

Sound Generator 2M. Cellular Phone

SPECIFICATIONS

CMOS LSI chip designed for electronic toy applications. Contains 8 electronic sounds. This COB is used in childrens cellular phone. Auto power off, one shot mode, wide operating voltage between 2.5V & 5V. Quiescent current less than 5uA. Operating current about 0.6mA.

Construction. A mother board is supplied with the kit to make assembly as easy as possible. Solder the COB PCB into the slot at each of the 14 pads. Be careful you do not short out 2 adjacent pins with solder. Both resistors sit up vertically on the board.

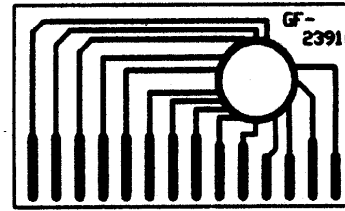
You have to supply your own hook-up wire to suit the lengths that you want for the various connections. Connect the POSitive & NEGative pads to between 2.5V to 5V. Connect the SPKR pads to the speaker. There are 8 pairs of pads for each of the 8 phone sounds. Six pairs are on the front left of the mother board. Pads 7 & 8 are on the middle right of the board. The ground connection for these two pads are next to the NEGative pad.

PINOUT

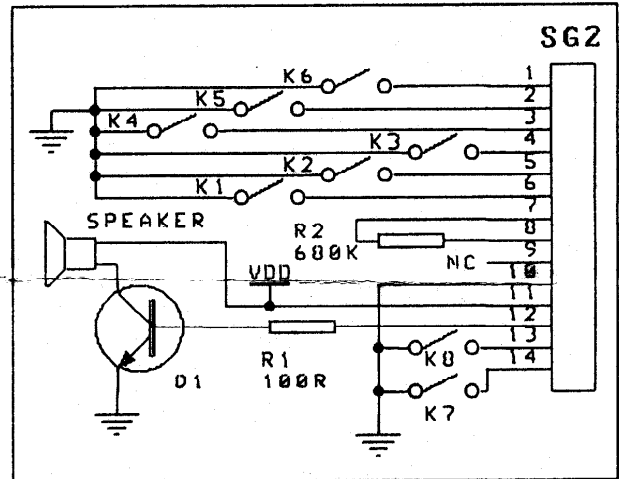
Bonded on 29mm x 16mm single sided PCB.

PCB Position	Pin Function
1	Key 6, US phone ringing
2	Key 5, tone autodial
3	Key 4, tone
4	Key 3, tone
5	Key 2, tone
6	Key 1, tone
7	Oscillator 1
8	Oscillator 2
9	No connection
10	VSS negative power supply
11	VDD positive supply
12	Output
13	Key 8, music box tune
14	Key 7, engaged signal

You can experiment with different values of the oscillator resistor, R2. 680K is supplied. A higher resistance will give a slower tune. Any small signal transistor works for Q1. 8 ohm speaker.



POSITION 1 2 3 4 5 6 7 8 9 10 11 12 13 14

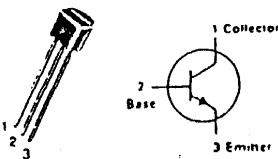


COB PCB Pinout

KIT COMPONENTS

8 ohm speaker	1
3V battery snap	1
100R resistor, R1	1
680K resistor, R2	1
SG2 COB PCB	1
BC547, Q1	1
Push-on switch	8
SG2 mother board	1

BC547, A, B, C
BC548, A, B, C



AMPLIFIER TRANSISTORS

NPN SILICON

