

# **SPECIFICATION**

				V	Version No.: <u>V2.</u>
常州	昊 翔	电子	有	限 公	司
Changzhou	ı HaoXid	ang Ele	ectronic	Co.,	LTD
客户名	名 称				
CUSTOME	R NAMER	: Pan	asonic	Group	
产品名	<b>分</b> 称				
COMMOD	TY:	PI	EZO BUZ	ZZER	<u> </u>
产品型	以 号				
MODEL NO	o :	<u> </u>	DA-27	3-L83	
客户料	4号				
PART NO					
				Jr.	
审核	秦皓		主办	唐俐	雅 Aug.7,2019

	客	户	承	认	栏	
承	认				拒	收

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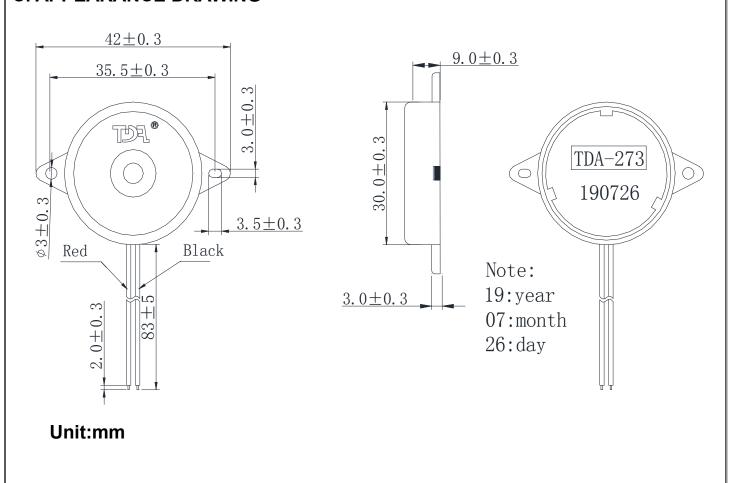
### A. SCOPE

This specification applies piezo buzzer, TDA-273-L83

## **B. SPECIFICATION**

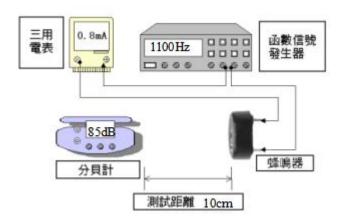
No.	Item	Unit	Specification	Condition
1	Oscillation Fraguency	Hz	1100±500	eguaro wayo
<u>'</u>	Oscillation Frequency	ΠΖ	3500±500	square wave
2	Operating Voltage	Vp-p	45 max	
3	Current Consumption	mA	MAX. 5	at 9Vp-p
4	Sound Pressure Level	dB	MIN. 85	at 10cm 9Vp-p 1100Hz
5	Operating Temperature	$^{\circ}$	-20 ~ +60	
6	Storage Temperature	$^{\circ}\!\mathbb{C}$	-20 ~ +65	
7	Dimension	mm	42.0xH9.0	See appearance drawing
8	Weight (MAX)	gram	4.5	
9	Housing Material		ABS	
10	Leading Wire		UL1571 AWG30#	See appearance drawing
11	Environmental Protection Regulation		RoHS	

### C. APPEARANCE DRAWING

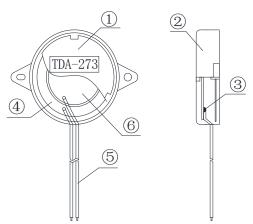


Material list						
No.	Part name	QTY	Material	Dim		
1	Outer casing	1	ABS	φ30*H9mm		
2	Cover plate	1	ABS	φ28.3*2.5mm		
3	Diaphragm	1	Cu-plate	φ27mm		
Lead	wire					
No.	SPEC	QTY	COLOR	LENGTH		
1	UL1571	1	RED	83±5mm		
2	UL1571	1	BLACK	83±5mm		

## D. RECOMMEND DIRVING CIRCUIT



## **E.BILL FOR MATERIAL**



NO.	Item Name	Material	Source
1	Molded case	ABS	ChenXiang
2	Molded case	ABS	ChenXiang
3	Solder wire	Sn	JinJian
4	Piezo elements	Brass Plate	ZhenHuaHongYun
5	Lead wire	UL1571	HaiYanTengFei
6	Piezo elements	Piezo Ceramics	ZhenHuaHongYun

### 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 $300\pm5$ °C for $5\pm0.5$ seconds or $260\pm5$ °C for $10\pm1$ 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 75cm 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**

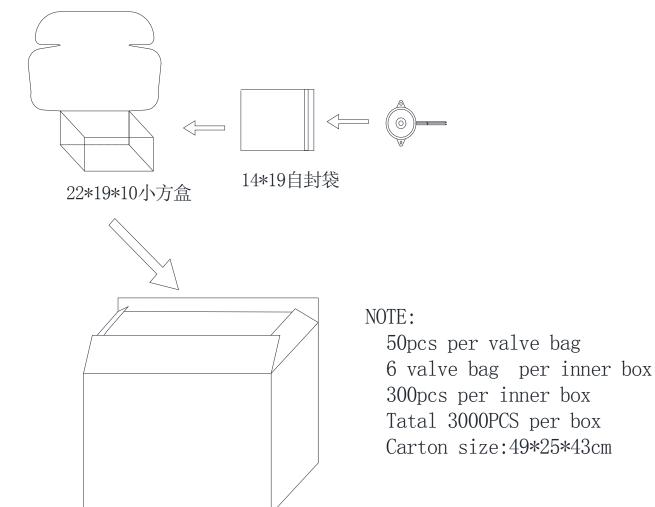
NO	Item	Test Condition	Evaluation standard	
1	High temp. test	After being placed in a chamber at+65°C for 96 hours		
2	Low temp. test	After being placed in a chamber at -20 ℃ for 96 hours		
3	Llumidity to at	After being placed in a chamber at 40°C and 85±5%	Being placed for 4 hours	
) 	Humidity test	relative humidity for 96hours	at 25℃,buzzer shall be	
		The part shall be subjected to 5 cycles. One cycle shall be	measured. The value of	
		consist of:	oscillation frequency	
		60℃		
			consumption should be	
			in ±10% compared with	
4	Temp. cycle test	<u>25℃</u>	initial one. The SPL	
			should be in ±10dB	
		- <u>20℃</u>	compared with initial	
		0.5 0.5H 0.25 0.5H 0.5H 0.5H 0.25	one.	
		₹ 3hours		

## 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.

**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

No.	DATE	DESCRIPTION	REMARK	VERSION
1	Jan.23,2019	Initial condition	TDA-273-L83	V2.0
2	Jul.26,2019	Add product bill of material and product packing standard	TDA-273-L83	V2.1
3	Aug.7,201	Change the appearance size tolerance of the product from 0.5mm to 0.3mm	TDA-273-L83	V2.2

