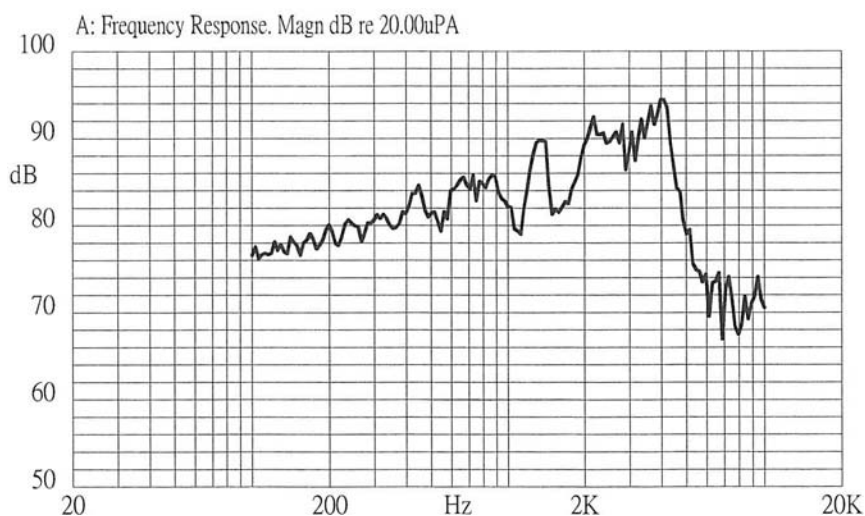




## Specifications

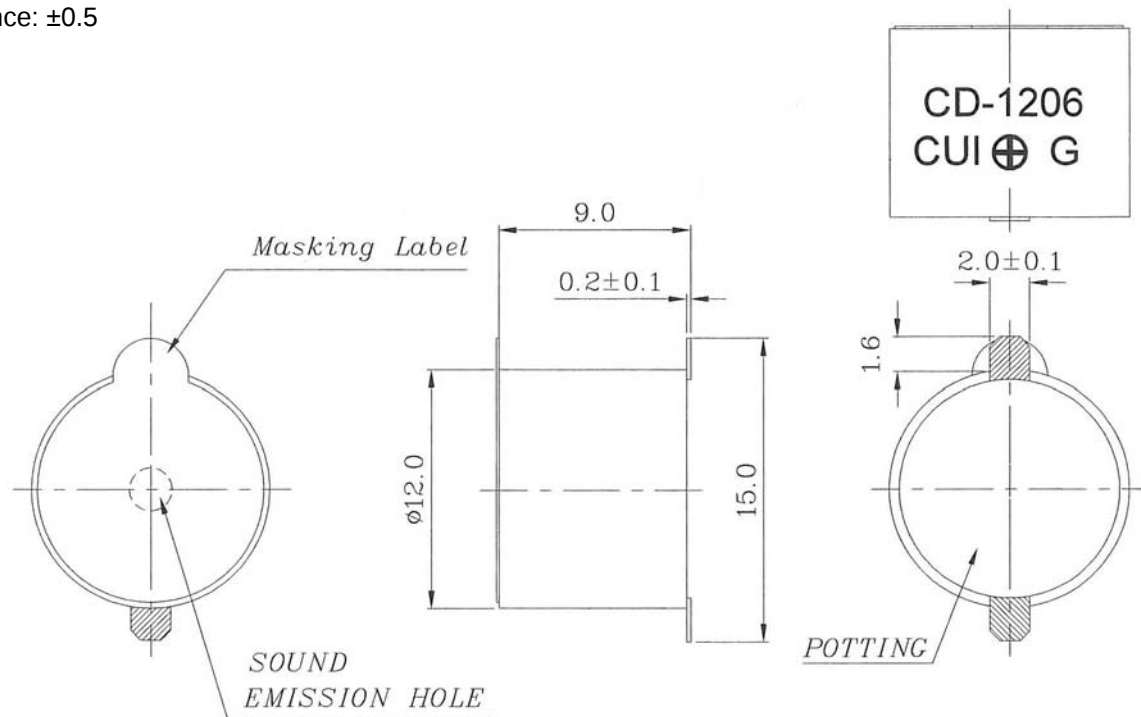
|                       |                          |                                                                                                 |
|-----------------------|--------------------------|-------------------------------------------------------------------------------------------------|
| Rated voltage         | 5 Vo-p                   |              |
| Operating voltage     | 4.0 - 8.0 Vo-p           |                                                                                                 |
| Mean current          | 40 mA max.               |                                                                                                 |
| Coil resistance       | 47 $\pm$ 7 $\Omega$      | Applying rated voltage, 2400 Hz square wave, 1/2 duty                                           |
| Sound output          | Min. 85 (Typical 94) dBA | Distance at 10cm (A-weight free air). Applying rated voltage of 2400 Hz, square wave, 1/2 duty. |
| Rated frequency       | 2,400 Hz                 |                                                                                                 |
| Operating temperature | -30 ~ +70° C             |                                                                                                 |
| Storage temperature   | -40 ~ +85° C             |                                                                                                 |
| Dimensions            | $\varnothing$ 12 x H9 mm | See attached drawing                                                                            |
| Weight                | 1.6 g                    |                                                                                                 |
| Material              | PPS (Black)              |                                                                                                 |
| Terminal              | SMD type (Au Plating)    | See attached drawing                                                                            |
| RoHS                  | yes                      |                                                                                                 |

## Frequency Response Curve

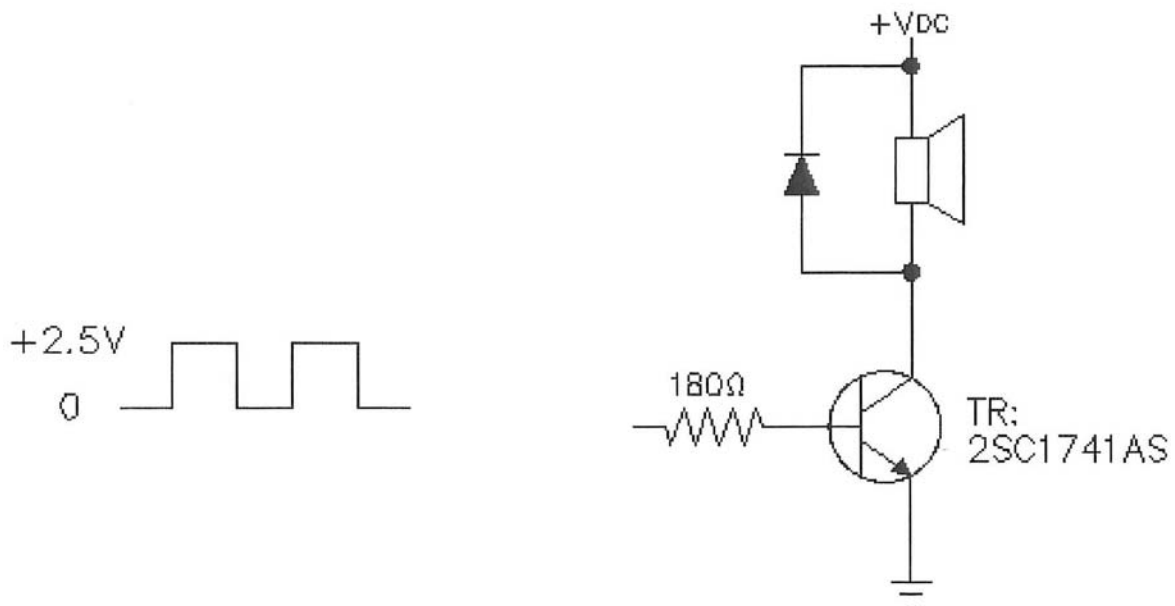


## Appearance Drawing

Tolerance:  $\pm 0.5$



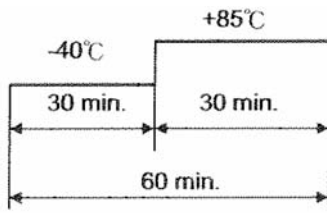
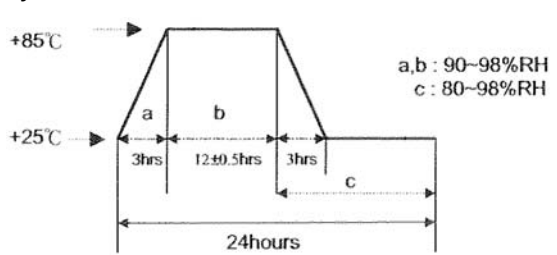
## Measurement Method



## Mechanical Characteristics

| Item                         | Test Condition                                                                                                                                                                | Evaluation Standard                                                                                                                                            |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solderability                | Lead terminals are immersed in a solder bath of $+270 \pm 5^{\circ}\text{C}$ for $3 \pm 1$ seconds.                                                                           | 95% min. of lead terminals should be covered with fresh solder.                                                                                                |
| Soldering Heat Resistance    | Lead terminals are immersed in solder bath of $+260 \pm 5^{\circ}\text{C}$ for $3 \pm 1$ seconds.                                                                             | No in interference in operation.                                                                                                                               |
| Terminal Mechanical Strength | Lead pads should be soldered onto the PC Board and then the force of 9.8 N (1.0 kg) should be applied behind the part for 10 seconds.                                         | No damage or cutting off.                                                                                                                                      |
| Vibration                    | The buzzer will 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 | After the test, the part should meet specifications without any damage to the appearance and the SPL should be within $\pm 10$ dBA of the initial measurement. |
| Drop Test                    | The part should be dropped from a height of 75 cm onto a 40 mm thick wooden board 3 times in 3 axis (X, Y, Z) for a total of 9 drops.                                         |                                                                                                                                                                |

## Environment Test

| Item                 | Test Condition                                                                                                                                                                            | Evaluation Standard                                                                                                                                                                           |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High temp. test      | The part will be subjected to $+85^{\circ}\text{C}$ for 96 hours.                                                                                                                         | After the test, the part should meet specifications without any damage to the appearance or performance except SPL. After 4 hours at $25^{\circ}\text{C}$ , the SPL should be 80 dBA or more. |
| Low temp. test       | The part will be subjected to $-40^{\circ}\text{C}$ for 96 hours                                                                                                                          |                                                                                                                                                                                               |
| Thermal shock        | The part will be subjected to 10 cycles. One cycle will consist of:<br><br>                            |                                                                                                                                                                                               |
| Temp./Humidity cycle | The part shall be subjected to 10 cycles. One cycle should last 24 hours and will consist of:<br><br> |                                                                                                                                                                                               |

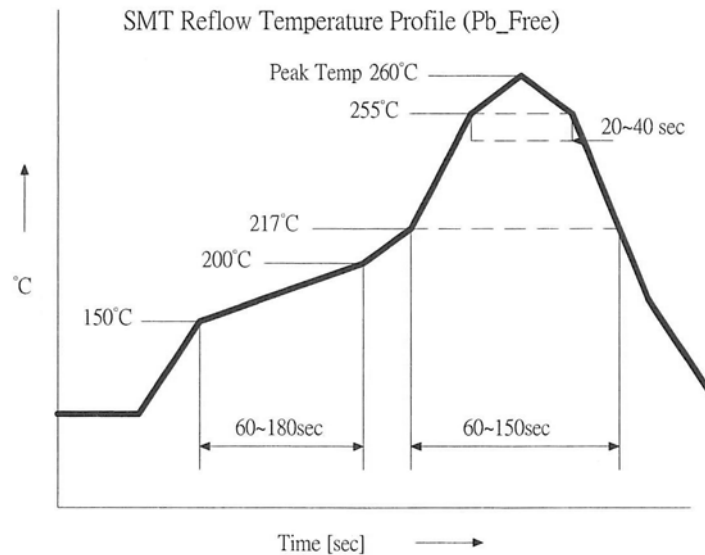
## Reliability Tests

| Item                  | Test Condition                                                                                                                                                                                                                                                                | Evaluation Standard                                                                                                                                                          |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating (Life Test) | <p>1. Continuous life test:<br/>The part will be subjected to 72 hours at 55°C with 5 V, 2400 Hz applied.</p> <p>2. Intermittent life test:<br/>A duty cycle of 1 minute on, 1 minute off, a minimum of 10,000 times at room temp. (+25 ±10°C) with 5 V, 2400 Hz applied.</p> | After the test, the part should meet specifications without any damage to the appearance or performance except SPL. After 4 hours at 25°C, the SPL should be 80 dBA or more. |

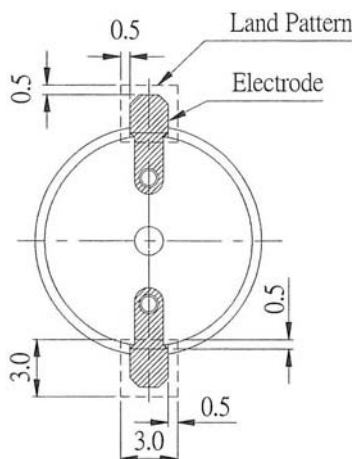
## Test Conditions

|                          |                            |                       |                              |
|--------------------------|----------------------------|-----------------------|------------------------------|
| 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 |

## Recommended Temperature Profile for Reflow Oven



## Recommended Land Pattern





**CUI INC**

Part No: CD-1206

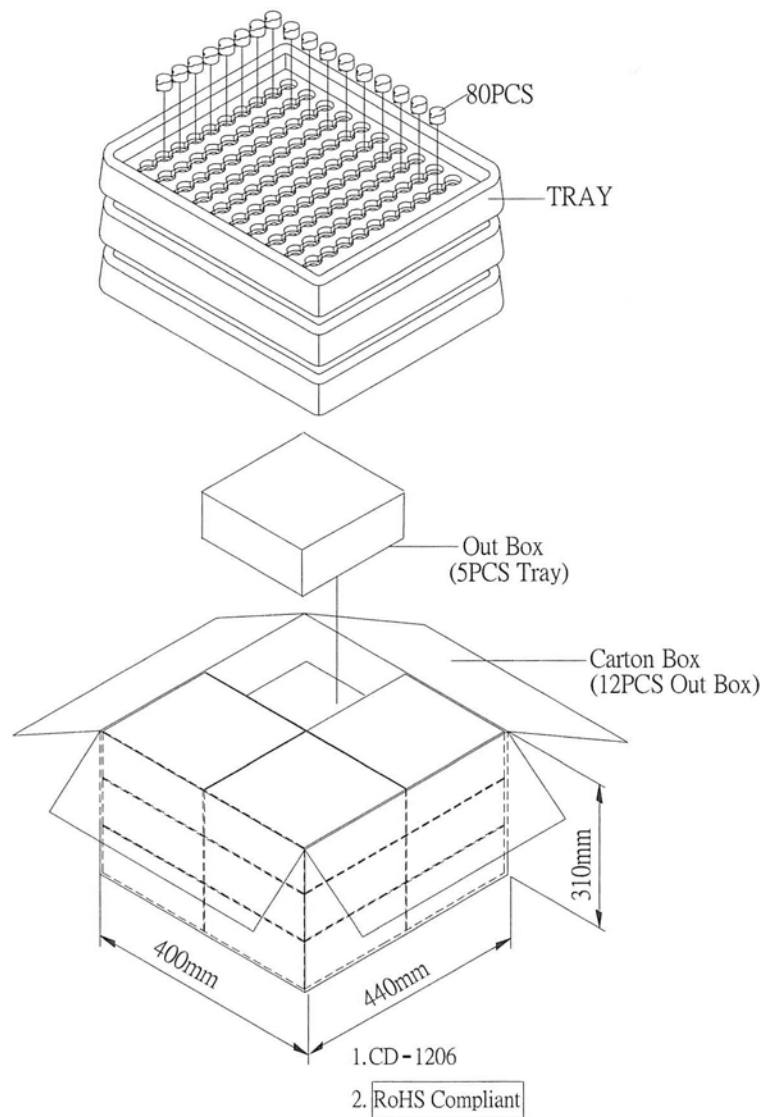
Description: magnetic buzzer

Date: 8/21/2006

Unit: mm

Page No: 5 of 5

## Packaging



|            |                   |                     |
|------------|-------------------|---------------------|
| TRAY       | 184mmx184mmx24mm  | 8x10PCS=80PCS       |
| Out Box    | 200mmx190mmx100mm | 5LAYERx80PCS=400PCS |
| Carton Box | 440mmx400mmx310mm | 400PCSx12=4800PCS   |