



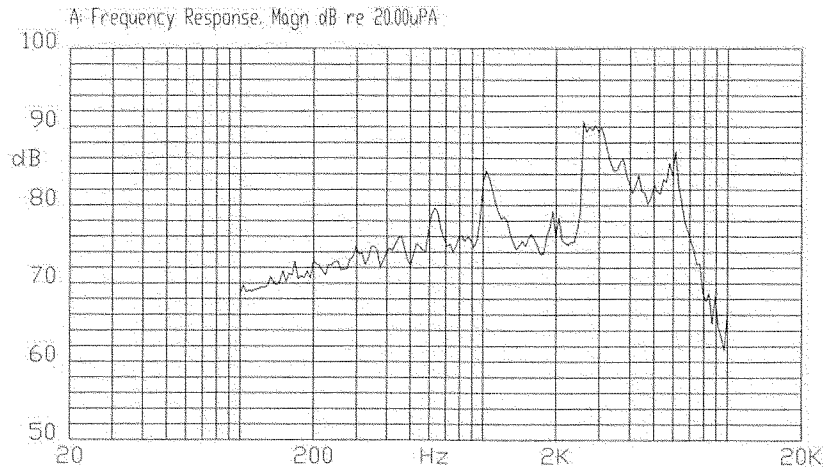
SCOPE

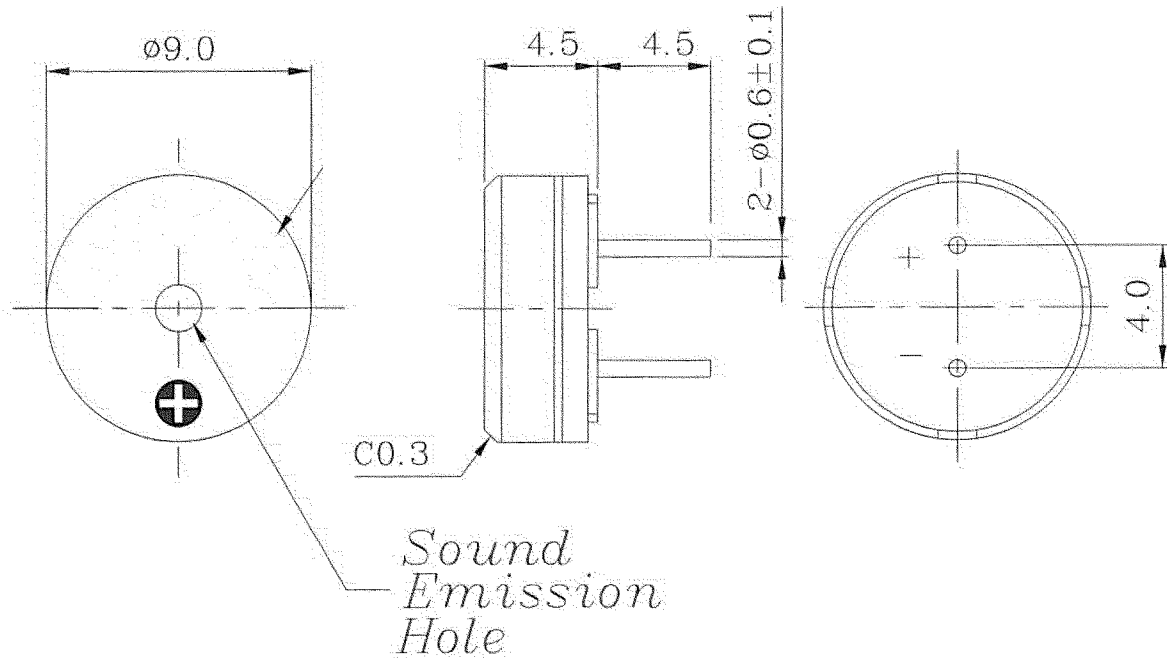
This specification applies to magnetic buzzer, CST-931AP

SPECIFICATION

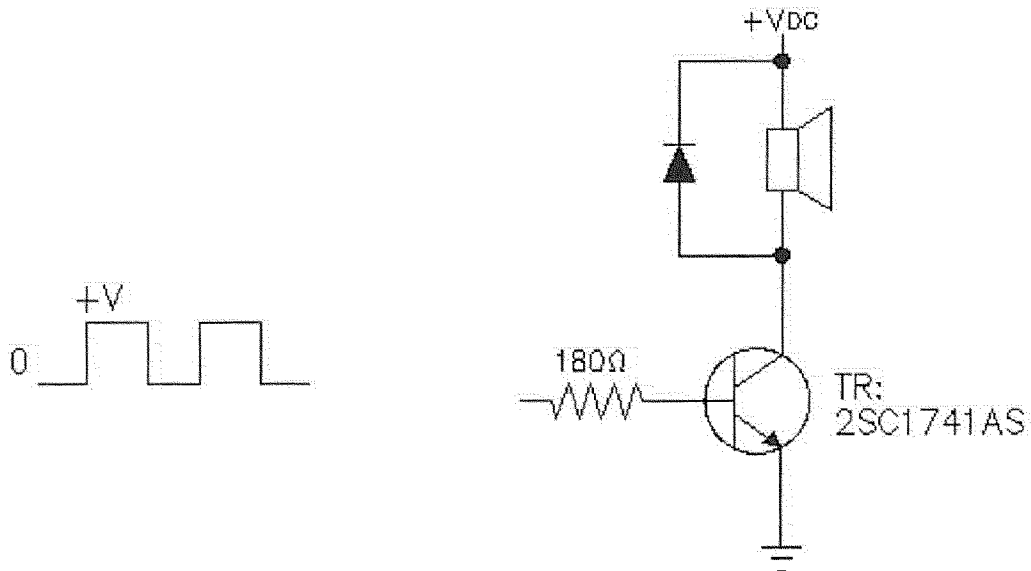
| No. | Item                                | Unit         | Specification            | Condition  |
|-----|-------------------------------------|--------------|--------------------------|--|
| 1   | Rated Voltage                       | Vo-p         | 3.0                      |  |
| 2   | Operating Volt.                     | Vo-p         | 2.0~4.0                  |  |
| 3   | Mean Current                        | mA           | Max. 80                  | Applying rated voltage, 2730Hz square wave, 1/2duty                                      |
| 4   | Coil Resistance                     | $\Omega$     | 15.0 $\pm$ 2.3           |  |
| 5   | Sound Output                        | dBA          | Min. 85<br>(Typical 92)  | Distance at 10cm(A-weight free air). Applying rated voltage 2730Hz, square wave, 1/2duty |
| 6   | Rated Frequency                     | Hz           | 2730                     |  |
| 7   | Operating Temp.                     | $^{\circ}$ C | -20 ~ +60                |  |
| 8   | Storage Temp.                       | $^{\circ}$ C | -30 ~ +70                |  |
| 9   | Dimension                           | mm           | $\phi$ 9.0 x H4.5        | See attached drawing.  |
| 10  | Weight                              | gram         | 0.6                      |  |
| 11  | Material                            |              | PPO(Black)               |  |
| 12  | Terminal                            |              | Pin type<br>(Plating Au) | See attached drawing.  |
| 13  | Environmental Protection Regulation |              | RoHS                     |  |

TYPICAL FREQUENCY RESPONSE CURVE



**APPEARANCE DRAWING**


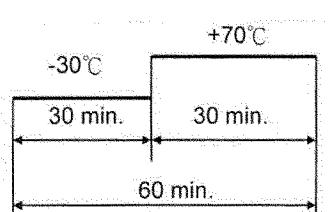
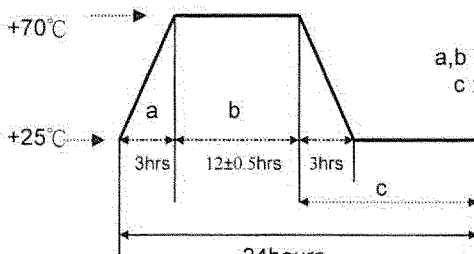
**Tol:  $\pm 0.5$**   
**Unit: mm**

**MEASUREMENT METHOD**


**MECHANICAL CHARACTERISTICS**

| No. | Item                         | Test condition   | Evaluation standard  |
|-----|------------------------------|--|--|
| 1   | Solderability                | Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+270\pm 5^{\circ}\text{C}$ for $3\pm 1$ seconds.                                     | 90% min. lead terminals shall be wet with solder. (Except the edge of terminal)  |
| 2   | Soldering Heat Resistance    | Lead terminal are immersed up to 1.5mm from sounder's body in solder bath of $+260\pm 5^{\circ}\text{C}$ for $3\pm 1$ seconds.   | No interference in operation   |
| 3   | Terminal Mechanical Strength | The force 10 seconds of 9.8N (1.0kg) is applied to each terminal in axial direction.   | No damage and cutting off  |
| 4   | Vibration                    | Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours. | After the test the part shall meet specifications with-out any damage in appearance and the SPL should be in $\pm 10\text{dBA}$ compared with initial one. |
| 5   | Drop test                    | The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes (X.Y.Z). (a total of 9 times).   |  |

**ENVIRONMENT TEST**

| No. | Item                  | Test condition   | Evaluation standard   |
|-----|-----------------------|--|---|
| 1   | High temp. test       | After being placed in a chamber at $+70^{\circ}\text{C}$ for 96 hours.   | After the test the part shall meet specifications with-out any degradation in appearance and performance except SPL. after 4 hours at $+25^{\circ}\text{C}$ . the SPL should be in $\pm 10\text{dBA}$ . |
| 2   | Low temp. test        | After being placed in a chamber at $-30^{\circ}\text{C}$ for 96 hours.   |   |
| 3   | Thermal Shock         | The part shall be subjected to 10 cycles. One cycle shall consist of:<br>                 |   |
| 4   | Temp./ Humidity Cycle | The part shall be subjected to 10 cycles. One cycle shall be 24 hours and consist of:<br> |   |



RELIABILITY TEST

| No. | Item                | Test condition  | Evaluation standard   |
|-----|---------------------|---|---|
| 1   | Operating life test | 1. Continuous life test<br>The part shall be subjected to 72 hours at +45°C with 3V ,2730Hz applied.<br><br>2. Intermittent life test<br>A duty cycle of 1 minute on, 1 minutes off, a minimum of 10000 times at room temp.( +25±10°C) with 3V ,2730Hz applied. | After the test the part shall meet specifications with-out any degradation in appearance and performance except SPL. after 4 hours at +25°C. the SPL should be in ±10dBA. |

TEST CONDITION.

Standard Test Condition : a) Temperature : +5 ~ +35°C b) Humidity : 45-85% c) Pressure : 860-1060mbar

Judgement Test Condition : a) Temperature : +25 ± 2°C b) Humidity : 60-70% c) Pressure : 860-1060mbar

PACKING STANDARD

