



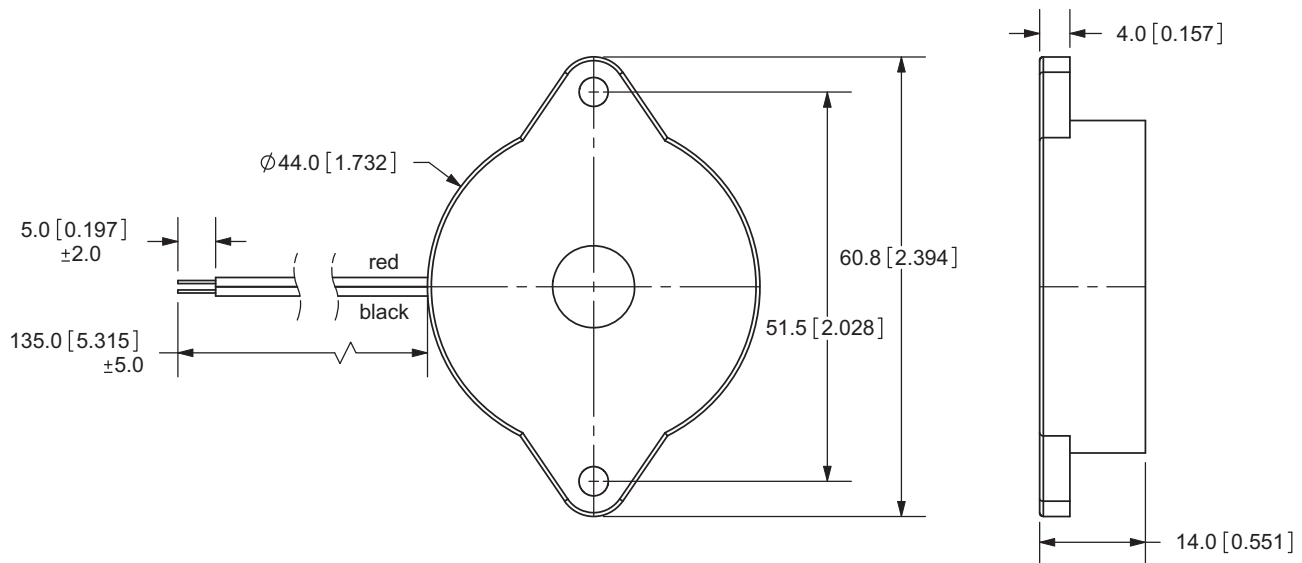
PART NUMBER: CPE-6080

DESCRIPTION: PIEZO AUDIO TRANSDUCER

SPECIFICATIONS

| parameter | conditions/description | min | nom | max | units |
|------------------------|--|--------|--------|--------|-------|
| operating voltage | | | | 50 | V p-p |
| 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

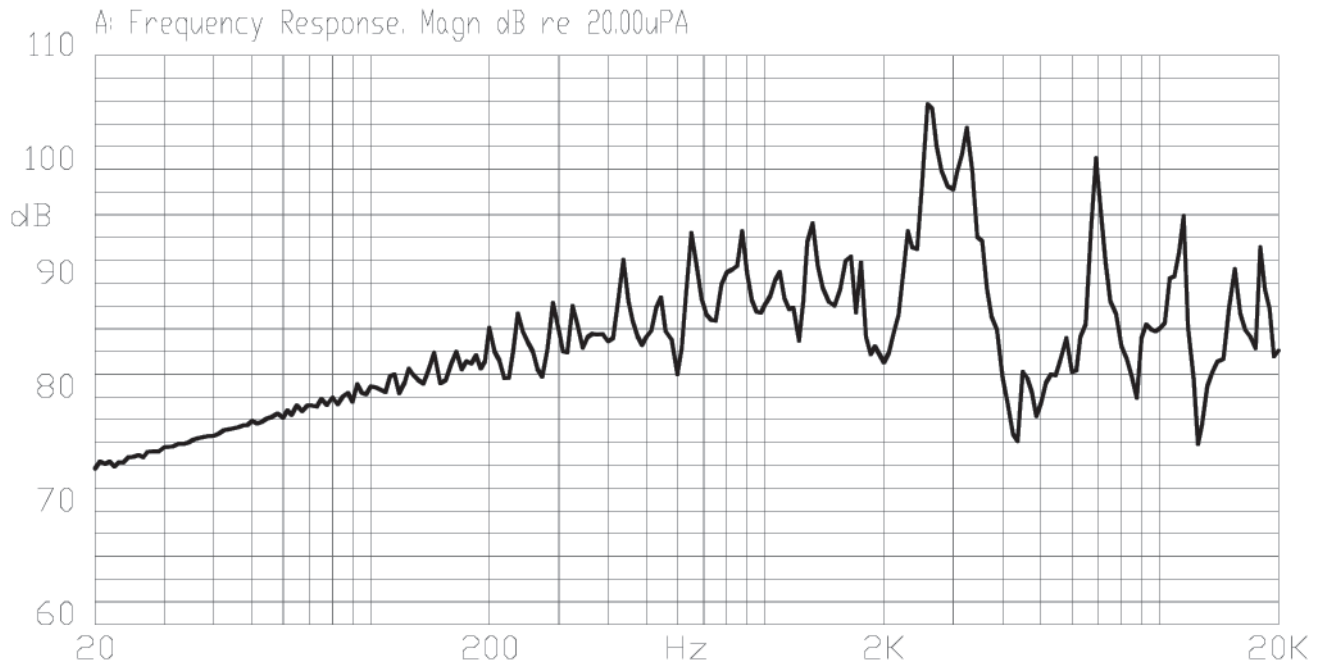


TOLERANCE:
±0.5mm UNLESS OTHERWISE
SPECIFIED

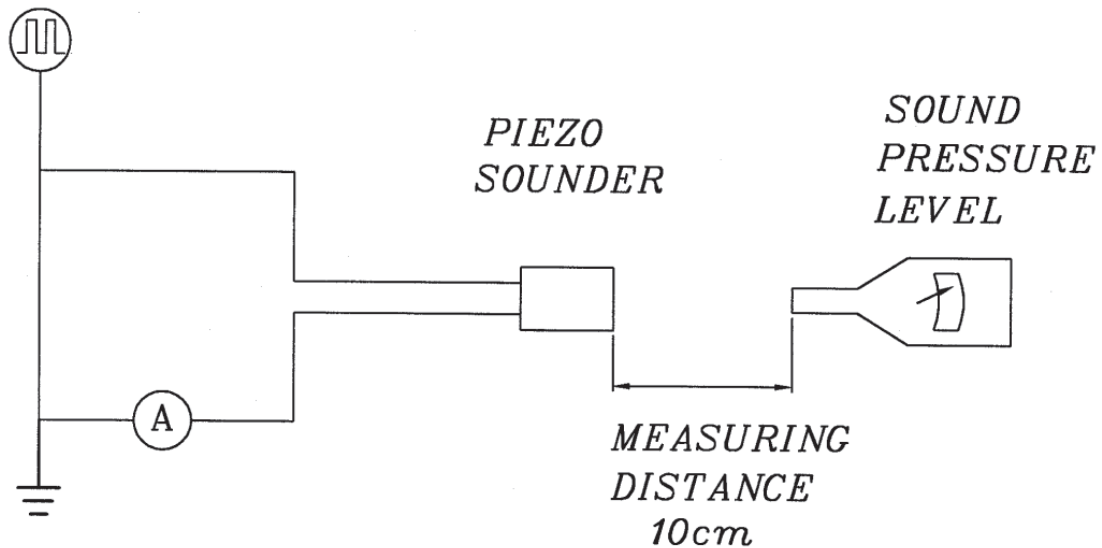
PART NUMBER: CPE-6080

DESCRIPTION: PIEZO AUDIO TRANSDUCER

FREQUENCY RESPONSE



MEASUREMENT METHOD



S.P.L. Measuring Circuit
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



PART NUMBER: CPE-6080

DESCRIPTION: PIEZO AUDIO TRANSDUCER

MECHANICAL CHARACTERISTICS

| item | test condition | evaluation standard |
|-------------------------|--|--|
| solderability | Lead terminals are immersed in rosin for 5 seconds and then immersed in a solder bath of $+270 \pm 5^\circ\text{C}$ for 3 ± 0.5 seconds. | 90% min. of the lead terminals will be wet with solder. (except the edge of the terminal) |
| 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 $\pm 10\%$ of the initial measurements. The SPL should be within $\pm 10\text{dB}$ 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 $+80^\circ\text{C}$ for 240 hours. | After any tests, the buzzer will meet specifications without any damage in appearance except SPL. After 4 hours, SPL should be within $\pm 10\%$ of the initial measurements. |
| low temperature test | After being placed in a chamber at -40°C for 240 hours. | |
| humidity test | After being placed in a chamber at $+40^\circ\text{C}$ and $90 \pm 5\%$ RH for 240 hours. | |
| temperature cycle test | The part will be subjected to 5 cycles. One cycle will consist of: | |

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

TEST CONDITIONS

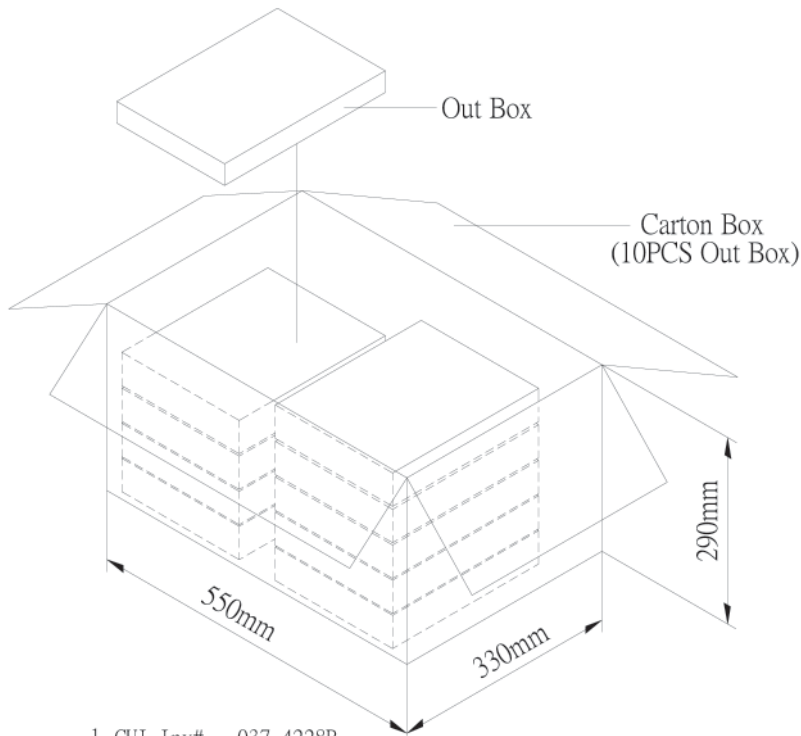
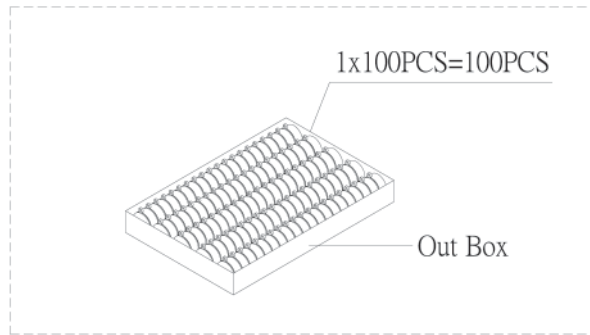
| | | | |
|---------------------------|---|-----------------------|------------------------------|
| standard test conditions | a) Temperature: $+5 \sim +35^\circ\text{C}$ | b) Humidity: 45 ~ 85% | c) Pressure: 860 ~ 1060 mbar |
| judgement test conditions | a) Temperature: $+25 \pm 2^\circ\text{C}$ | b) Humidity: 60 ~ 70% | c) Pressure: 860 ~ 1060 mbar |



PART NUMBER: CPE-6080

DESCRIPTION: PIEZO AUDIO TRANSDUCER

PACKAGING



1. CUI Inv#. 037-4228R
CUI Part#. CPE-6080

2. RoHS Compliant

| | | |
|------------|-------------------|--------------------|
| Out Box | 310mmx248mmx49mm | 1x100PCS=100PCS |
| Carton Box | 550mmx330mmx290mm | 100PCSx10=1,000PCS |