



Experimental Training Board has been designed specifically for Determination of Energy Band Gap in Semiconductor (P-N Junction Diode) using Temperature dependent of reverse saturation current. The board is absolutely self contained and requires no other apparatus.

Practical experience on this board carries great educative value for Science and Engineering Students.

**Object:**

01. To draw the characteristics of a P-N junction Diode for reverse saturation current and temperature.
02. To determine the Energy Band Gap in a P-N Junction Diode.

**Features:**

The board consists of the following built-in parts :

01. 2V D.C. at 10mA, regulated Power Supply.
  02. Digital Microammeter, 3½ digits having range 200uA D.C.
  03. Semiconductor Diode.
  04. Thermometer 0-110 °C.
  05. Oven, Electrically heated to heat the Semiconductor Diode.
  06. Mains ON/OFF switch and Fuse.
- \* The unit is operative on 230V ±10% at 50Hz A.C. Mains.
  - \* Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length ½ metre.
  - \* Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections /observation of waveforms.
  - \* Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

Note: Specifications are subject to change.

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