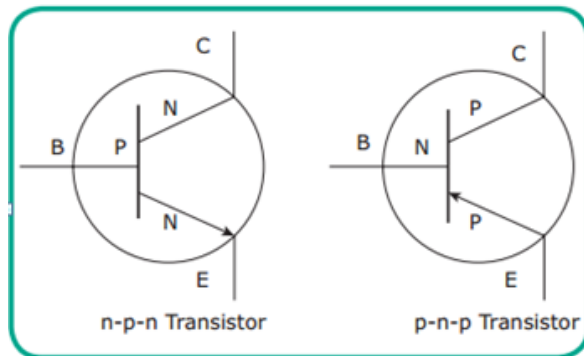
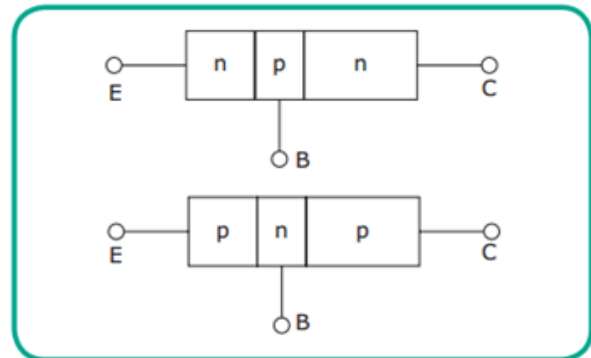


## BIPOLAR JUNCTION TRANSISTOR



NPN and PNP Transistors



PNP and NPN Transistor

It is nothing but an ordinary transistor. These transistors are amongst the most widely used devices for amplification of all types of electrical signals and intermediate devices in discrete circuits, i.e., circuits made from individual components rather than integrated circuits. Transistors are also used in circuits together with integrated circuits, since it is often more practical to use discrete transistors where higher power output is needed, which is higher than the integrated circuit output.

**There are two types of transistor**

1. PNP Transistor
2. NPN Transistor

Remembering Tips:

P-Points N-Never

N-iN P-Points

P-Permanently N-iN

Figures show the symbol and structure of PNP and NPN transistors, respectively. In PNP transistors, a thin layer of N type is sandwiched between two P type layers. In NPN transistors, a thin layer of P type is sandwiched between two N type layers.