



APPROVAL SHEET
FOR
PIEZO BUZZER

深圳市銳創達電子有限公司

TAT ELECTRONICS CO., LTD.

CUSTOMER:

MODEL NUMBER: BPC2310-1235

OUR PART NO.:

CUSTOMER PART NO.:

CUSTOMER	APPROVED	CHECKED

Add: Rm 1610, Pengji Wisdom Center, Bagua 1st Rd, Futian Dist,
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Specification for Piezoelectric Ceramic Buzzer With built-in oscillating circuit (Pin Type)		Des.	Page 2 of 4
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Model No.: BPC2310-1235	Part No.	Chk.	Apr.
		Jiang Yin	

1、 Technical Parameter

Measuring condition

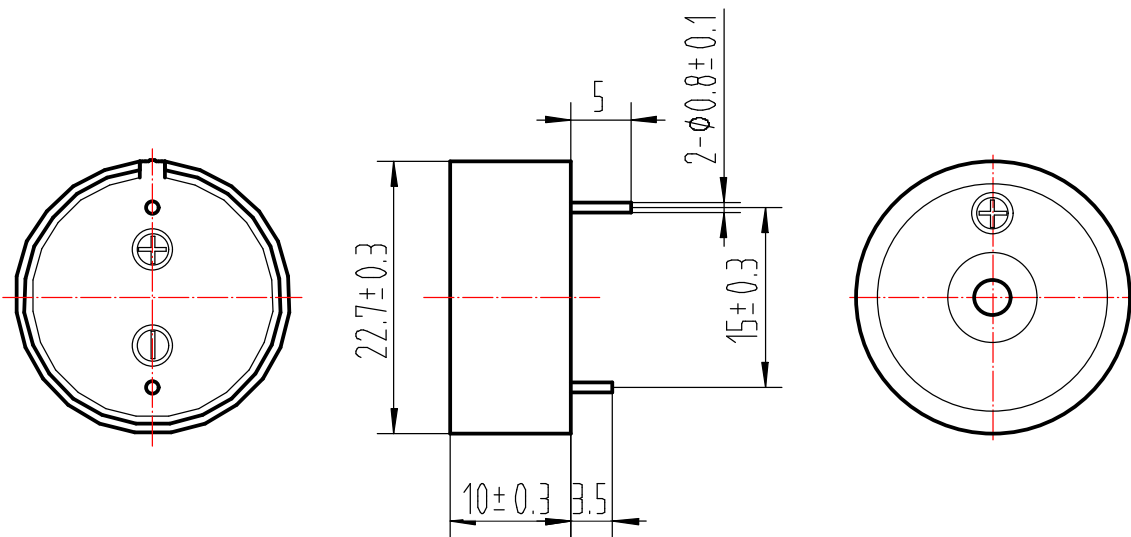
Part shall be measured under a condition (Temperature: 5 ~ 35°C, Humidity: 45% ~ 85%R.H., Atmospheric pressure: 860 ~ 1060hPa) unless the standard condition (Temperature: 25±3°C, Humidity: 60±10%R.H. Atmospheric pressure: 860 ~ 1060hPa) is regulated to measure.

1	Rated Voltage	12 VDC
2	Operating Voltage	6 – 15VDC
3	Rated Current	Max.15mA, at 12VDC
4	Sound Output at 10cm	Min.90dB, at 12VDC
5	Resonant Frequency	3500 ± 500 Hz
6	Tone	Continuous
7	Operating Temperature	-20 - +70°C
8	Storage Temperature	-30 - +80°C
9	RoHS	Yes
10	Weight	Approx 3g

2、 Dimensions

Unit: mm

Tolerance: ±0.5mm Except Specified



*Housing Material: Black PBT



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3、Reliability Test

After any following tests the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall not deviate more than -10 dB from the initial value

3.1 Ordinary Temperature Life Test

The part shall be subjected to 96 hours at $25 \pm 10^\circ\text{C}$. Input rated voltage Resonant frequency, 1/2 duty Square wave.

3.2 High Temperature Test

The part shall be capable of with standing a storage temperature of $+80^\circ\text{C}$ for 96 hours.

3.3 Low Temperature Test

The part shall be capable of with standing a storage temperature of -30°C for 96 hours.

3.4 Humidity Test

Temperature: $+40^\circ\text{C} \pm 3^\circ\text{C}$ Relative Humidity: 90%~95% Duration: 48 hours and expose to room temperature for 6 hours

3.5 Temperature Shock Test

Temperature: 70°C /1hour \rightarrow 25°C /3hours \rightarrow -30°C /1hour \rightarrow 25°C /3hours (1cycle)
Total cycle: 10 cycles

3.6 Drop Test

Standard Packaging From 120mm (Drop on hard wood or board of 5cm thick, three sides, six plain.)

3.7 Vibration Test

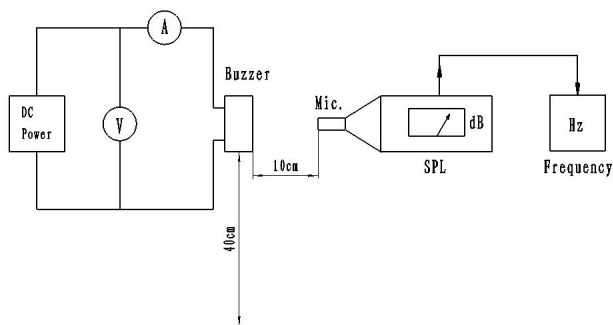
Vibration: 1000cycles /min. Amplitude: 1.5mm, Duration: 1 hour in each 3 axes

Note:

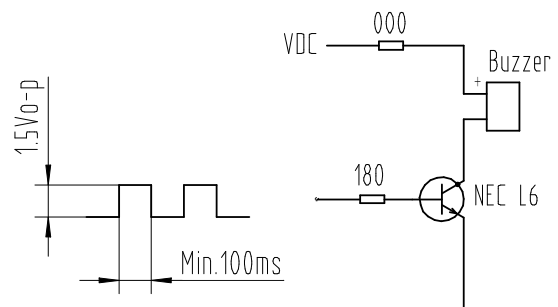
As this product is not protected from foreign material entering, please make sure that any foreign materials (e.g. magnetic powder, washing solvent, flux, corrosive gas) do not enter this product in your production processes. The functional degradation (e.g. SPL down) may occur if foreign material enter it.

4、Electrical And Acoustical Measuring Condition

a) Recommended Setting



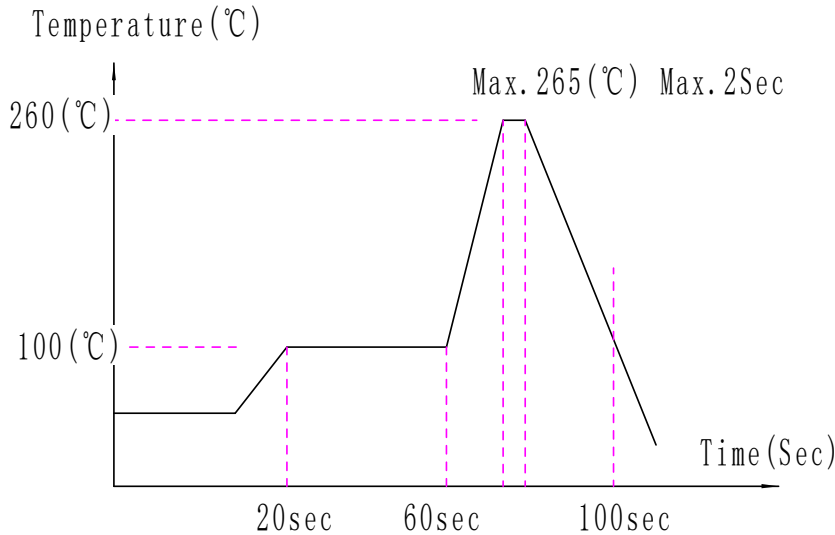
b) Recommended Test Circuit





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5. Recommended the wave soldering temperature



6. Reliability Test

After any following tests the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall not deviate more than -5 dB from the initial value

6.1 Ordinary Temperature Life Test

The part shall be subjected to 96 hours at $25 \pm 10^\circ\text{C}$. Input rated voltage Resonant frequency, 1/2 duty Square wave.

6.2 High Temperature Test

The part shall be capable of with standing a storage temperature of $+80^\circ\text{C}$ for 96 hours.

6.3 Low Temperature Test

The part shall be capable of with standing a storage temperature of -30°C for 96 hours.

6.4 Humidity Test

Temperature: $+40^\circ\text{C} \pm 3^\circ\text{C}$ Relative Humidity: 90%~95% Duration: 48 hours and expose to room temperature for 6 hours

6.5 Temperature Shock Test

Temperature: 60°C /1hour \rightarrow 25°C /3hours \rightarrow -20°C /1hour \rightarrow 25°C /3hours (1cycle)
Total cycle: 10 cycles

6.6 Drop Test

Standard Packaging From 1.2m (Drop on hard wood or board of 5cm thick, three sides, six plain.)

6.7 Vibration Test

Vibration: 1000cycles /min. Amplitude: 1.5mm, Duration: 1 hour in each 3 axes

Note:

As this product is not protected from foreign material entering, please make sure that any foreign materials (e.g. magnetic powder, washing solvent, flux, corrosive gas) do not enter this product in your production processes. The functional degradation (e.g. SPL down) may occur if foreign material enter it.