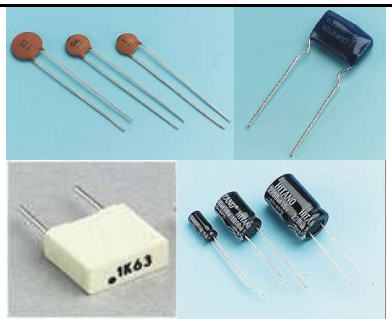
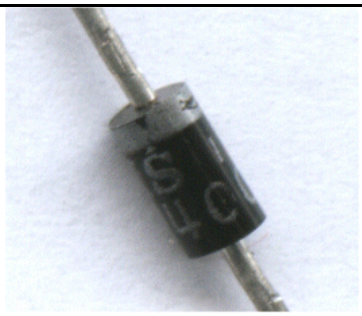
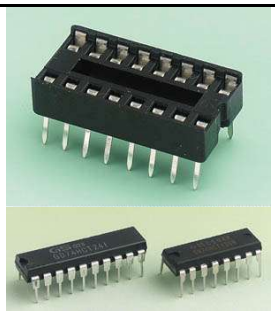
Component Identification



Capacitor
Electrolytic capacitors (cylindrical shape) are marked with a band and '-' to indicate the negative lead.



Diode
The band on the diode shows polarisation, this must match the marking on the board.



Integrated circuit
The top picture is an IC holder placed into the PCB, below are ICs. The notch on the holder should line up with the notch on the PCB.

LED
There is a flat edge on the LED, this should line up with the flat on the PCB.

Resistor
These can go in either way around.

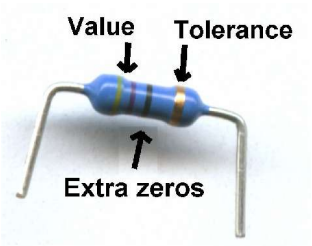
Transistor
The D shape of the transistor, needs to be lined up with the D on the PCB.

Capacitor values

The larger electrolytic capacitors tend to have the value printed on the side of them. Other capacitors, which are often smaller, may not have enough space to print the value in full and can use a 3-digit code.
The first 2 digits are the first part of the number and the third digit give the number of zeros to give it's value in pF.

101 is a 100 pF cap
104 is a 100,000 pF

Resistor values



0	Black	5	Green
1	Brown	6	Blue
2	Red	7	Purple
3	Orange	8	Grey
4	Yellow	9	White

This resistor has yellow, purple, black, gold bands has a value of 47 with no extra zeros so is a 47Ω resistor. The gold band indicates that this is accurate to ± 1%.

A red, red, red, gold resistor would be a 2200 Ω
(1 KΩ = 1000Ω, 1MΩ = 1000 KΩ)