### 2.3.4 Assembly of the IC socket

The IC socket can be found on the black foam in the protective bag. Place the socket on the PCB in the position marked as IC14. Please note that the notch should face upwards. Solder the socket. There is no need to cut the legs.

### 2.3.5 Assembly of the Resistor Packs

The first resistor pack can be found on the black foam. It looks like an IC, but is yellow rather than black. It should be placed to the left of the keyboard (RNETW1), just above IC4 mounted a few moments ago. The notch should be facing down.

The remaining 4 resistor packs can be found in the plastic bag containing the discrete electronic components. They are also yellow but only have a single row of 9 pins. These resistor packs should all go onto the Steckerbrett in the positions marked RNETW2, RNETW3, RNETW4 and RNETW5. Before inserting these resistor packs in the PCB you should identify pin 1. This pin is marked on the resistor pack with a black dot. Pin 1 should go into the hole with the square pad.

### 2.3.6 Mounting the LEDs

The kit contains only 1 green LED (LED32) which is located to the left of the PIC (IC14). The longest wire should go in the rightmost hole (the square pad). The sponge-method will be of help here. First solder one of the legs and check if the LED is aligned straight up. If this is not the case, gently move it into position. Now solder the second leg. Carefully cut the legs of the LEDs (not too short). Please note that you should not heat the LEDs for too long, as this will reduce their brilliance. **Never bend the legs of the LEDs!**
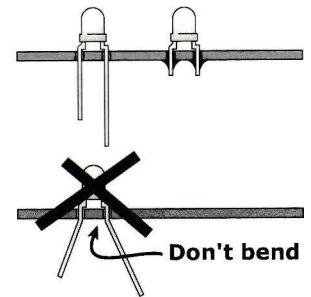
Next we solder the 5 red LEDs (LED1, LED2, LED3, LED4 and LED5), left of the displays. The longest leg should go into the rightmost hole (square pad).

**Don't bend**

The remaining 26 yellow LEDs are used for the lamp panel. Again, the longest leg should go into the rightmost hole (square pad). Please use the same method for mounting them as described for the other LEDs, to ensure that they are all neatly lined up.

### 2.3.7 Assembly of the Ceramic Capacitors

All 25 ceramic capacitors are 100nF (the blue ones) and they are scattered all over the PCB. Locate each one and insert the component. After soldering, you should cut the legs (not too short).

### 2.3.8 Assembly of the keyboard

In the plastic bag containing the mechanical materials, you'll find 35 push buttons. Put them on the PCB at the positions marked SW1 to SW35. They fit tightly, which is convenient when soldering them. First solder one leg and check if the key is nicely aligned with the board, if not, heat the pin again and align it first. Once you are satisfied, solder the other legs. Don't cut the legs after soldering as this may cause damage to the interior of the key.

### 2.3.9 Assembly of the Voltage Regulator

Take the Voltage Regulator (IC9) from the plastic bag containing the discrete electronic components. It's marked as 78L05. Although it looks like a transistor, it is in fact an IC. It is located at the top left of the board. It has a flat side, which should line up with the drawing on the PCB.

### 2.3.10 Assembly of the 10µF Capacitors

There are 5 small electrolytic capacitors of 10µF in the kit. C1, C6, C24 and C29 are close to the PIC micro-controller (IC14). C17 is to the right of the Voltage Regulator (IC9) at the top left of the board. Please note that the longest leg should go into the square pad. Solder them and cut the legs.