



请承认书

Version No.: V2.0

常州昊翔电子有限公司
Changzhou HaoXiang Electronic Co., LTD

客户名称

CUSTOMER NAMER : _____

产品名称

COMMODITY : PIEZO BUZZER

产品型号

MODEL NO : TDA-23220PB

客户料号

PART NO : _____

审核	秦皓	主办	唐俐雅 Aug.21,2018
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客户承认栏			
承认		拒收	

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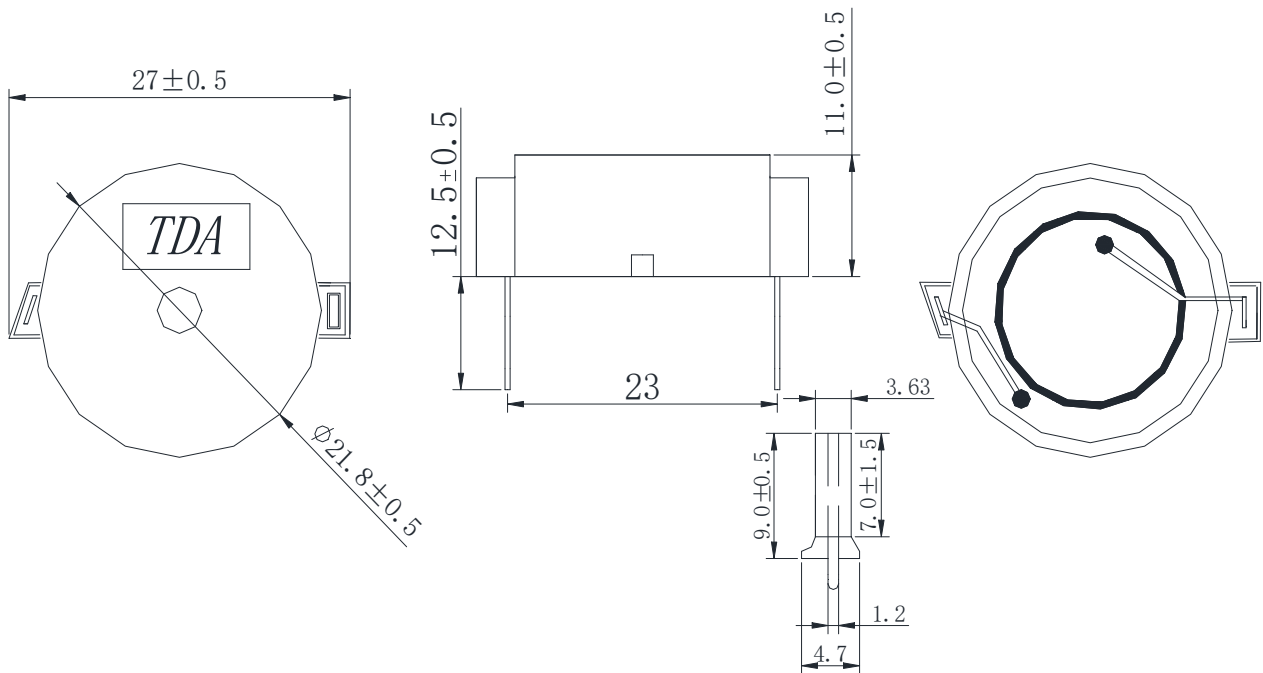
A. SCOPE

This specification applies piezo buzzer, **TDA-23220PB**

B. SPECIFICATION

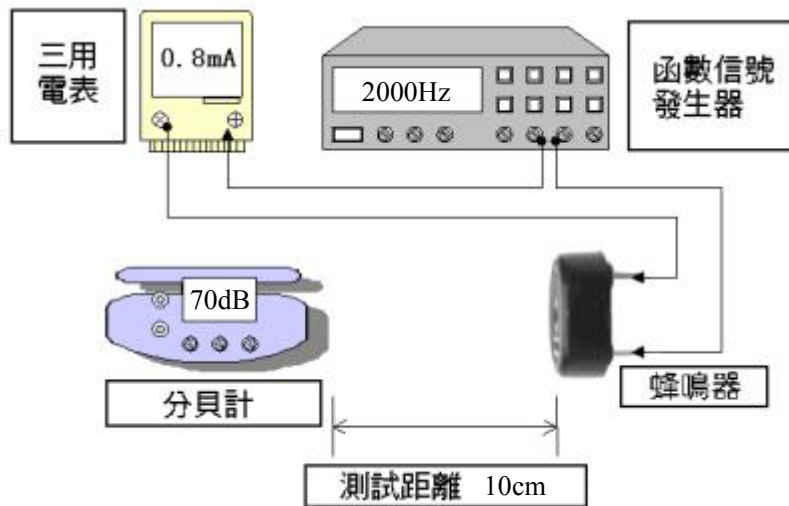
No.	Item	Unit	Specification	Condition
1	Oscillation Frequency	Hz	2000	square wave
2	Operating Voltage	Vp-p	30 max	
3	Current Consumption	mA	MAX. 2	at 5Vp-p
4	Sound Pressure Level	dB	MIN. 70	at 10cm 5Vp-p 2000Hz
5	Operating Temperature	°C	-30 ~ +85	
6	Storage Temperature	°C	-30 ~ +85	
7	Dimension	mm	Ø23xH11.0	See appearance drawing
8	Weight (MAX)	gram	3.2	
9	Housing Material		PPO(Black)	
10	Leading Pin		Tin Plated Brass(Sn)	See appearance drawing
11	Environmental Protection Regulation		RoHS	

C. APPEARANCE DRAWING

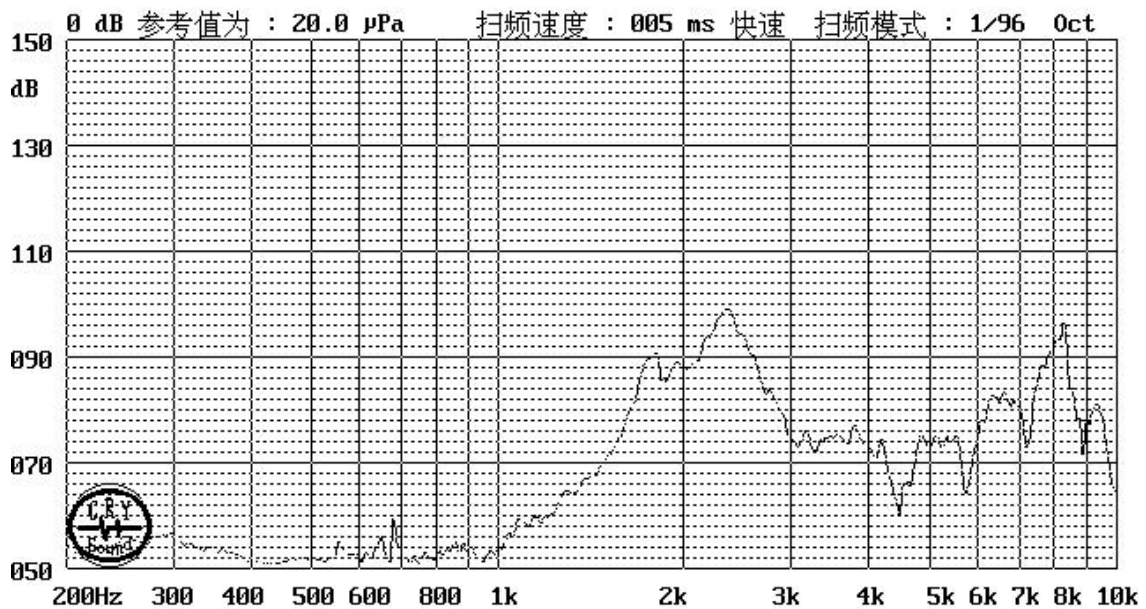


Unit:mm Tolerance : ± 0.5 mm

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 $270\pm 5^{\circ}\text{C}$ 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 $300\pm 5^{\circ}\text{C}$ for ± 0.5 seconds or $260\pm 5^{\circ}\text{C}$ 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.	The value of oscillation frequency and current consumption should be in $\pm 10\%$ compared with initial ones.
5	Drop test	Dropped naturally from 75cm height onto the surface of 40mm thick wooden board of 3 directions for 1times.	The SPL should be in $\pm 10\text{dB}$ compared with initial one.

G. ENVIRONMENT TEST

NO	Item	Test Condition	Evaluation standard
1	High temp. test	After being placed in a chamber at 85°C for 96 hours	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.
2	Low temp. test	After being placed in a chamber at -30°C for 96 hours	
3	Humidity test	After being placed in a chamber at +85°C and 85±5% relative humidity for 96 hours	
4	Temp. cycle test	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of:</p> <p>The diagram illustrates a temperature cycle test profile. It starts at -30°C for 0.5 hours, then ramps up to 25°C over 0.5 hours, stays at 25°C for 0.25 hours, ramps up to 85°C over 0.5 hours, stays at 85°C for 0.5 hours, ramps down to 25°C over 0.5 hours, stays at 25°C for 0.25 hours, and finally ramps down to -30°C over 0.5 hours. The total duration of one cycle is 3 hours.</p>	

H. RELIABILITY TEST

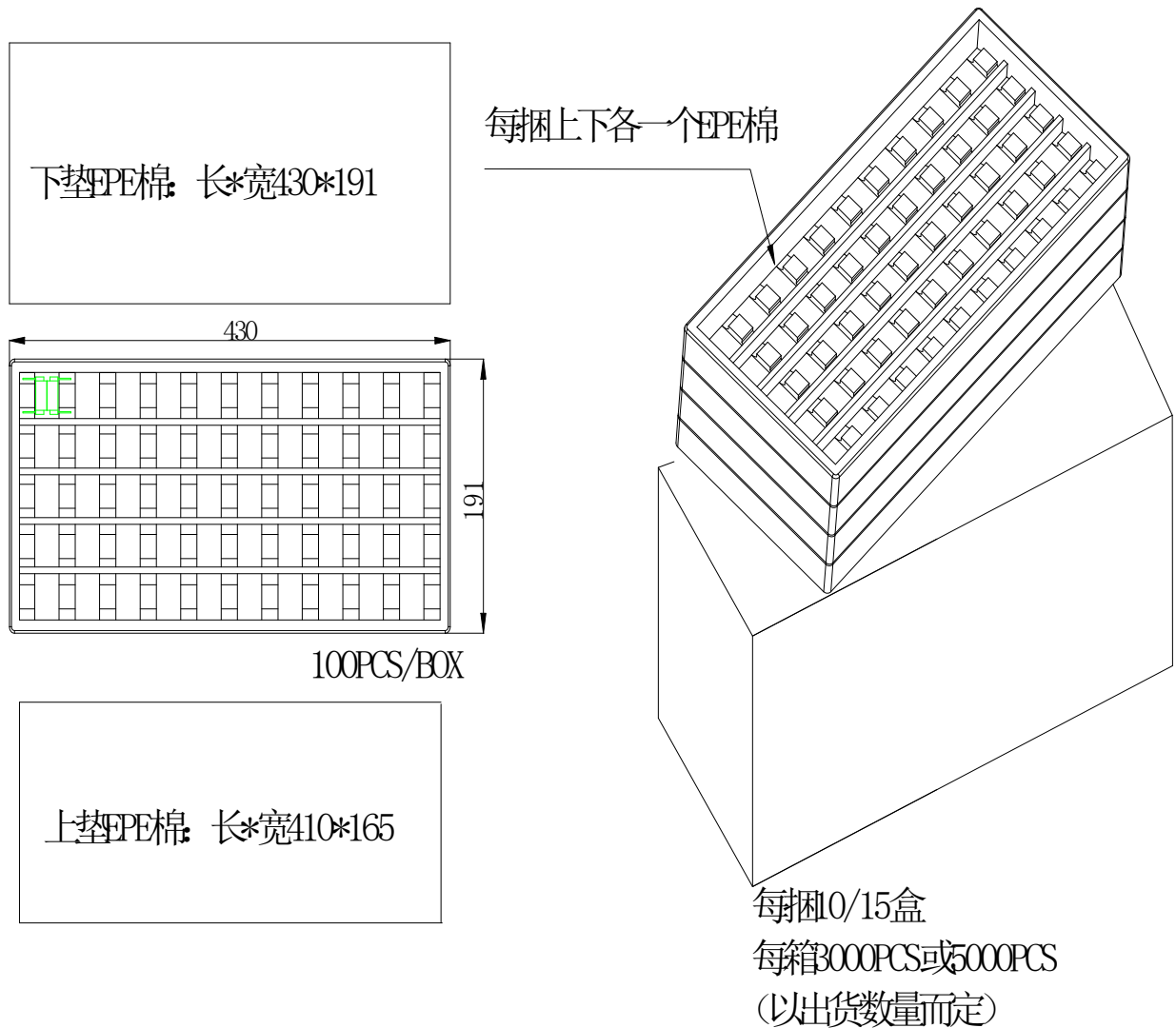
NO	Item	Test condition	Evaluation standard
1	Operating life test	<ol style="list-style-type: none"> Continuous life test 96 hours continuous operation at 60°C with maximum rated voltage applied. Intermittent life test A duty cycle of 1 minute on, 5 minutes off, a minimum of 1000 times at room temp. (25±2°C) and maximum rated voltage applied 	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 ~ +35°C b) Humidity : 45-85% c) Pressure : 860-1060mbar

Judgment Test Condition: a) Temperature : +25±2°C b) Humidity : 60-70% c) Pressure : 860-1060mbar

I. PACKING STANDARD



J. NOTE CAUTIONS

- 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.
- Can not be imposed over pronunciation body or pronunciation components allows the use of voltage range of the voltage on the.
- Please pay attention in welding process, don't let soldering flux invasion into the sound chamber , otherwise flux can cause defect conduction.
- 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.

