

| Order code | Manufacturer code | Description                          |
|------------|-------------------|--------------------------------------|
| 82-0739    | n/a               | SMC0608S 6-TONE SOUND GENERATOR (RC) |

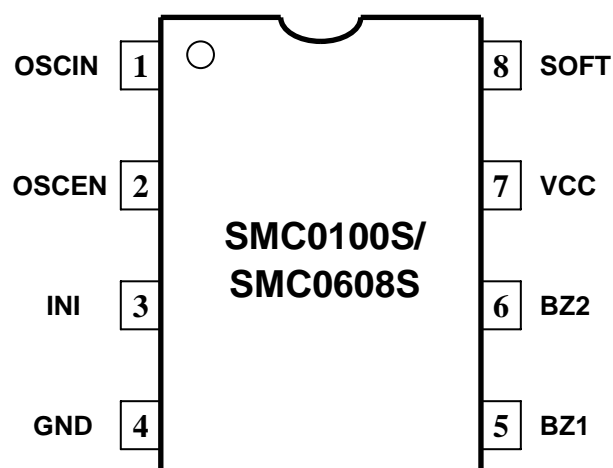
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|--|--------------------------|
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| The enclosed information is believed to be correct, Information may change without notice due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E. | Revision A<br>20/02/2007 |

**SMC0100S / SMC0608S**

The SMC0100S & SMC0608S is a one tone and six tone design for alarm sound application CMOS IC.

**FEATURES:**

1. Low Operating Voltage 2V~5V.
2. CMOS process.
3. Single RC oscillator.

**PIN DIAGRAM**

## PIN OUT AND DESCRIPTION

| Symbol | Description  | PIN | I/P,O/P |
|--------|--|-----|---------|
| OSCIN  | Oscillator pin   | 1   | O/P     |
| OSCEN  | Oscillator pin   | 2   | I/P     |
| INI    | An internal pull-up resistor. Might disable BZ1,BZ2 when connected to GND. | 3   | I/P     |
| GND    | Ground   | 4   |         |
| BZ1    | Audio output   | 5   | O/P     |
| BZ2    | Audio output   | 6   | O/P     |
| VCC    | Power  | 7   |         |
| SOFT   | Open = Tone<br>Vcc = Tone with 2 s soft chirp                              | 8   | I/P     |

## ELECTRICAL CHARACTERISTICS

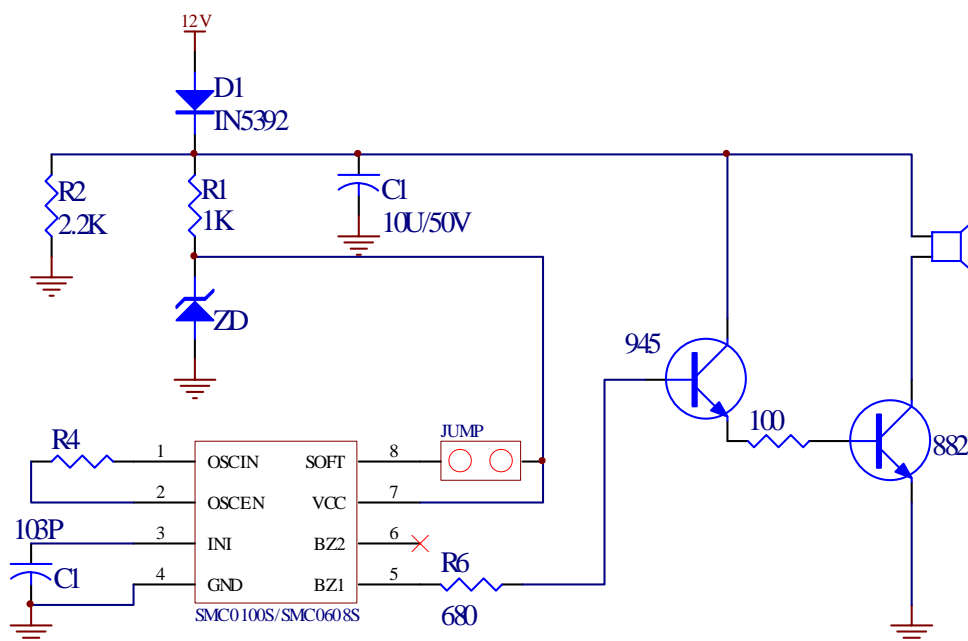
VCC=5V, Temp. =25°C

| Parameter                              | Symbol         | Min. | Typ. | Max. | Unit |
|--|----------------|------|------|------|------|
| Operating Voltage                      | VCC            | 2.0  | -    | 5.0  | V    |
| Operating Current<br>(Reference FIG.1) | Iop            | -    | -    | 800  | mA   |
| BZ1, BZ2<br>Driving Current            | Ioh<br>Voh=4.5 | -    | -    | 5    | mA   |
|  | Iol<br>Vol=0.5 | -    | -    | 8    | mA   |
| Operating Frequency                    | Fop            | -    | 128  | -    | K Hz |

## ABSOLUTE MAXIMUM RATINGS

| Symbol | Parameter             | Rating         | Unit |
|--------|-----------------------|----------------|------|
| VCC    | Supply Voltage        | -0.3 ~ 6       | V    |
| Vi     | Input Voltage         | -0.3 ~ Vcc+0.3 | V    |
| Vo     | Output Voltage        | -0.3 ~ Vcc+0.3 | V    |
| Tst    | Storage Temperature   | -40 ~ 125      | °C   |
| Ttp    | Operating Temperature | 0 ~ 65         | °C   |

## APPLICATION CIRCUIT



(FIG.1)

| IC TYPE               | ZD   | R4  |
|-----------------------|------|-----|
| SMC0100S/<br>SMC0608S | 2.7V | 82K |
|                       | 3.3V | 82K |
|                       | 4.7V | 82K |