

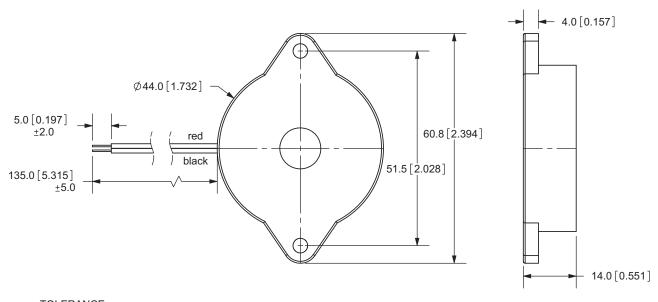
PART NUMBER: CPE-6080

DESCRIPTION: PIEZO AUDIO TRANSDUCER

SPECIFICATIONS

| parameter | conditions/description | min | nom | max | units |
|------------------------|--|--------|--------|--------|-------|
| operating voltage | | | | 50 | V р-р |
| current consumption | at 10 V p-p, square wave, 800 Hz | | | 10 | mA |
| sound pressure level | at 10 cm / 10 V p-p, square wave, 800 Hz | 80 | | | dB |
| electrostatic capacity | at 120 Hz, 1 V | 49,000 | 70,000 | 91,000 | pF |
| operating temperature | | -30 | | 80 | °C |
| storage temperature | | -40 | | 80 | °C |
| dimenstions | ø60.8 x H14.0 mm | | | | |
| weight | | | | 12 | g |
| material | PA-777D (black) | | | | |
| terminal | wire type | | | | |
| RoHS | yes | | | | |

APPEARANCE DRAWING



TOLERANCE: ±0.5mm UNLESS OTHERWISE SPECIFIED

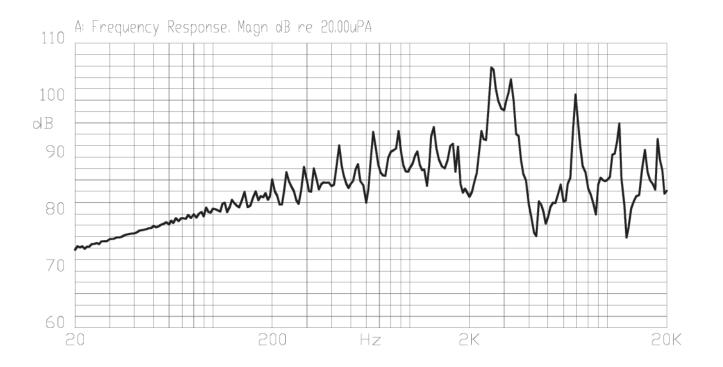


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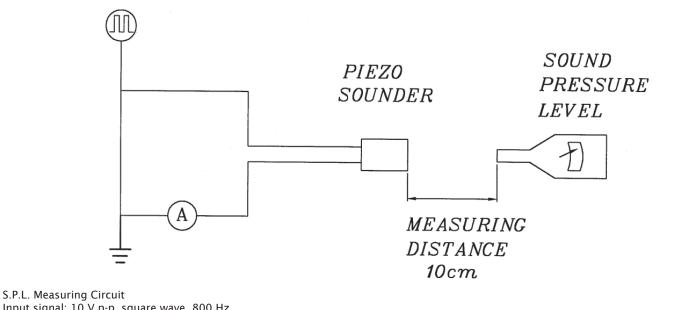
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FREQUENCY RESPONSE



MEASUREMENT METHOD



Input signal: 10 V p-p, square wave, 800 Hz Mic: RION S.P.L. meter UC30 or equivalent S.G.: Hewlett Packard 33120A function generator or equivalent



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MECHANICAL CHARACTERISTICS

| item | test condition | evaluation standard 90% min. of the lead terminals will be wet with solder. (except the edge of the terminal) | |
|-------------------------|--|---|--|
| solderability | Lead terminals are immersed in rosin for 5 seconds and then immersed in a solder bath of $+270 \pm 5^{\circ}$ C for 3 ± 0.5 seconds. | | |
| lead wire pull strength | The pull force will be applied to double lead wire: horizontal 3.0 N (0.306 kg) for 30 seconds vertical 2.0 N (0.204 kg) for 30 seconds | No damage or cutting off. | |
| vibration test | The buzzer should be measured after a vibration amplitude of 1.5 mm with 10 ~ 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 buzzer without packaging is subjected to 3 drops on each axis from the height of 75 cm onto a 40 mm thick wooden board. | | |

ENVIRONMENT TEST

| item | test condition | evaluation standard | |
|---|--|---|--|
| high temperature test | After being placed in a chamber at +80°C for 240 hours. | | |
| low temperature test | After being placed in a chamber at -40°C for 240 hours. |] | |
| humidity test | After being placed in a chamber at $+40^{\circ}$ C and 90 \pm 5% RH for 240 hours. | | |
| temperature cycle test The part will be subjected to 5 cycles. One cycle will consist of: $\begin{array}{r} +80^{\circ}\text{C} \\ +25^{\circ}\text{C} \\ \hline 0.5\text{hr} \\ 0.5\text$ | | After any tests, the buzzer will meet specifications without any damage in appearance except SPL. After 4 hours, SPL should be within ±10% of the initial measurements. | |

RELIABILITY TEST

| item | test condition | evaluation standard |
|-----------------------|--|---|
| operating (life test) | Continuous life test: The part will be subjected to 48 hours of continuous operation at 65°C with rated voltage applied. | After any tests, the buzzer will meet specifications without any damage in appearance except SPL. After |
| | 2. Intermittent life test: A duty cycle of 1 minute on, 1 minute off, a minimum of 5,000 times at room temp (+25 $\pm 2^{\circ}$ C) with rated voltage applied. | 4 hours, SPL should be within ±10% of the initial measurements. |

TEST CONDITIONS

| standard test conditions | a) Temperature: +5 ~ +35°C | b) Humidity: 45 ~ 85% | c) Pressure: 860 ~ 1060 mbar |
|---------------------------|----------------------------|-----------------------|------------------------------|
| judgement test conditions | a) Temperature: +25 ±2°C | b) Humidity: 60 ~ 70% | c) Pressure: 860 ~ 1060 mbar |



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PACKAGING

