

## 6 ALARM SOUND SIREN CODE 278

A sound generating circuit that uses the digital memory principle for creating a 6 alarm sounds siren. The digital signal and programme are contained in the IC which is produced directly from the circuit factory. The contained programme, therefore, cannot be changed. Ideally, the circuit is suitable for fixing to a small toy car.

#### **Technical Specifications:**

- Power supply : 3VDC.
- Consumption : 105mA. max.
- PCB dimensions : 1.13 x 1.00 in.

#### How to Work:

All various circuit workings have been contained in the IC, as shown in Figure 1. The output pin 5 is connected to the base of TR1 through R2 for amplifying and then moving out through speaker. R1 and C2 will limit IC frequency while C1 will filter a fed voltage for a

# better smoothness.

#### Circuit Assembling:

External connecting and fitting of components are shown in Figure 2. It is recommended to assemble the circuit starting with a lower component i.e. diodes, resistor, electrolite capacitors and transistors etc. Be careful while assembling and check for the matching of PCB poles and components before soldering as shown in Figure 3. Use a max. 40W. solder and soldering lead with a tin and lead ratio of 60/40 together with a joint solution inside. Recheck the assembled circuit for your own assurance. Better using a lead sucker or a lead wire absorber in case of misplacing component to protect PCB from damage.

<u>CAUTION:</u>- As the used IC is the main component of the circuit, it is recommended to avoid any over accumulated heat within the IC while soldering.

### Testing:

Supply 9VDC to the circuit that having connected positive pole to position +9V and negative one to position G. Six alarm sounds can be heard through the speaker and then the circuit will start producing a new round of the same sounding, repeatedly.



#### **Troubleshooting:**

As the circuit has only a few components, the main cause of troubles will come from component misplacing and defaulted soldering. When found out that the circuit does not work, check for the proper component placings and various soldering points.



## Figure 1. 6 Alarm Sound Siren Circuit

