

EFFECT OF FREE WHEELING DIODE IN SINGLE PHASE FULLY-CONTROLLED **BRIDGE CONVERTER**

OMEGATYPE PET-432



OMEGA TYPE PET- 432 Power Electronic Training Board has been designed specifically to study and obtain the single phase fully controlled bridge converter using (i) R-load (ii) R-L load and (iii) effect of free wheeling diode in R-L load.

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

OBJECT

- 01 To study and obtain the single phase fully controlled bridge converter using R-load.
- 02 To study and obtain the single phase fully controlled bridge converter using R-L load & effect of free wheeling diode.

FEATURES

The board consists of the following built-in parts:

- 01 35V D.C. at 500mA Zener Regulated Power Supply.
- 02 Bridge rectifier for making DC voltage.
- 03 Two UJT.
- 04 Four SCR's.
- 05 Two Pulse transformer 1:1:1.

- 06 Two Potentiometers for controlling UJT firing angle.
- 07 Bulb 12V 5W.
- 08 Inductor 20mH.
- 09 Adequate no. of other Electronic Components.
- 10 Mains ON/OFF switch, Fuse and Jewel light.
- 11 The unit is operative on 230VAC ±10% at 50Hz.
- 12 Adequate no. of patch cords stackable 4 mm spring loaded plug length 50cm.
- 13 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.
- 14 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

15 Weight : 5.00 Kg. (Approx.)

16 Dimension : W415xH165xD315

OTHER APPARATUS REQUIRED:

01 Dual trace CRO 20MHz OMEGATYPE CRO-20 with Isolation Transformer for unearthing.

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

OMEGA ELECTRONICS