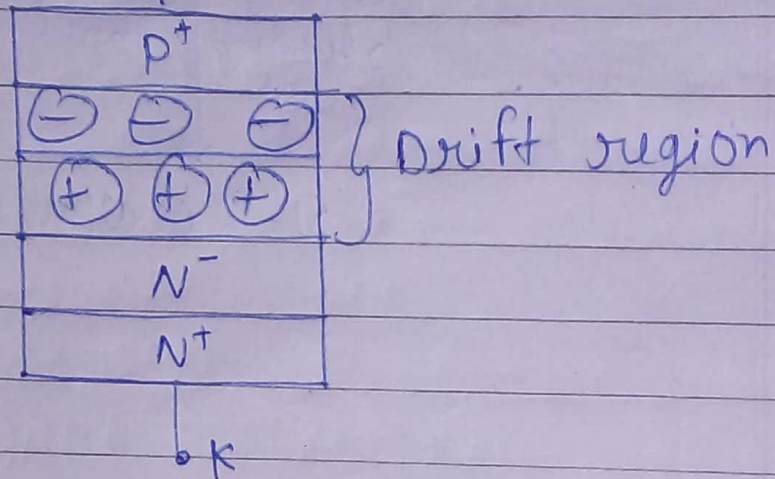


① Power Diode

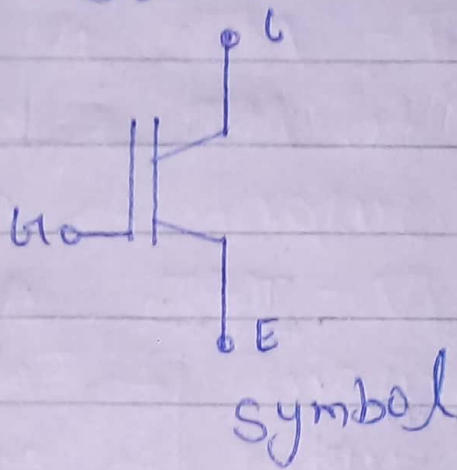
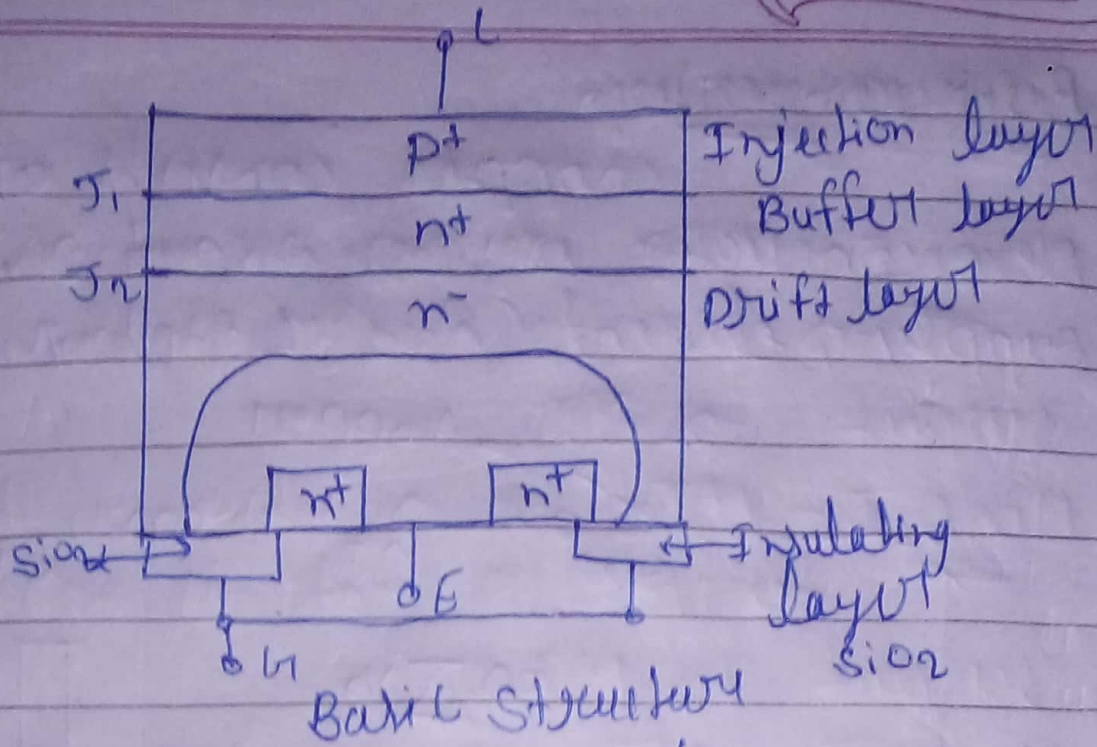
Power diode is a two layer, two terminal, p-n junction semiconductor device. It has one p-n junction formed by alloying, diffusing or epitaxial growth.



Application:-

- ① A diode is a specialized electronic component with two terminals called the anode & cathode.
- ② Diode can be used as rectifiers, signal limiters, voltage regulators, switches, signal modulators, oscillators.

IGBT - (Insulated Gate bipolar transistor)
IGBT is a voltage controlled power electronic device. It is a device which combines the fast acting feature & high power capability of bipolar transistor with the voltage control feature of MOSFET gate.



Working- when a (+) voltage is applied at the collector terminal with respect to the emitter, in the absence of a gate-to-emitter voltage, the device cannot conduct because the junction J_2 remain reverse biased.

When a positive voltage is applied at gate with respect to the emitter, electrons are pulled from the n^+ region to the gate terminal.

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