



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Part No: CEM-1606

Description: magnetic buzzer


Date: 9/11/2006

Unit: mm

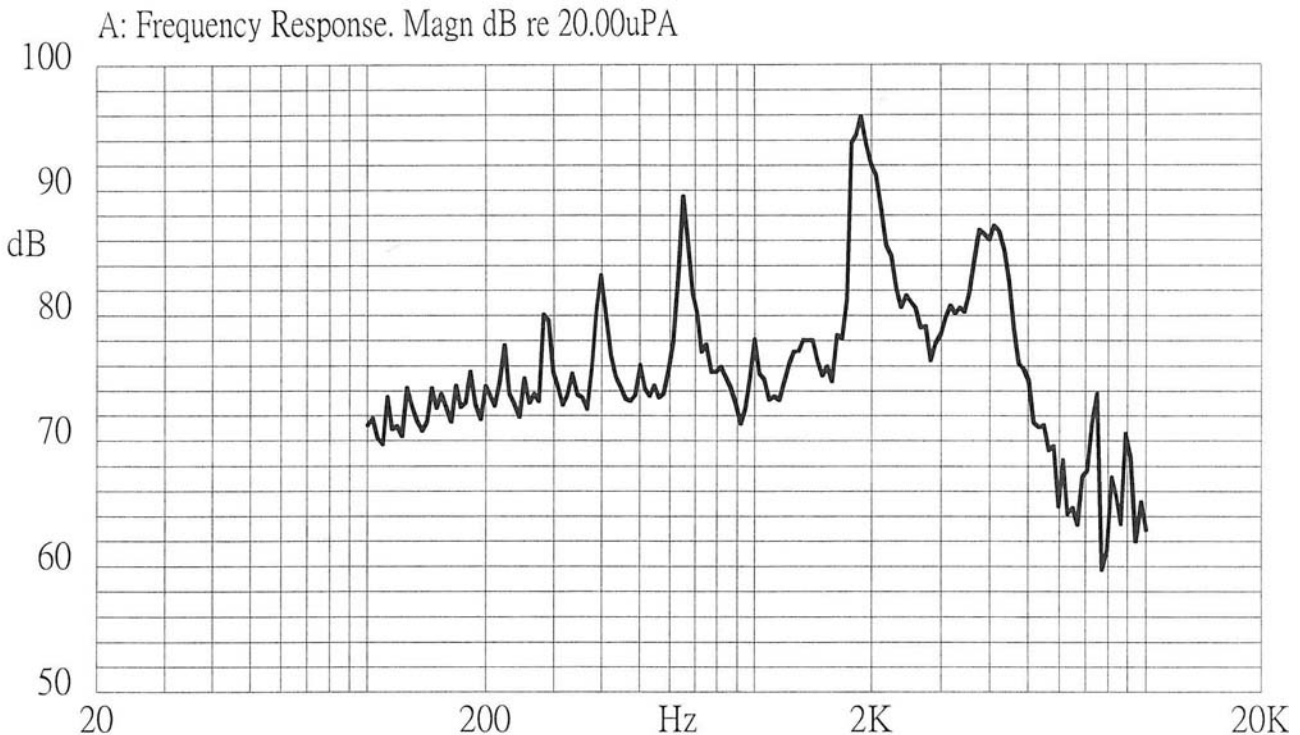
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Specifications

| | | |
|-----------------------|--------------------------|---|
| Rated voltage | 6 Vo-p |  |
| Operating voltage | 3.0 - 12.0 Vo-p | |
| Mean current | 50 mA max. | |
| Coil resistance | 50 ±7.0 Ω | Applying rated voltage, 2048 Hz square wave, 1/2 duty |
| Sound output | Min. 85 (Typical 96) dBA | Distance at 10cm (A-weight free air). Applying rated voltage of 2048 Hz, square wave, 1/2 duty. |
| Rated frequency | 2,048 Hz | |
| Operating temperature | -20 ~ +60° C | |
| Storage temperature | -30 ~ +70° C | |
| Dimensions | ø16.0 x H14.0 mm | See attached drawing |
| Weight | 4.6 g | |
| Material | PPO (Black) | |
| Terminal | Pin type (Au Plating) | See attached drawing |
| RoHS | yes | |

Frequency Response Curve





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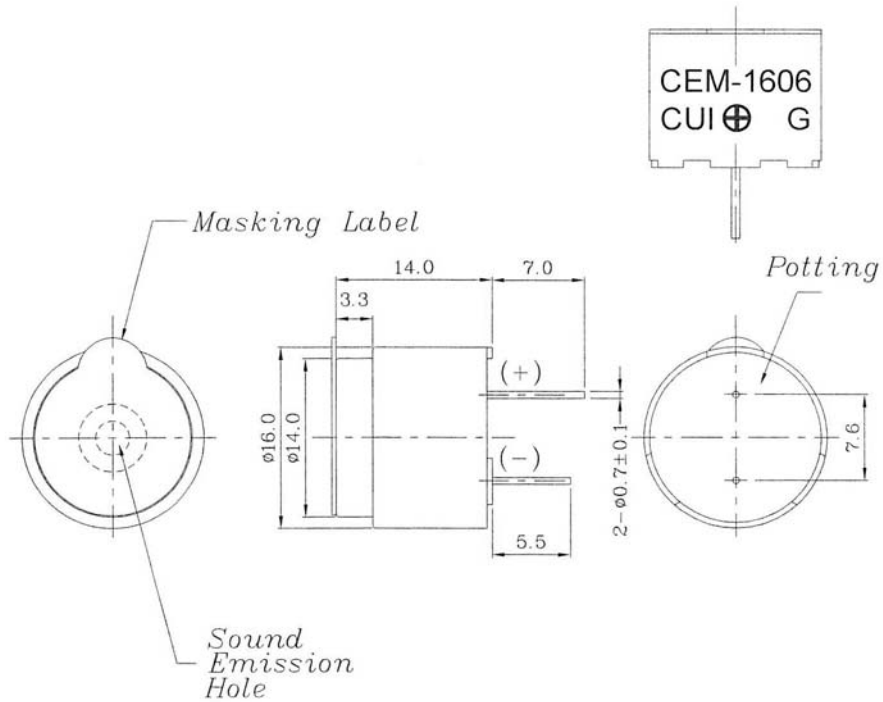
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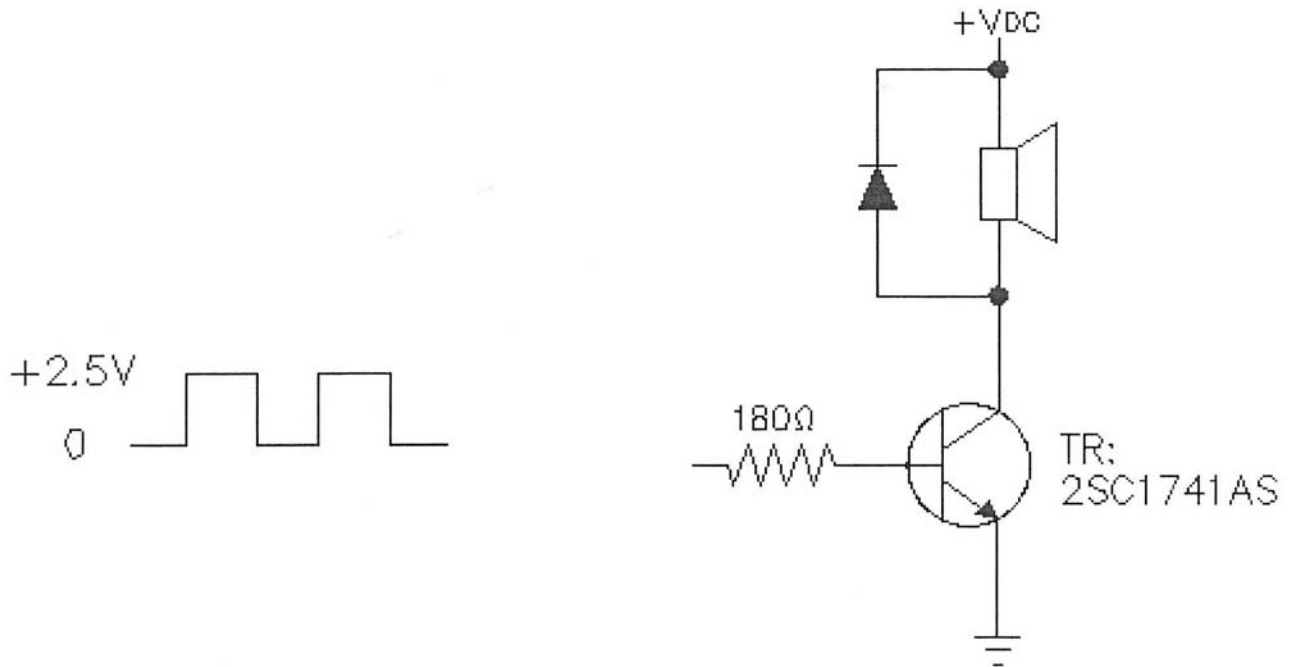
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Appearance Drawing

Tolerance: ± 0.5



Measurement Method





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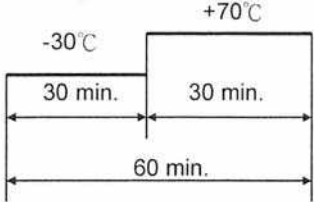
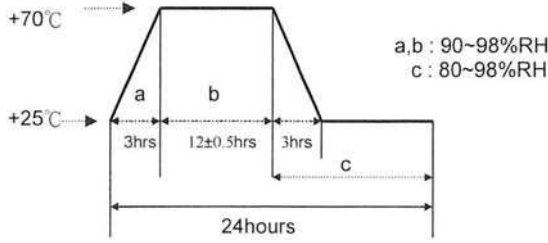
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Mechanical Characteristics

| Item | Test Condition | Evaluation Standard |
|------------------------------|---|---|
| Solderability ¹ | Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of 270 ±5°C for 3 ±1 seconds. | 90% min. lead terminals should be wet with solder. (Except the edge of the terminal.) |
| Soldering Heat Resistance | Lead terminals are immersed up to 1.5 mm from the buzzer's body in solder bath of 260 ±5°C for 3 ±1 seconds. | No in interference in operation. |
| Terminal Mechanical Strength | Apply a force of 9.8 N (1.0 kg) to each terminal in each axial direction. | No damage or cutting off. |
| Vibration | The buzzer will be measured after applying a vibration amplitude of 1.5mm 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 ±10 dBA of the initial measurement. |
| Drop Test | The part is to 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. | |

Notes: 1. Not recommended for wave soldering

Environment Test

| Item | Test Condition | Evaluation Standard |
|----------------------|--|---|
| High temp. test | The part will be subjected to +70°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°C, the SPL should be within ±10 dBA of the initial measurement. |
| Low temp. test | The part will be subjected to -30°C for 96 hours | |
| Thermal shock | The part will be subjected to 10 cycles. One cycle will consist of:  | |
| Temp./Humidity cycle | The part shall be subjected to 10 cycles. One cycle will be 24 hours and consist of:  | |



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Reliability Tests

| Item | Test Condition | Evaluation Standard |
|-----------------------|--|---|
| Operating (Life Test) | 1. Continuous life test: The part will be subjected to 72 hours at 45°C with 6 V, 2048 Hz applied. 2. Intermittent life test: A duty cycle of 1 minute on, 1 minute off, a minimum of 10,000 times at room temp. (+25 ±10°C) with 6 V, 2048 Hz applied. | After the test, the part shall meet specifications without any damage to the appearance. After 4 hours at +25°C, the SPL should be within ±10 dBA of the initial SPL. |

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 |



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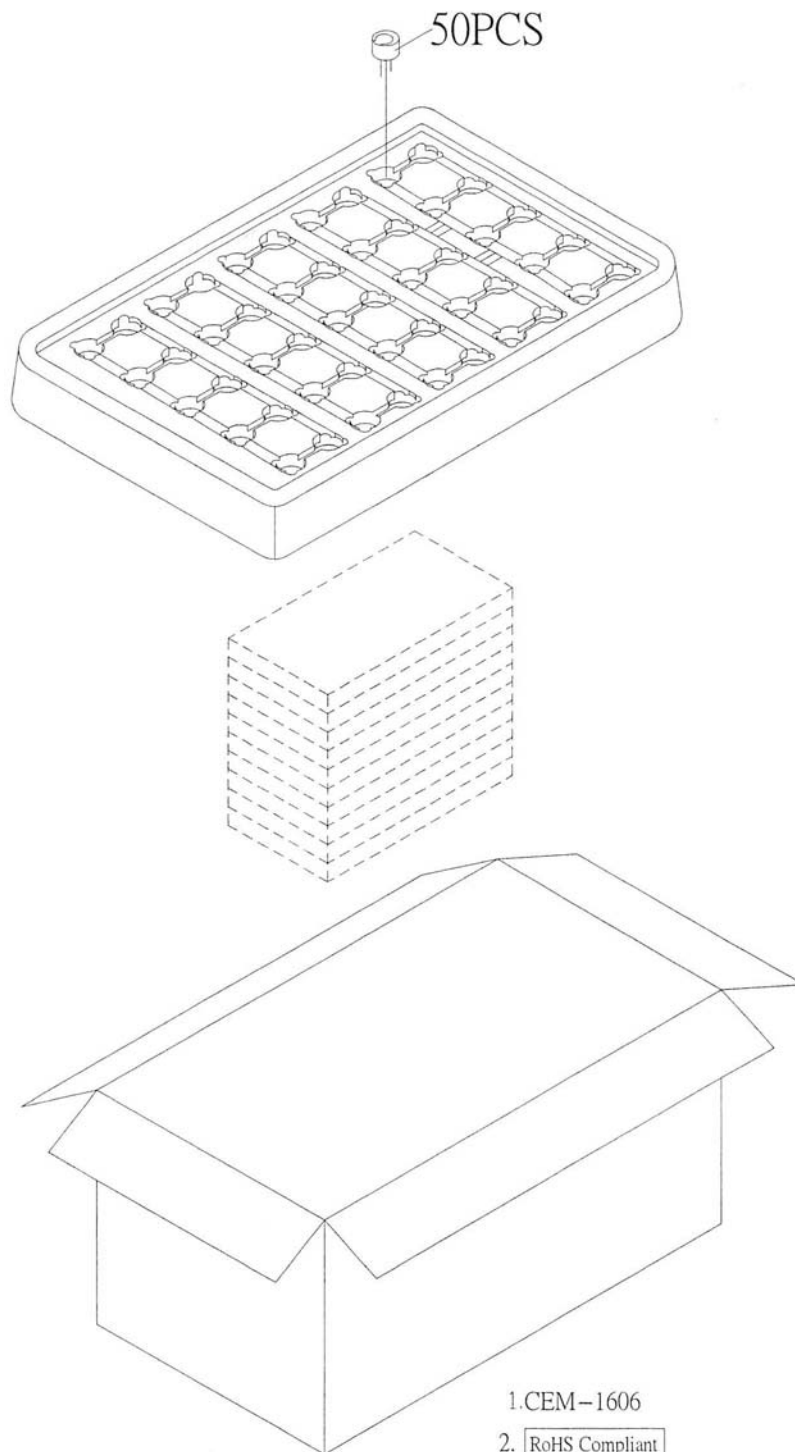
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Packaging



| | | |
|--|-------------------|------------------|
| | 320mmx170mmx28mm | 1x50PCS=50PCS |
| | 340mmx190mmx310mm | 10x50PCS=500PCS |
| | 690mmx390mmx350mm | 4x500PCS=2000PCS |