EXAMS DAILY

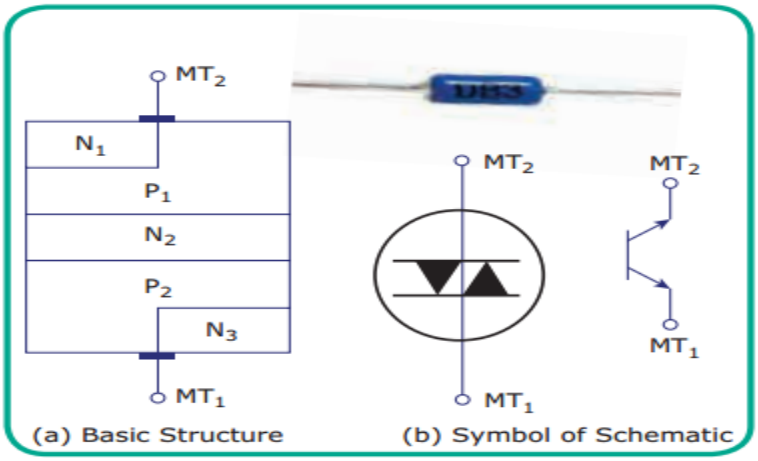
# DIAC

## DIAC

The DIAC is a bidirectional semiconductor switching device. It can be switched 'ON' using both polarities. DIAC is a short version of DIODE Alternating Current. It is widely used as a triggering device of a Triac, especially, for AC switches, dimmer application and starter circuits in fluorescent lamps.

## Construction:

Figure shows the structure and symbol of DIAC. The DIAC is a two terminal device, namely $MT_1$, $MT_2$. It is a combination of parallel semiconductor layers ($P_1N_1P_2N_2$,$P_2N_1P_1N_3$) connected in anti-parallel. The DIAC can be configured to conduct in both the directions. The structure of DIAC is similar to transistor, but no terminal attached to the base layer.




**Basic Structure and Symbol of DIAC**

## Application of DIAC

1. Used as Triggering device in TRIAC Power Control System.
2. Used in Lamp Dimmer Circuit
3. Used in Heater Control Circuit.

4. Used in Motor Speed Control.