

SPECIFICATIONS

Model No.

UGCM0903EPD(5.0)

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1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

| | Item | Unit | Specifications |
|------|-----------------------------|--------------------|----------------|
| 1-1 | Rated Voltage (Square Wave) | V | 3.0 |
| 1-2 | Operating Voltage | V | 2-4 |
| 1-3 | * Rated Current (Max) | mA | 60 |
| 1-4 | * Min Sound Output at 10cm | dB | 85 |
| 1-5 | * Resonant Frequency | Hz | 2731 |
| 1-6 | Coil Resistance | Ω | 25 ± 3 |
| 1-7 | Operating Temperature | $^{\circ}\text{C}$ | -30~+70 |
| 1-8 | Storage Temperature | $^{\circ}\text{C}$ | -40~+85 |
| 1-9 | Weight | g | 1.0 |
| 1-10 | Housing Material | PBT | |
| 1-11 | Lead Pin Material | Red Copper (DSn) | |
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* Value Applying at Rated Voltage (resonant frequency, 1/2 duty, square wave)

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| | | 15.11.23 | ZhuYu | Shi Cong | Wang Xue Wen |
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2.ENVIRONMENTAL TEST

| | Item | Specifications |
|-----|-----------------------|--|
| 2-1 | Storage in High temp. | Storage in $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power. |
| 2-2 | Storage in Low temp. | Storage in $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power. |
| 2-3 | Storage in Humidity | Storage in $+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 90-95%RH test box for 96 hours, then expose to the room temperature for 2 hours without applying power. |
| 2-4 | Thermal cycle test. | <p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p> |
| 2-5 | Vibration test | <p>Amplitude: 1.5mm Time : 1min/axis</p> <p>Make this test for the directions of X,Y, Z for 2 hours each (total 6 hours).</p> |
| 2-6 | Drop test | Free drop a unit from the height 100cm to the surface of 10mm thick board ,three directions(X,Y,Z). |
| 2-7 | Solderability test | Soldering temp.: $260 \pm 5^{\circ}\text{C}$ Heat applying time: $3 \pm 0.5\text{sec}$. |

PASS CRITERION :

After these tests , the change of S.P.L shall be within $\pm 5\text{ dB}$.

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3.MEASURING METHOD(BUZZER MODE)

3-1 .Test Condition

3-1-1.STANDARD

Temperature : $25 \pm 3^{\circ}\text{C}$

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

3-1-2.JUDGEMENT

Temperature : $15 \sim 35^{\circ}\text{C}$

Relative humidity : 45% ~ 85%,

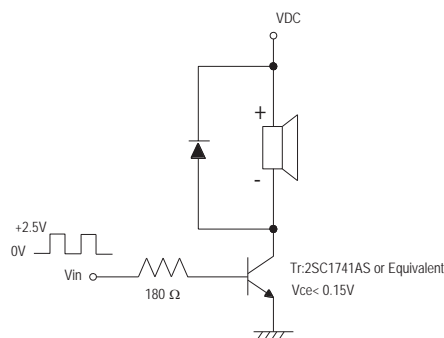
Atmospheric pressure : 860mbar to 1060mbar.

3-2 . Standard Test Fixture

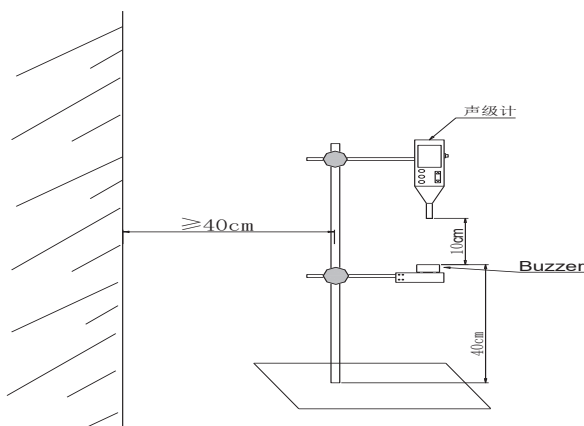
1.rated Voltage(Square wave):3V

2.Resonant Frequency:2731Hz

3.Standard Drive Circuit:



4. Standard test fixture:



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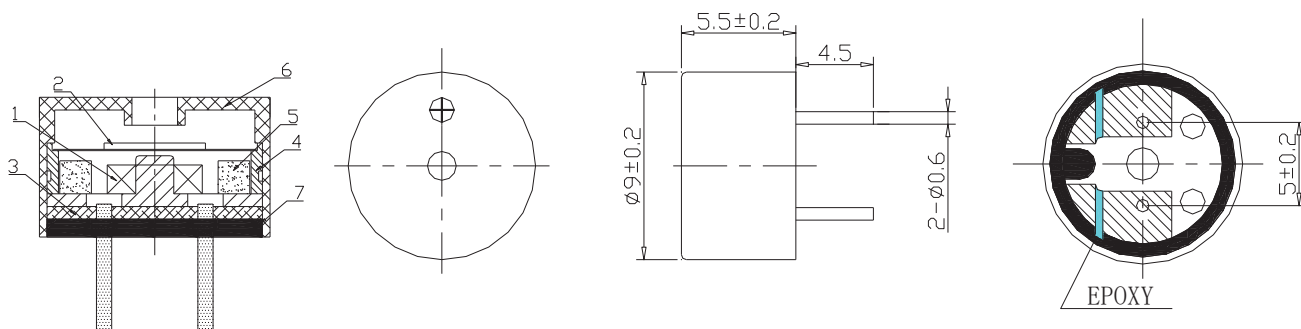
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5.DIMENSIONS

Unless otherwise specified, tolerance: ± 0.5 (unit:mm)



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|--------------------------------------|----------------------|
| Cadmium(Cd)/Cadmium Compounds | $\leq 100\text{ppm}$ |
| Lead (Pb) / Lead Compounds | $\leq 800\text{ppm}$ |
| Mercury (Hg) Mercury Compounds | $\leq 800\text{ppm}$ |
| Hexavalent-Chromium (Cr6+) Compounds | $\leq 800\text{ppm}$ |
| PBB | $\leq 800\text{ppm}$ |
| PBDE | $\leq 800\text{ppm}$ |

- 1) All parts must be meet to ROHS
- 2) Wave solder allowed and wash not allowed.

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|----------|------------|------|-----------------|--------|
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| 7 | Potting | | Expoy | |
| 6 | Housing | 1 | PBT | |
| 5 | Magent | 1 | Ferrite | |
| 4 | Brass ring | 1 | Copper | |
| 3 | PCB | 1 | | |
| 2 | Diaphragm | 1 | Iron | |
| 1 | Coil Part | 1 | Copper And Iron | |
| Part No. | Part Name | Q'TY | Material | Remark |

| | | | | | |
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