

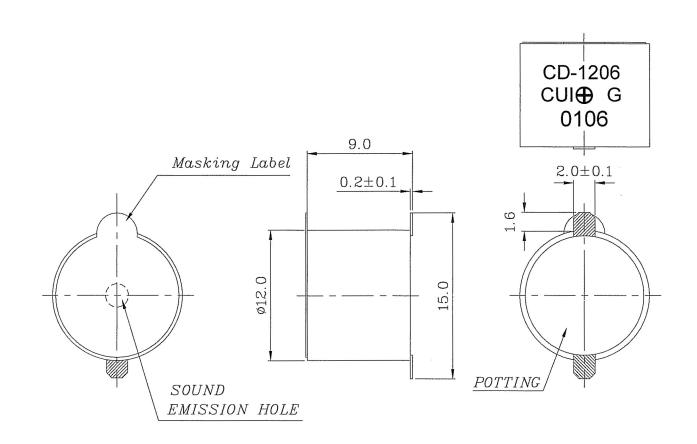
**DESCRIPTION:** magnetic buzzer

## SPECIFICATIONS

| rated voltage         | 5.0 Vo-p              | Vo-p  |  |
|-----------------------|-----------------------|---|--|
| operating voltage     | 4.0 ~ 8.0 Vo-p        |   |  |
| current consumption   | 40 mA max.            | applying rated voltage, 2400 Hz square wave, ½ duty |  |
| coil resistance       | 47.0 Ω ±7.0           |   |  |
| sound pressure level  | 85 db min. (94 typ.)  | at 10 cm (A-weight), applying rated voltage,        |  |
|                       |                       | 2400 Hz square wave, ½ duty                         |  |
| operating temperature | -40 ~ +70° C          |   |  |
| storage temperature   | -40 ~ +85° C          |   |  |
| dimensions            | ø12.0 x H9.0 mm       |   |  |
| weight                | 1.6 g                 |   |  |
| material              | PPS (black)           |   |  |
| terminal              | SMD type (Au Plating) |   |  |
| RoHS                  | yes                   |   |  |
|                       |                       |   |  |

## APPEARANCE DRAWING

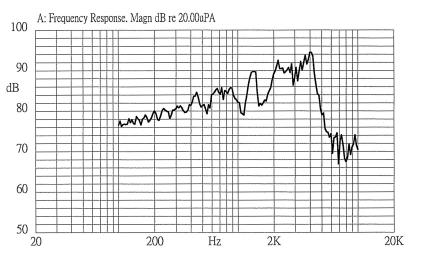
tolerance: ±0.5



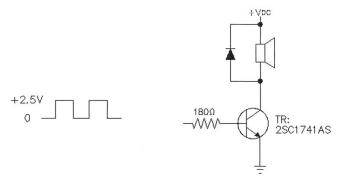


**DESCRIPTION:** magnetic buzzer

# TYPICAL FREQUENCY RESPONSE CURVE



## MEASUREMENT METHOD



## **MECHANICAL CHARACTERISTICS**

| item                         | test condition  | evaluation standard   |
|------------------------------|---|---|
| solderability                | Lead terminals are immersed in solder bath of 270 $\pm$ 5°C for 3 $\pm$ 1 seconds.  | 95% of the lead pad surfaces<br>must be covered with fresh solder<br>(except the edge of the terminal).                         |
| soldering heat resistance    | The buzzer follows the reflow temperature<br>curve to test its reflow thermo stability.   | No interference in operation.   |
| terminal mechanical strength | Lead pads will be soldered onto the PCB, the force of 9.8N (1.0kg) is applied behind the part for 10 seconds.   | No damage or cutting off.   |
| vibration                    | The buzzer will be measured after applying<br>a vibration amplitude of 1.5 mm with 10 to<br>55 Hz band of vibration frequency to each of<br>the 3 perpendicular directions for 2 hours. | After the test, the part will meet<br>specifications without any<br>damage to its appearance. The<br>SPL should be within ±10dB |
| drop test                    | The part will be dropped from a height of<br>75 cm onto a 40 mm thick wooden board 3<br>times in 3 axes (X, Y, Z) for a total of 9 drops.   | compared with the initial measurement.  |



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PART NUMBER: CD-1206

**DESCRIPTION:** magnetic buzzer

## ENVIRONMENT TEST

| item             | test condition                               | evaluation standard   |
|------------------|--|---|
| high temp. test  | After being placed in a chamber at +85°C for |   |
|                  | 96 hours.                                    |   |
| low temp. test   | After being placed in a chamber at -40°C for | -   |
|                  | 96 hours.                                    |   |
| thermal shock    | The part will be subjected to 10 cycles. One |   |
|                  | cycle will consist of:                       |   |
|                  | +85℃   |   |
|                  | -40°C  |   |
|                  |  |   |
|                  | 30 min. 30 min.                              |   |
|                  | <b>∢</b> ►                                   |   |
|                  | 60 min.                                      |   |
|                  | <ul> <li>du min.</li> </ul>                  | After the test, the part will meet  |
|                  |  | specifications without any  |
| temp. cycle test | The part will be subjected to 10 cycles. One | damage to its appearance and<br>performance. After 4 hours at<br>25°C, the SPL should be 80 dBA |
| temp. cycle test | cycle will consist of:                       |   |
|                  |  | or more.  |
|                  | a,b : 90~98%RH                               |   |
|                  | c : 80~98%RH                                 |   |
|                  | +85°C  |   |
|                  |  |   |
|                  |  |   |
|                  | /a b \                                       |   |
|                  | +25°C +                                      |   |
|                  | 3hrs 12±0.5hrs 3hrs                          |   |
|                  | C  |   |
|                  | 4  |   |
|                  | 24hours                                      |   |
|                  |  |   |
|                  |  |   |

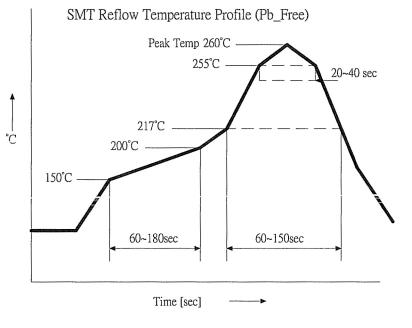
| item                  | test condition   | evaluation standard  |
|-----------------------|--|--|
| operating (life test) | 1. Continuous life test:   |  |
|                       | The part will be subjected to 72 hours of continuous operation at +55°C with 5 V, 2400 Hz applied. | After the test, the part will meet<br>specifications without any<br>damage to its appearance and |
|                       | 2. Intermittent life test:   | performance. After 4 hours at 25°C, the SPL should be 80 dBA                                     |
|                       | A duty cycle of 1 minute on, 1 minute off, a minimum of 10,000 times at room temp                  | or more.   |
|                       | (+25 ±10°C) with 5 V, 2400 Hz applied.   |  |

# standard test conditiona) temperature: +5 ~ +35°Cb) humidity: 45 - 85%c) pressure: 860-1060 mbarjudgement test conditiona) temperature: +25 ±2°Cb) humidity: 60 - 70%c) pressure: 860-1060 mbar

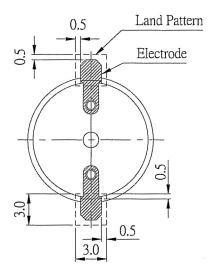


**DESCRIPTION:** magnetic buzzer

# **RECOMMENDED TEMPERATURE PROFILE FOR REFLOW OVEN**



**RECOMMENDED LAND PATTERN** 





## **DESCRIPTION:** magnetic buzzer

PACKAGING

