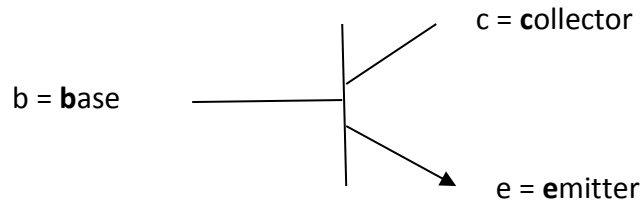


N5

Transistor

A transistor is a **process** device. It acts as an **automatic switch**.

Symbol

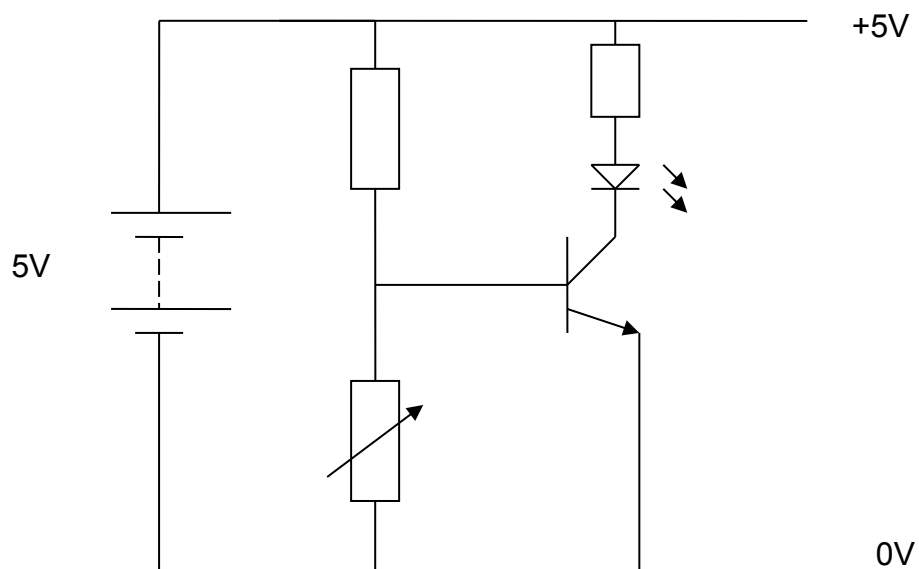


Electrons flow from the emitter through the base to the collector. This only happens if the **voltage across the base /emitter** is high enough.

The conducting voltage is 0.7V - ON

Anything less and the transistor will not allow current to flow through it. Below 0.7 V the transistor is non-conducting - OFF.

Example



As the **resistance of the variable resistor is gradually increased**, the voltage across it increases and the voltage applied to the emitter- base increases. When the voltage applied to the emitter-base of the transistor is 0.7 V or more, the transistor will **switch on** and conduct allowing current to flow through it to the LED and the LED will switch 'on'.

