

# 请承认书

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

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	Chang	gzhou	ı Ho	aoXia	ng	Electr	onic	Co.	, L	TD.
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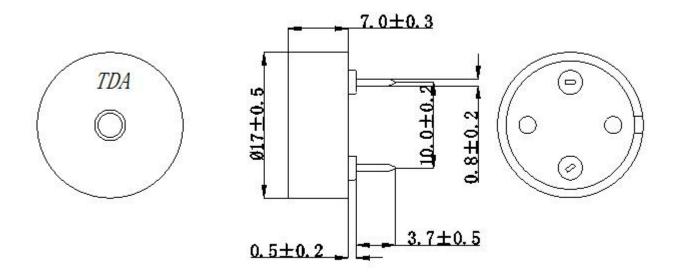
## A. SCOPE

This specification applies piezo buzzer, TDA-15240

## **B. SPECIFICATION**

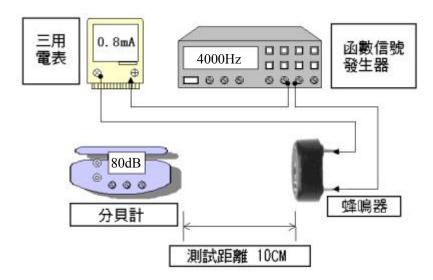
No.	Item	Unit	Specification	Condition
1	Oscillation Frequency	Hz	4000	square wave
2	Operating Voltage	Vp-p	30 max	
3	Current Consumption	mA	MAX. 2	at 5Vp-p
4	Sound Pressure Level	dB	MIN. 80	at 10cm 5Vp-p 4000Hz
5	Operating Temperature	$^{\circ}$	-20 ~ +85	
6	Storage Temperature	$^{\circ}$	-30 ~ +85	
7	Dimension	mm	Ø17.0xH7.5	See appearance drawing
8	Weight (MAX)	gram	1.5	
9	Housing Material		PBT( Black )	
10	Leading Pin		Tin Plated Brass(Sn)	See appearance drawing
11	Environmental Protection Regulation		RoHS	

## **C. APPEARANCE DRAWING**

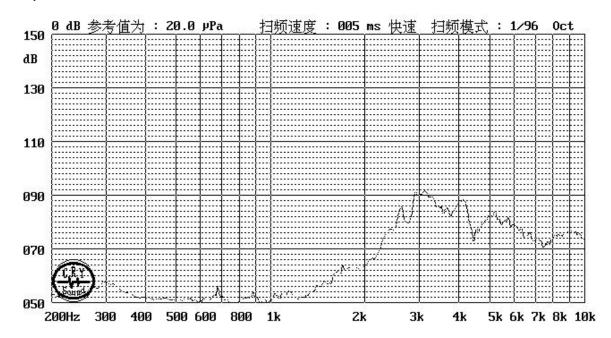


Unit:mm

### D. RECOMMEND DIRVING CIRCUIT



#### **E.FREQUENCY CURVE**



## F. MECHANICAL CHARACTERISTICS

NO	Item	Test Condition	Evaluation standard
1	Solderability	Stripped wires of lead wires are immersed in rosin for 5 seconds and then immersed in solder bath of 270±5℃ for 3±0.5 seconds.	90%min stripped wires shall be wet with solder.(except the edge of terminal)
2	Soldering Heat Resistance	Stripped wires are immersed up to 1.5mm from insulation in solder bath of 300±5 $^{\circ}$ C for ±0.5 seconds or 260±5 $^{\circ}$ C for 10±1 seconds.	No interference in operation
3	Terminal Strength Pulling	The force 10±1 seconds of 9.8N is applied to each terminal in axial direction	No damage and cutting off
4	Vibration	Buzzer shall be measured after being applied vibration of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours.	frequency and current consumption should be
5	Drop test	Dropped naturally from 80cm height onto the surface of 40mm thick wooden board of 3 directions for 1times.	in±10%compared with initial ones. The SPL should be in ±10dB compared with initial one.

### **G. ENVIRONMENT TEST**

NO	Item	Item Test Condition		
1	High temp. test	After being placed in a chamber at85℃ for 96 hours		
2	Low temp. test	After being placed in a chamber at -30 ℃ for 96 hours		
3	Humidity test	After being placed in a chamber at 40 $^{\circ}\mathrm{C}$ and 85±5% relative humidity for 96hours	Being placed for 4 hours at 25℃,buzzer shall be	
4	Temp. cycle test	The part shall be subjected to 5 cycles. One cycle shall be consist of:  85°C  25°C  25°C  25°C  3hours	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.	

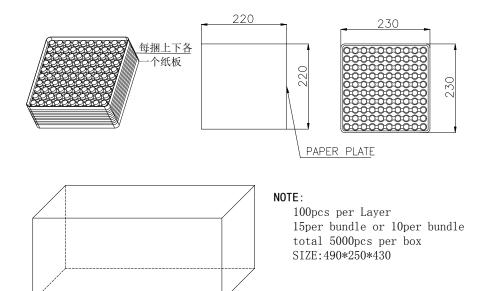
### H. RELIABILTY TEST

NO	Item	Test condition	Evaluation standard	
1	Operating life test	<ol> <li>Continuous life test         96 hours continuous operation at 60°C with         maximum rated voltage applied.</li> <li>Intermittent life test         A duty cycle of 1 minute on, 5mintes off, a minimum         of 1000 times at room temp.( 25±2°C) and maximum         rated voltage applied</li> </ol>	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.	

#### **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

#### I. PACKING STANDARD



#### J. 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.

#### K. 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.

## L. REVISION

		REMARK	VERSION
Aug.18,2019	Version upgrade	TDA-15240H	V2.0
	Aug.18,2019	Aug.18,2019 Version upgrade	Aug.18,2019 Version upgrade TDA-15240H