

PART NUMBER: CPE-223

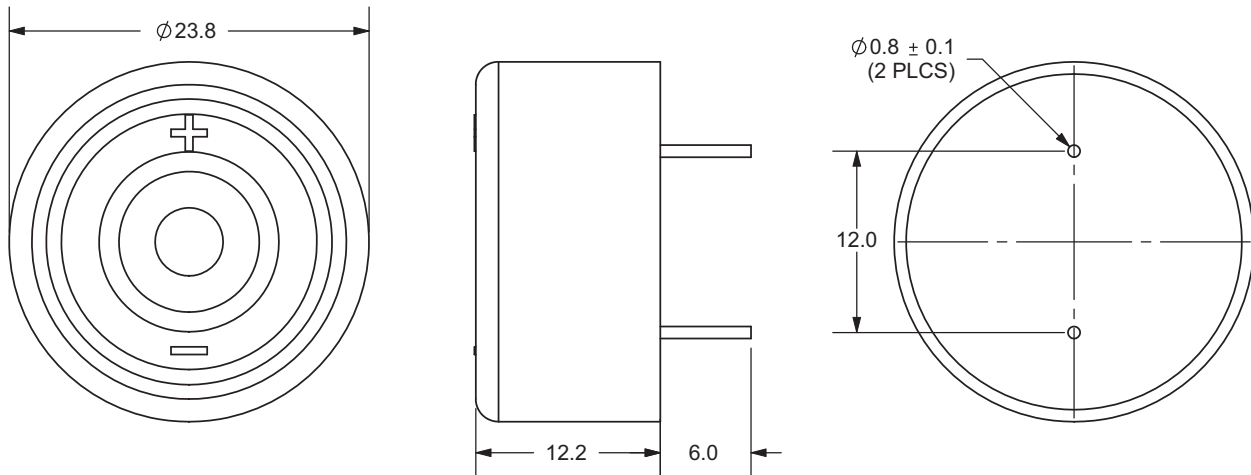
DESCRIPTION: piezo audio indicators

SPECIFICATONS

| | | |
|-------------------------|-----------------------|------------------|
| resonant frequency | 3.3 ± 0.5 KHz | |
| operating voltage range | 3 ~ 20 V DC | |
| current consumption | 13 mA max. | at 12 V DC |
| sound pressure level | 81 db min. | at 30 cm/12 V DC |
| rated voltage | 12 V DC | |
| tone | continuous | |
| operating temperature | -20 ~ +85° C | |
| storage temperature | -30 ~ +95° C | |
| dimensions | Ø23.8 x H12.2 mm | |
| weight | 3.5 g max. | |
| material | PBT+15% glass (black) | |
| terminal | pin type (Sn plating) | |
| RoHS | yes | |

APPEARANCE DRAWING

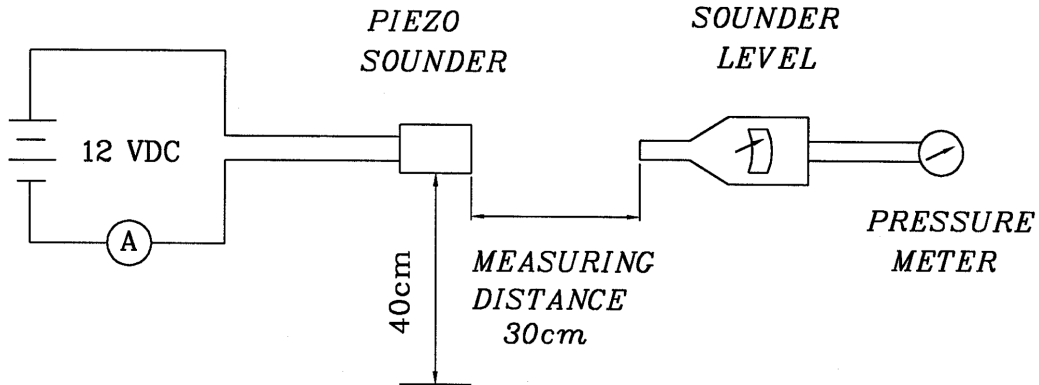
tolerance: ±0.5
units: mm



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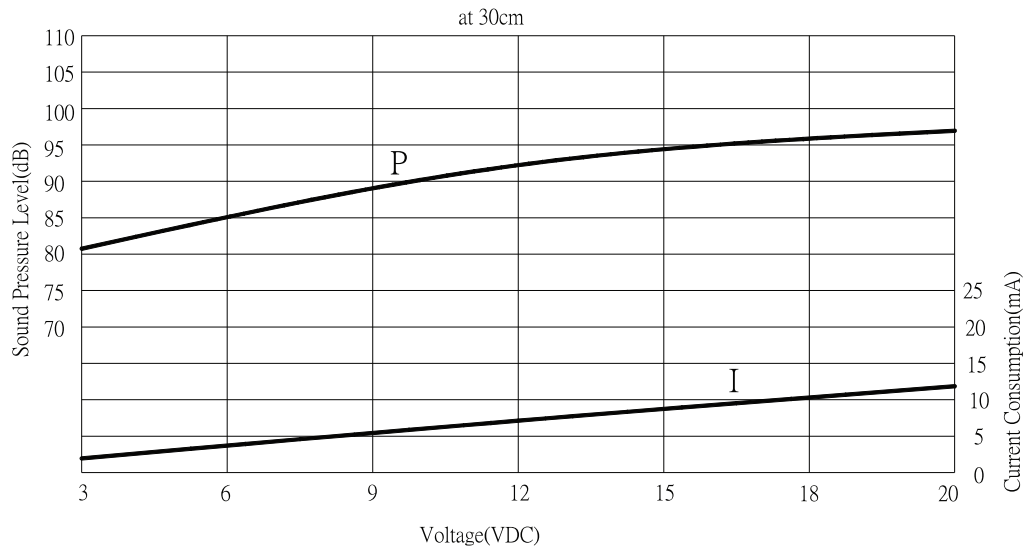
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MEASUREMENT METHOD



S.P.L. Measuring Circuit
Mic: RION S.P.L. meter UC30 or equivalent

CURRENT CONSUMPTION/SOUND PRESSURE LEVEL





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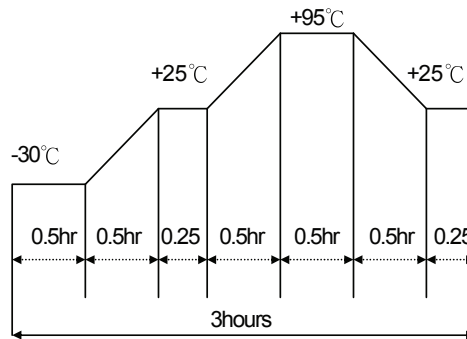
MECHANICAL CHARACTERISTICS

| item | test condition | evaluation standard |
|----------------------------|---|--|
| solderability ¹ | Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of 270 ±5°C for 3 ±1 seconds. | 90% min. of the lead terminals will be wet with solder (except the edge of the terminal). |
| soldering heat resistance | Lead terminals are immersed up to 1.5mm from buzzer's body in solder bath of 300 ±5°C for 3 ±0.5 seconds or 260 ±5°C for 10 ±1 seconds. | No interference in operation. |
| terminal strength pulling | For 10 seconds, the force of 300g is applied to each terminal in axial direction. | No damage or cutting off. |
| vibration | The buzzer shall be measured after applying a vibration amplitude of 1.5 mm with 10 to 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours. | The value of oscillation frequency/current consumption should be ±10% of the initial measurements. The SPL should be within ±10dB compared with the initial measurement. |
| drop test | The part will be dropped from a height of 75 cm onto a 40 mm thick wooden board 3 times in 3 axes (X, Y, Z) for a total of 9 drops. | |

Notes: 1. Not recommended for wave soldering

ENVIRONMENT TEST

| item | test condition | evaluation standard |
|------------------|---|---|
| high temp. test | After being placed in a chamber at +95°C for 240 hours. | The buzzer will be measured after being placed at +25°C for 4 hours. The value of the oscillation frequency/current consumption should be ±10% compared to the initial measurements. The SPL should be within ±10dB compared to the initial measurements. |
| low temp. test | After being placed in a chamber at -30°C for 240 hours. | |
| humidity test | After being placed in a chamber at +40°C and 90±5% relative humidity for 240 hours. | |
| temp. cycle test | The part shall be subjected to 5 cycles. One cycle will consist of: | |





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RELIABILITY TEST

| item | test condition | evaluation standard |
|-----------------------|---|---|
| operating (life test) | 1. Continuous life test: The part will be subjected to 48 hours of continuous operation at +70°C with rated voltage applied. 2. Intermittent life test: A duty cycle of 1 minute on, 1 minutes off, a minimum of 5,000 times at room temp (+25 ±2°C) with rated voltage applied. | The buzzer will be measured after being placed at +25°C for 4 hours. The value of the oscillation frequency/current consumption should be ±10% compared to the initial measurements. The SPL should be within ±10dB compared to the initial measurements. |

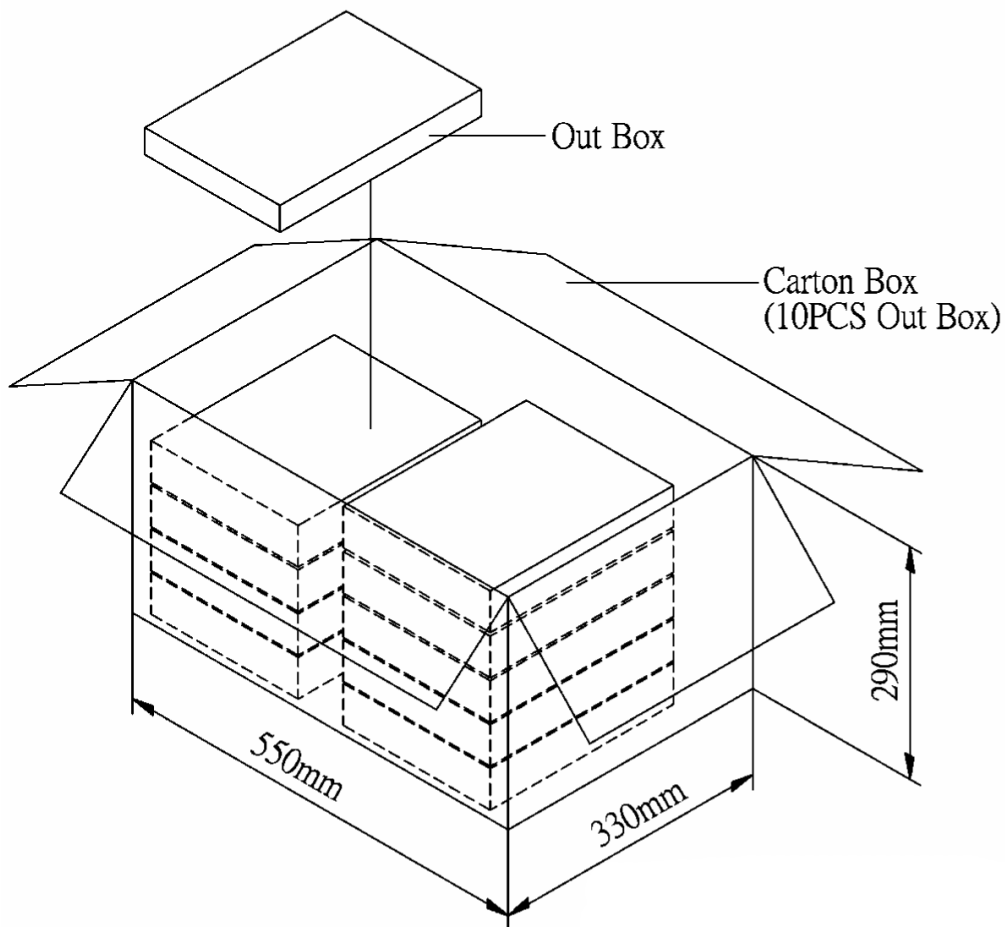
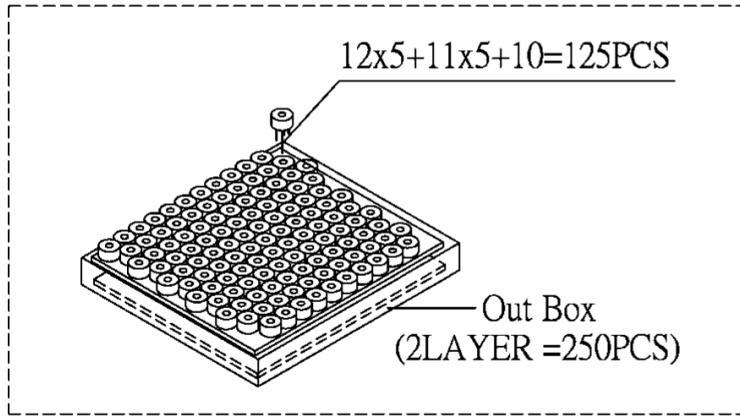
TEST CONDITIONS

| | | | |
|--------------------------|----------------------------|-----------------------|----------------------------|
| standard test condition | a) temperature: +5 ~ +35°C | b) humidity: 45 - 85% | c) pressure: 860-1060 mbar |
| judgement test condition | a) temperature: +25 ±2°C | b) humidity: 60 - 70% | c) pressure: 860-1060 mbar |

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PACKAGING



| | | |
|------------|-------------------|--------------------|
| Out Box | 310mmx248mmx49mm | 2x125PCS=250PCS |
| Carton Box | 550mmx330mmx290mm | 250PCSx10=2,500PCS |

AMEYA360

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