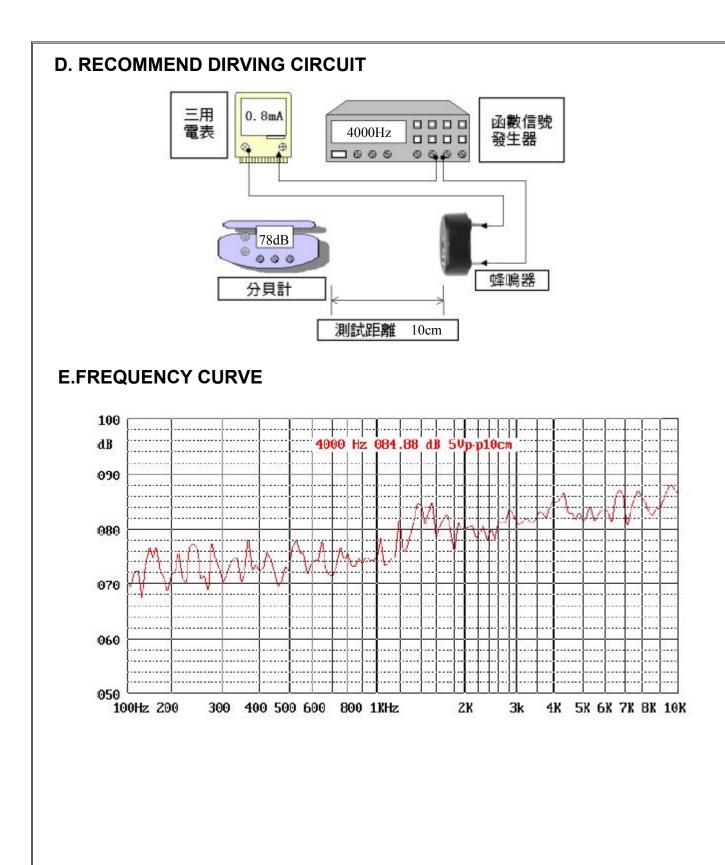
No.	ltem	Unit	Specification	Condition	
1	Oscillation Frequency	Hz	4000±500	square wave	
2	Operating Voltage	Vp-p	25max	square wave	
3	Current Consumption	mA	MAX. 3	at 3Vp-p ,4000Hz	
4	Sound Pressure Level	dB	MIN. 78	at 10cm 3Vp-p 4000Hz	
5	Operating Temperature	°C	-30 ~ +120		
6	Storage Temperature	°C	-40 ~ +120		
7	Dimension	mm	12x12x3	See appearance drawing	
8	Weight (MAX)	gram	0.3		
9	Housing Material		LCP		
10	Leading Pin		Tin Plated Brass(Sn)	See appearance drawing	
11	Environmental Protection Regulation		RoHS		

## C. APPEARANCE DRAWING

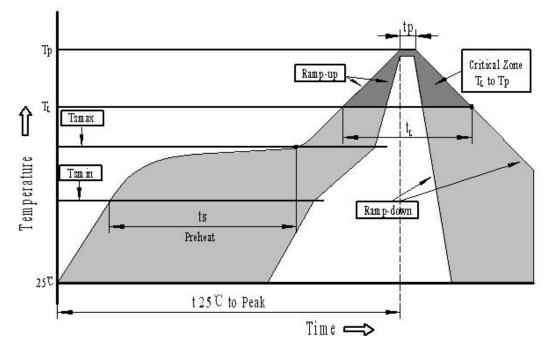




#### Unit:mm Tolerance : $\pm$ 0.5mm



## F.RECOMMENDED TEMP. PROFILE FOR REFLOW OVEN

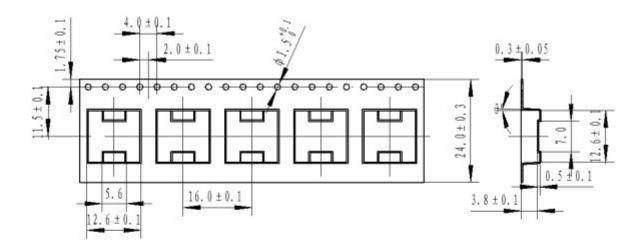


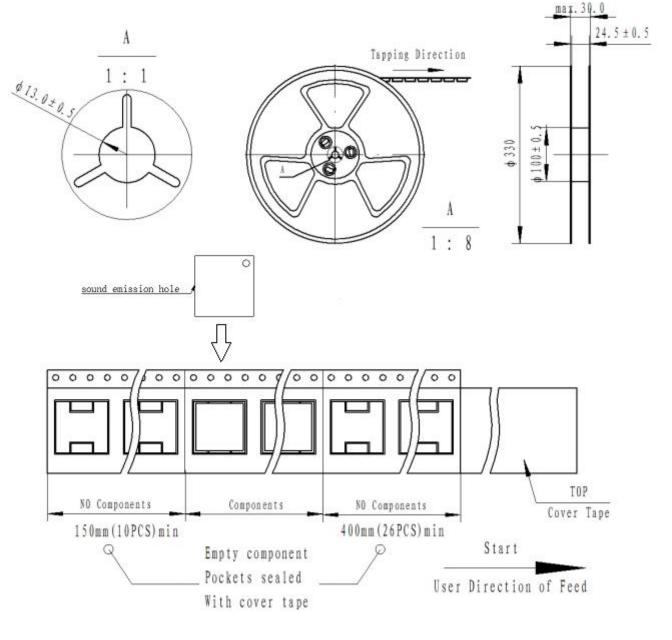
Profile Feature	Pb-Free Assembly	
Average ramp-up rate(T <sub>L</sub> to Tp)	3℃/second max.	
Preheat		
-Temperature Min.(Ts <sub>min</sub> )	<b>150</b> ℃	
-Temperature Min.(Ts <sub>max</sub> )	<b>200</b> ℃	
-Temperature Min.(ts)	$60{\sim}180$ seconds	
Ts <sub>max</sub> to T∟		
-Ramp-up Rate	3℃/second max.	
Time maintained above:		
- Temperature(T∟)	<b>217</b> ℃	
-Time(T <sub>L</sub> )	$60{\sim}150$ seconds	
Peak temperature(Tp)	<b>245℃+0/-5℃</b>	
Time within 5°C of actual Peak temperature (tp)	6 seconds max.	
Ramp-down Rate	6℃/second max.	
Time 25℃ to Peak Temperature	8 minutes max.	

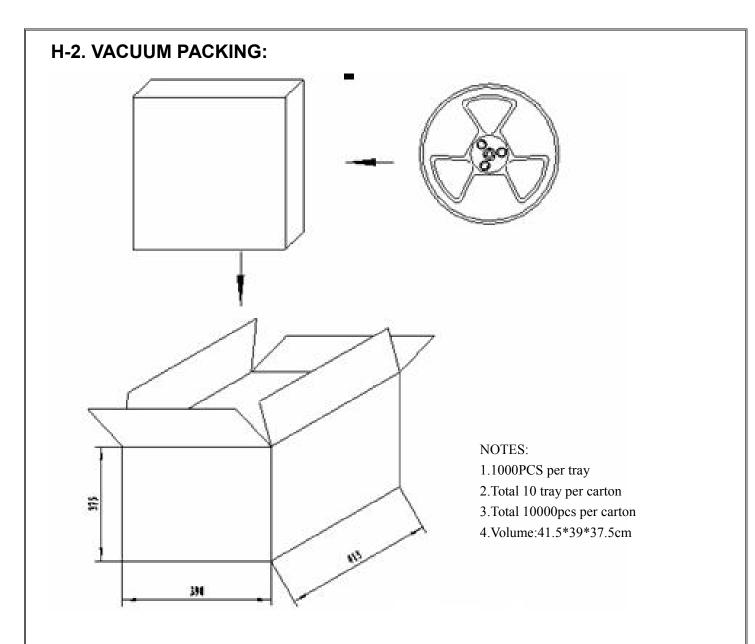
#### G. RELIABLY TEST VARIANCE NO. ITEM **TESTING CONDITION** AFTER TEST The part shall be capable of withstanding a storage High temp. 1 storage life temperature is +120°C for 96 hours The part shall be capable of withstanding a storage Low temp. 2 temperature is -40°C for 96hours storage life Being placed for 4 The part shall be subjected to 5 cycles. One cycle shall hours at 25°C, buzzer shall be measured. be consist of: The value of **120**℃ oscillation frequency and current consumption should be in ±10% 3 Temp. Cycle 20° **20°**C compared with initial one. The SPL should -30℃ be in ±10dB compared with initial 0.5H 0.5H 0.5H 0.5H 0.25 0.5 0.25 one. 3hours 4 Humidity Test 40±2°C, 90~95% RH, 96hours The part shall be subjected to a vibration cycle is 10Hz in a The value of period of 1 minute. Total peak amplitude shall be oscillation 1.52mm(9.3q). 5 Vibration Test frequency and The vibration test shall consist of 2 hours per plane in each current three mutually perpendicular planes for a total time of 6 consumption hours. should be Sounder shall be measured after being applied shock in±10%compared 6 Shock (980m/s<sup>2</sup>) for each three mutually perpendicular with initial ones. directions to each of 3 times by half sine wave. The SPL should be Dropped naturally from 700mm height onto the surface of in ±10dB compared 7 10mm thick wooden board. 2 directions-upper and side of Drop Test with initial one. the part are to be applied. The part shall be pushed with a force of 9.8N for 10±1 After the test part seconds behind the part. shall meet specifications 8 Lead pull without any degradation in appearance and performance. Recommende d temp. Profile 9 Shown in Fig.1 for Reflow Oven Warranty: For a period of one year from date of manufacture under normal operations. **TEST CONDITION** Standard Test Condition : a) Temperature : +5 ~ +35°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

#### H-1. PACKING:







#### 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	2014.11.03	Initial condition	TDA-M10240B	V1.0
2	Aug.28,2018	Version upgrade	TDA-M10240B	V2.0