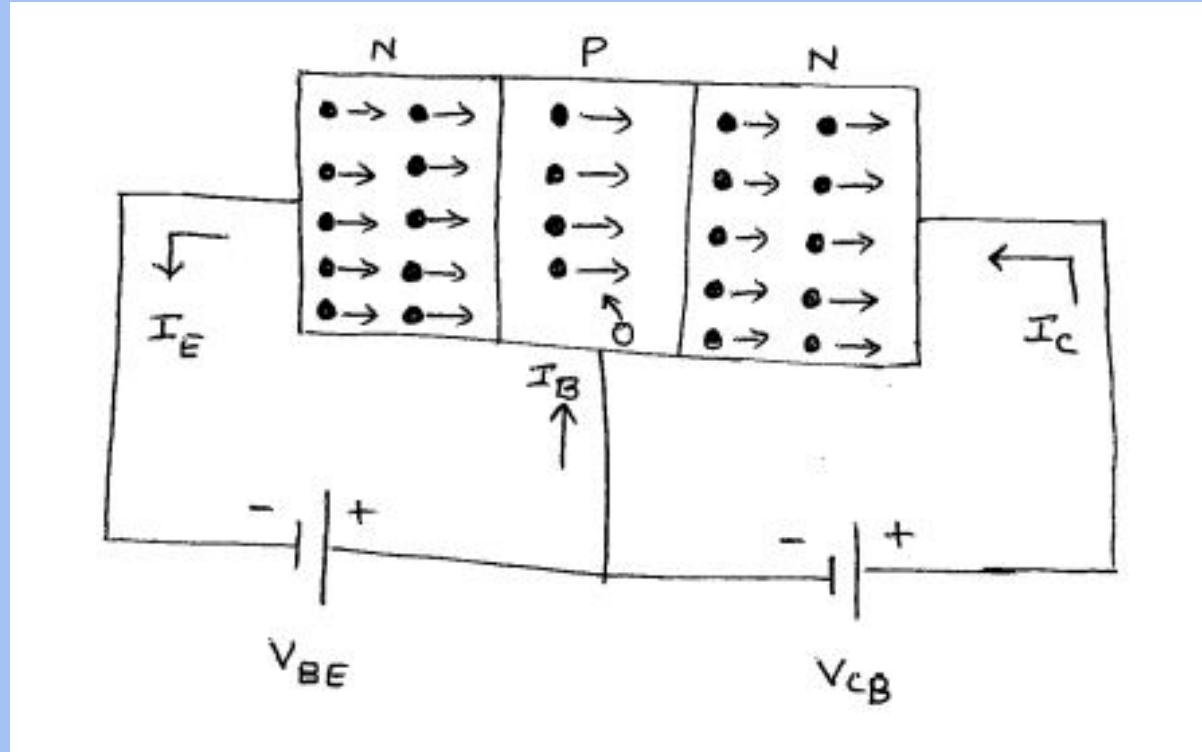


Working of NPN Transistor

Elementrix Classes

Working of NPN Transistor



- ❑ As Shown in figure, the forward bias is applied to the emitter base junction of NPN transistor causes a lot of electrons from the emitter region to cross over to the base region.
- ❑ As the base is lightly doped with p-type impurity, the number of holes in the base region is very small and hence the number of electrons that combine with holes in the p-type base region is also very small.
- ❑ Hence a few electrons combine with holes to constitute a base current I_B .

- ❑ The remaining electrons (more than 95%) crossover into the collector region constitute a collector current (I_C).
- ❑ Thus the base and collector current summed up gives the emitter current, i.e.

$$I_E = I_B + I_C$$

पढ़िए और पढ़ाइये

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