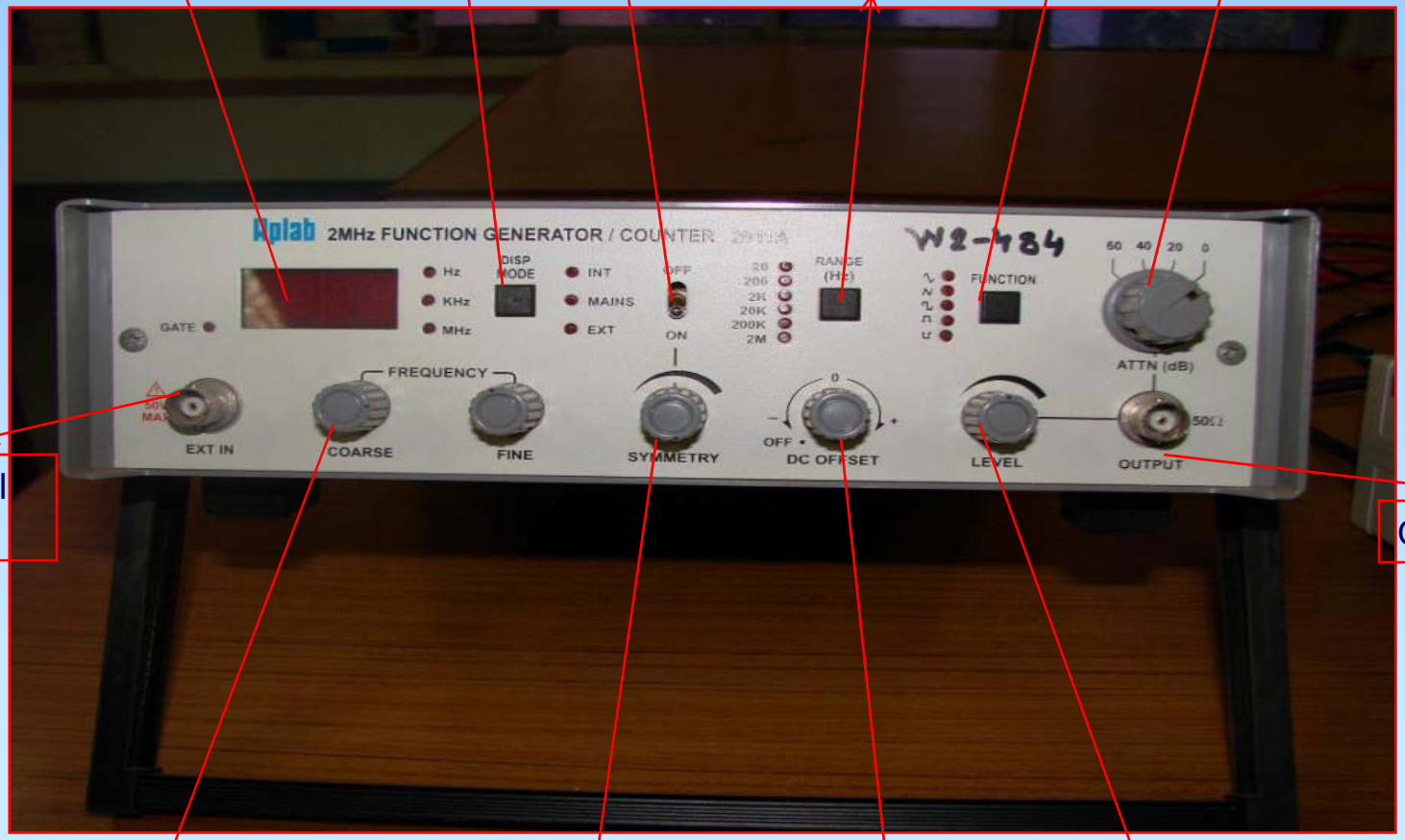
Function Generator



Frequency Display

Display Mode

Symmetry ON/OFF

Frequency Range Selection

Function Selection

Attenuation(dB)

External input

Output

Frequency Vary Knob

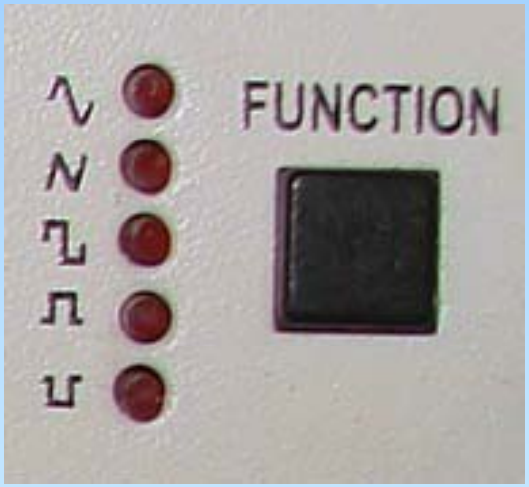
Symmetry Knob

DC offset knob

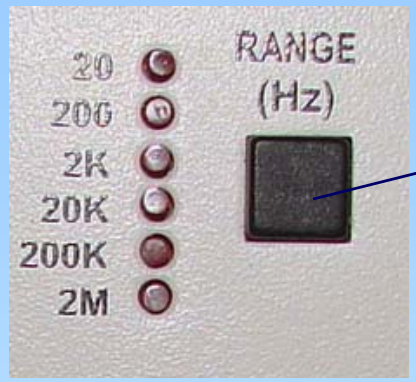
Voltage Level

Function

- Generates the functions – Sine, Square, Triangular, Positively going pulse and Negatively going pulse
- Amplitude and Frequency of the functions can be controlled



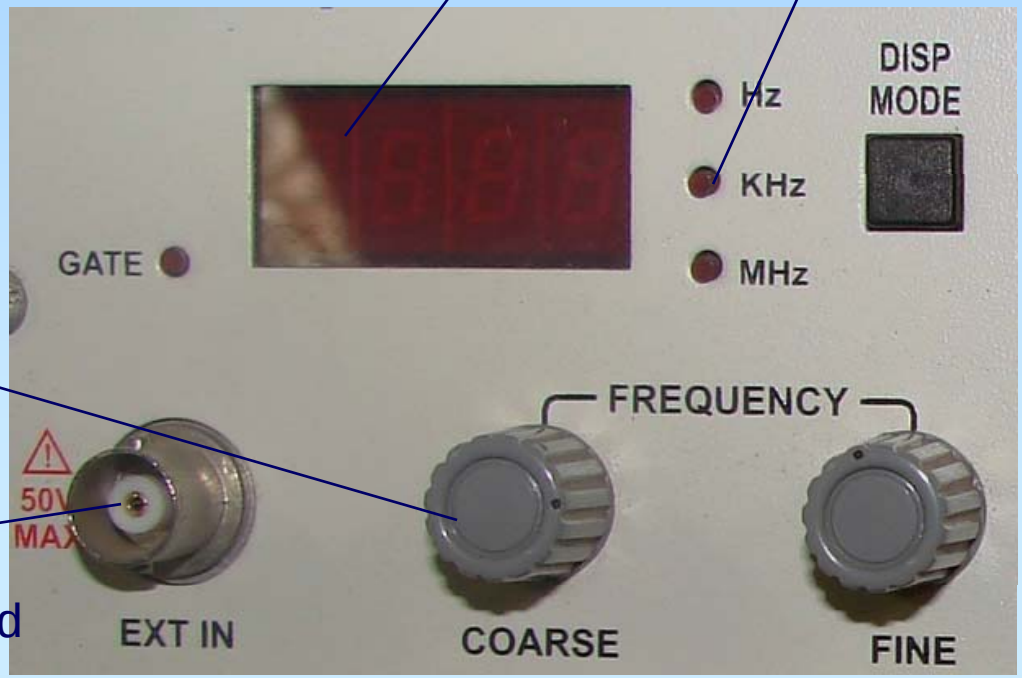
Frequency



Selects the maximum range of frequency

Indicates the unit of frequency currently displayed

Frequency Display



Frequency value adjustment knob

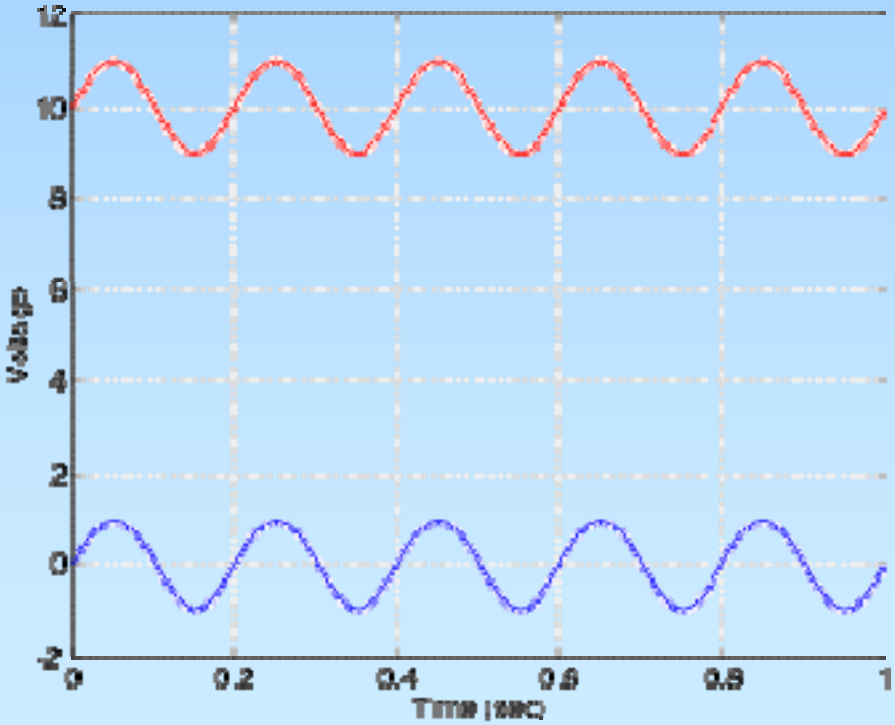
External Input.
The display shows
The frequency of
External input if selected

Voltage Level

- The voltage level of the function can be adjusted by the level knob
- For large attenuation of the signal level the attenuation knob can be used which has 20dB(0.01), 40dB(0.0001) and 60dB(0.000001) attenuations.

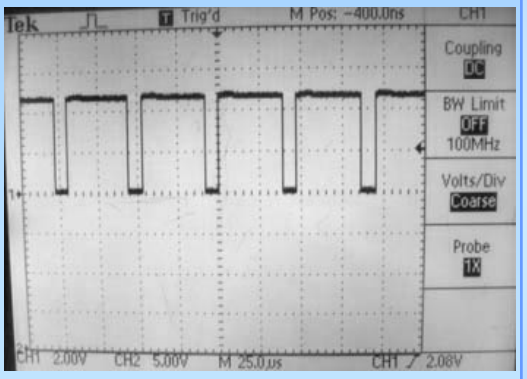
DC offset

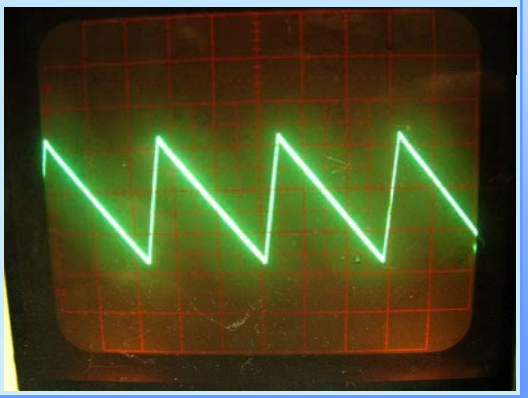
- Dc value can be added to the function by adjusting the DC offset knob.
- The DC offset can be turned OFF by moving the knob to the leftmost position and locking it



Symmetry Knob

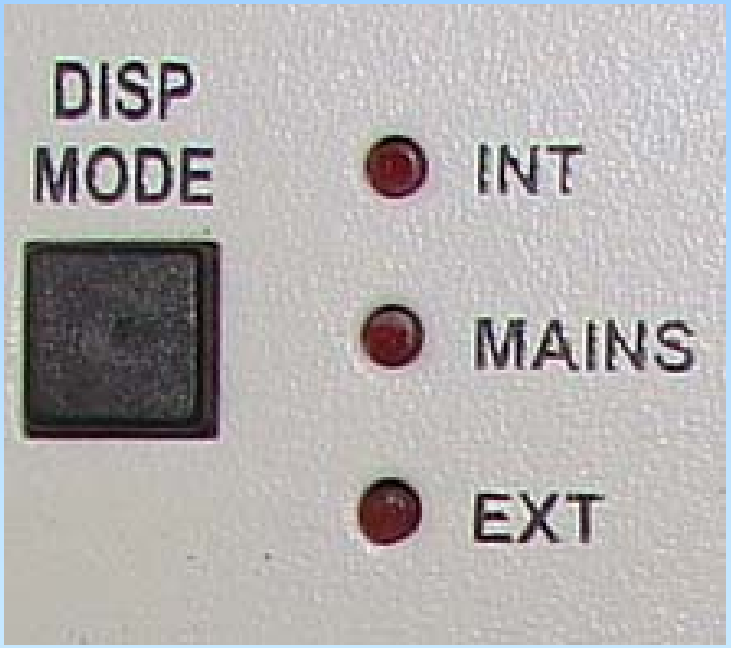
- The amount of symmetry of the function can be adjusted using the symmetry knob. There is a ON/OFF switch for the knob
- The symmetry control varies the generator's time base such that other derived waveforms can be produced
- It effects all three waveforms. When square wave is selected, the symmetry knob serves as a pulse width control.
- For the triangle wave, the knob at its extremes produces ramp and sawtooth waves.
- With sine selected, it produces various distortions of the sine wave; turning it all the way to either extreme produces a waveform that moves through half of a sine wave and then jumps back to the starting point
- When the symmetry of a wave is changed the frequency also changes.



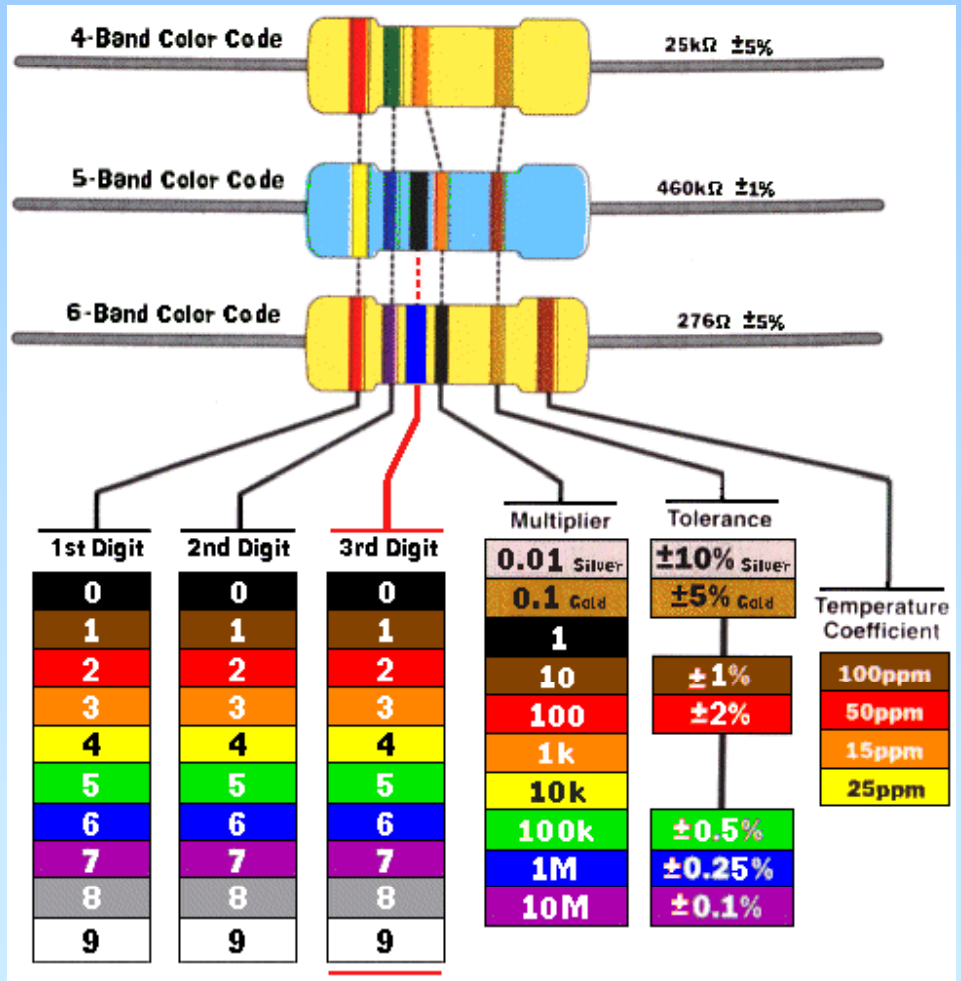


Display Mode

- The frequency displayed can be selected as either from the internal of function generator, main supply or from external source
- If the selection is other than internal then the source shall be connected to “EXT IN” of the function generator.
- A maximum of 5OV can be given as the external input.



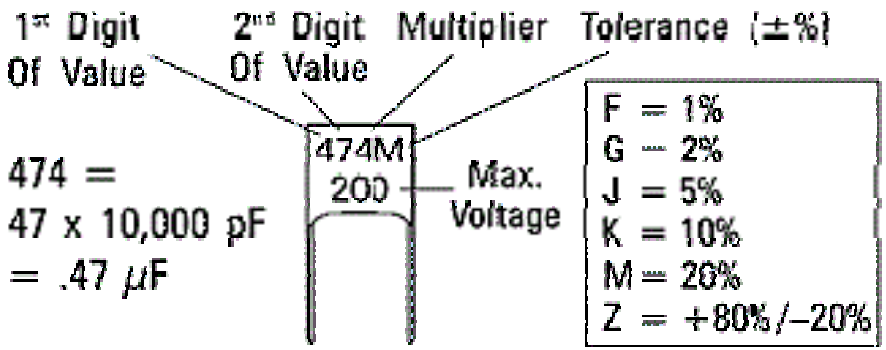
Resistor Colour Codes



Capacitor Code

CAPACITOR GUIDE

The Result of Capacitor Code is Given in pF



On some capacitors the value is shown as a straight number (4.7pF). On others the decimal point is replaced with the first letter of the prefix (4p7 = 4.7pF).

Prefix	Abbr.	Multiplier
pico	p	10^{-12}
nano	n	10^{-9}
micro	µ	10^{-6}

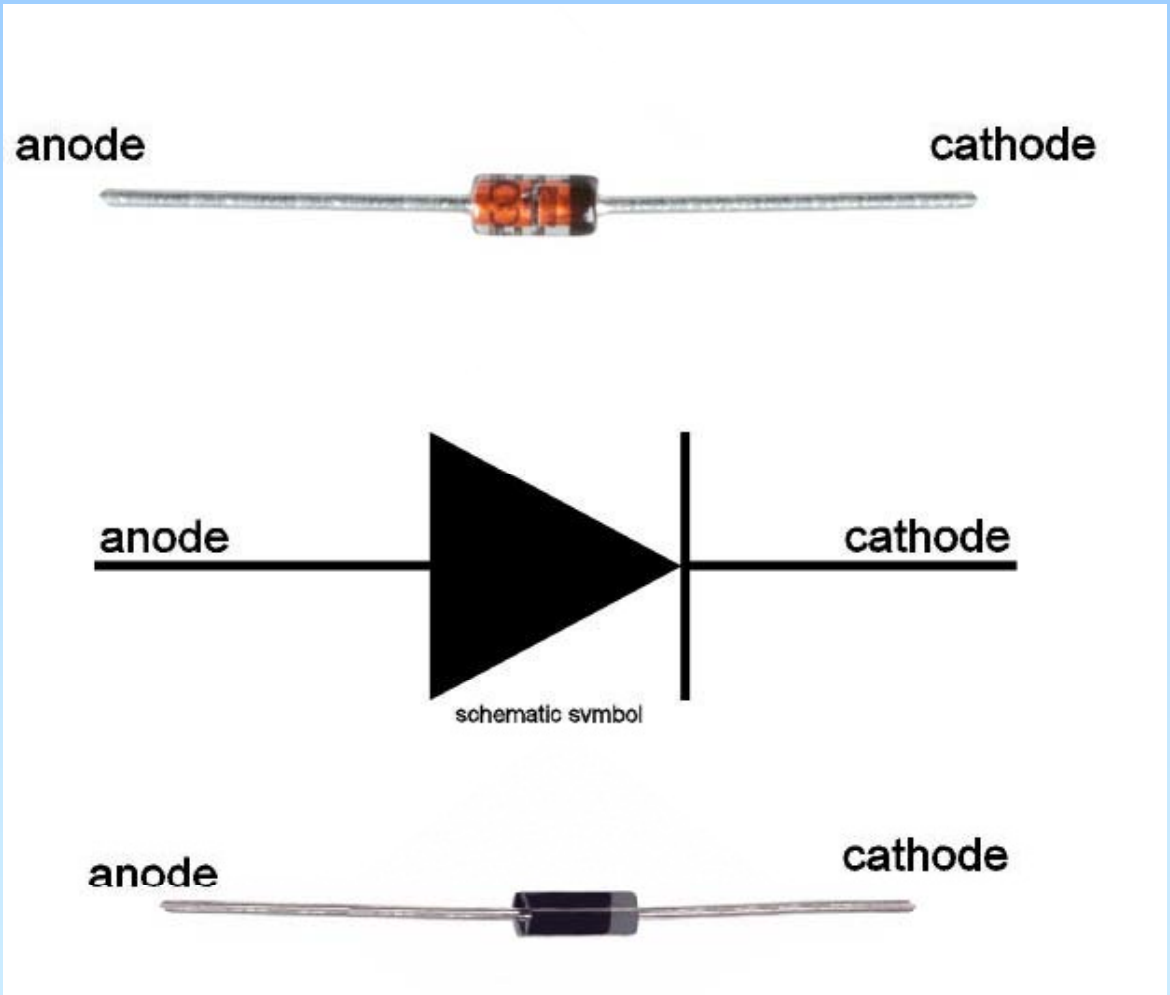
1000 pico = 1 nano
1 nano = .001 micro
1000 nano = 1 micro

EXAMPLES:

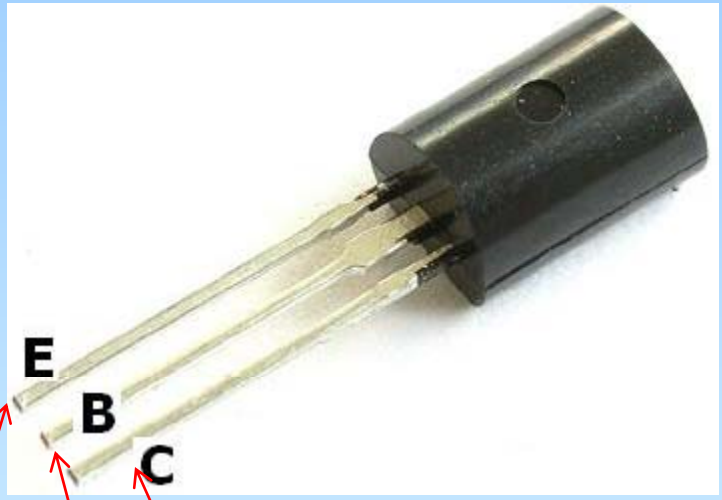
223J = 22 x 10^{3}pF = 22nF = 0.022µF 5%

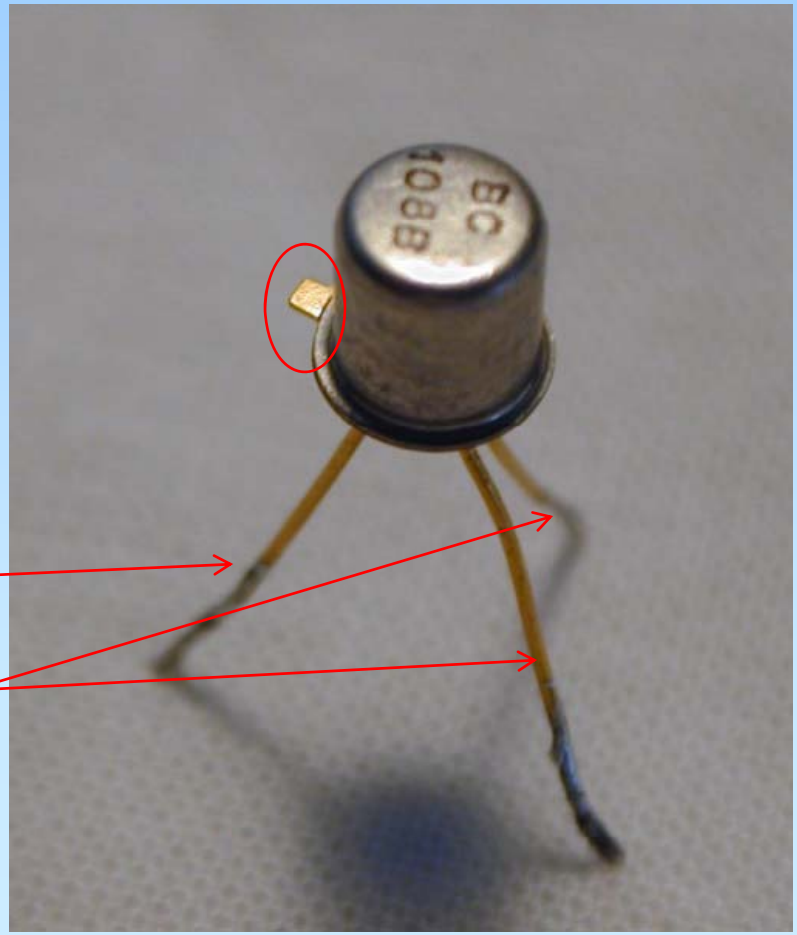
151K = 15 x 10^{1}pF = 150pF 10%

Identification of Diodes and Transistors



Transistors





Emitter

Base

Collector