

# JUNCTION DIODE RECTIFIER & FILTER CHARACTERISTICS

**OMEGA TYPE ETB-81** 



OMEGA TYPE ETB-81 Experimental Training Board has been designed specifically for the Study of the Junction Diode Rectifier and Filter Characteristics. Practical experience on this board carries great educative value for Science and Engineering Students.

### **OBJECT**

Study of Junction Diode Rectifier & Filter characteristics.

- 01 Study of Junction Diode Rectifier output and ripple content for different resistive loads for:
  - 1.1 Half wave.
  - 1.2 Full wave (Center Tap).
  - 1.3 Full wave (Bridge).
  - 1.4 Voltage Doubler Circuit.
- 02 Study of filter and load regulation characteristics for half wave and full wave rectifier having different resistive loads and filters of the type:
  - 2.1 Capacitor filter.
  - 2.2 Capacitor Filter with capacitor value doubled.
  - 2.3 Inductor filter.
  - 2.4 Capacitor input L section filter.
  - 2.5 Capacitor input  $\pi$  section filter.

#### **FEATURES**

The board consists of the following built-in parts:-

- 01 Mains transformer, secondary center tap 10V-0-10V at 100 mA.
- 02 Digital DC Ammeter 3½ Digit range 0-200 mA.
- 03 Digital DC Voltmeter, 3½ Digit range 0-20V/200V.
- 04 Four Silicon Junction Diodes.
- 05 Filter choke.
- 06 Adequate no. of other electronic components.
- 07 Mains ON/OFF switch, Fuse and Jewel light.
- 08 The unit is operative on 230VAC ±10% at 50Hz.
- O9 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 10 Good quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.
- 11 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

12 Weight : 3100 Kg. (Approx.) 13 Dimension : W 340 x H125 x D 210

## **OTHER APPARATUS REQUIRED:**

01 A.C. Millivoltmeter OMEGATYPE ACV-25

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

## OMEGA ELECTRONICS