

**PART NUMBER:** CPE-750

**DESCRIPTION:** panel mount piezo indicators

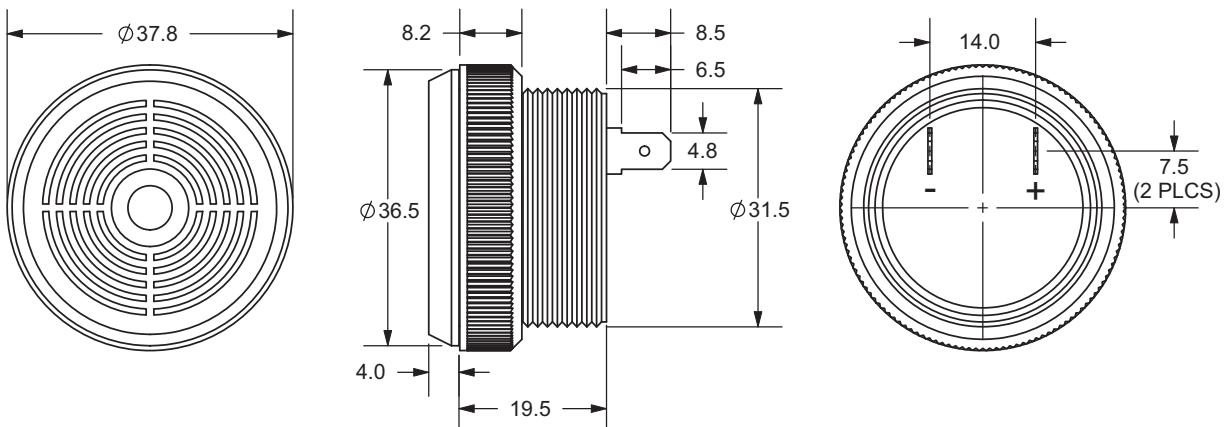
## SPECIFICATONS

|                         |                           |                  |
|-------------------------|---------------------------|------------------|
| operating frequency     | 3.6 ± 0.5 KHz             |                  |
| operating voltage range | 4 ~ 28 V DC               |                  |
| current consumption     | 8 mA max.                 | at 12 V DC       |
| sound pressure level    | 80 db min.                | at 30 cm/12 V DC |
| rated voltage           | 12 V DC                   |                  |
| tone                    | continuous                | at 12 V DC       |
| operating temperature   | -30 ~ +85° C              |                  |
| storage temperature     | -40 ~ +95° C              |                  |
| dimensions              | Ø37.8 x H23.5 mm          |                  |
| weight                  | 18.5 g max.               |                  |
| material                | ABS UL-94 1/16" HB (gray) |                  |
| terminal                | pin type (Au plating)     |                  |
| RoHS                    | yes                       |                  |

## APPEARANCE DRAWING

tolerance: ±0.5

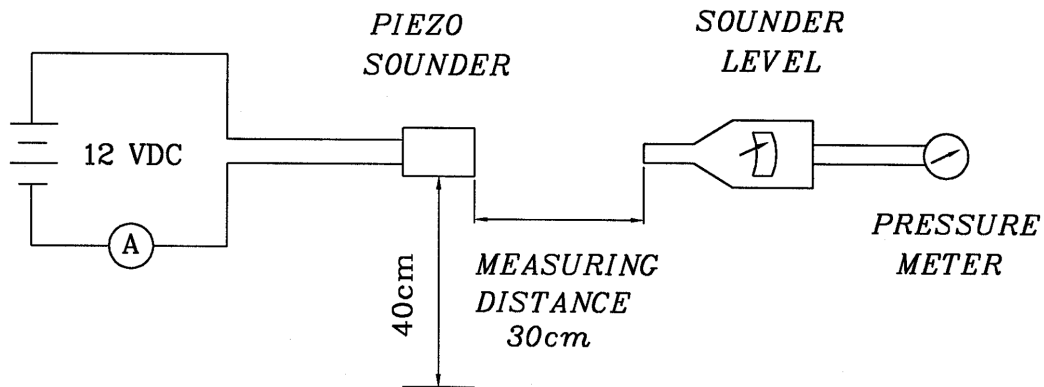
units: mm



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## MEASUREMENT METHOD

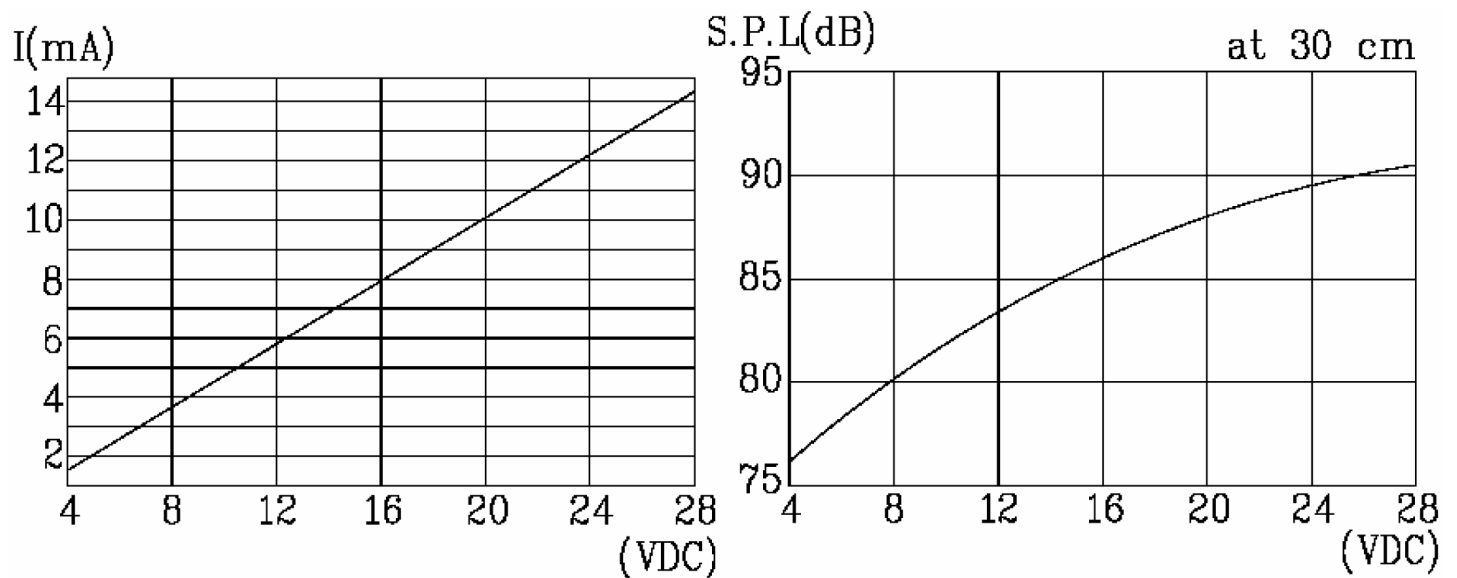


S.P.L. Measuring Circuit

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

S.G.: Hewlett Packard 33120A function generator or equivalent

## CURRENT CONSUMPTION/SOUND PRESSURE LEVEL



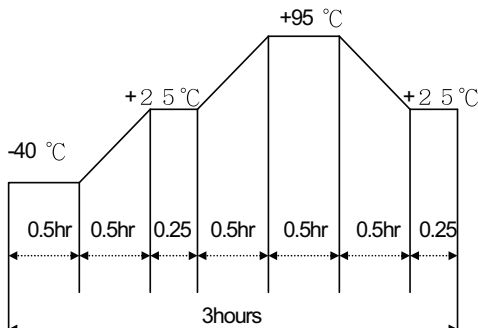
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## MECHANICAL CHARACTERISTICS

| item                         | test condition                                                                                                                                                                          | evaluation standard                                                                                                                                                                        |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| solderability                | Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $270 \pm 5^{\circ}\text{C}$ for $3 \pm 1$ 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 $300 \pm 5^{\circ}\text{C}$ for $3 \pm 0.5$ seconds or $260 \pm 5^{\circ}\text{C}$ for $10 \pm 1$ seconds. | No interference in operation.                                                                                                                                                              |
| terminal mechanical strength | For 10 seconds, the force of 9.8N (1.0kg) 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 $\pm 10\%$ of the initial measurements. The SPL should be within $\pm 10\text{dB}$ 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.                                                     |                                                                                                                                                                                            |

## ENVIRONMENT TEST

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

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| item                  | test condition                                                                                                                                                                                                                                                                                | evaluation standard                                                                                                                                                                                                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| operating (life test) | 1. Continuous life test:<br>The part will be subjected to 48 hours of continuous operation at +70°C with rated voltage applied.<br><br>2. Intermittent life test:<br>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

