

OMEGA TYPE ETB-84 Experimental Training Board has been designed specifically for the study of Discrete Electronic Components. It contains a wide selection of discrete components and A.C. & D.C. Power Supplies. The capabilities of this trainer extend far beyond the experiments described. Although only a finite number of experiments have been described yet other circuits as per individuals requirements can also be designed using the available components and power supplies.

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

OBJECT

01 RC & LC CIRCUITS :

- 1.1 Study of RC High Pass Filter
- 1.2 Study of RC Low Pass Filter
- 1.3 Study of RL Differentiating Circuits
- 1.4 Study of Series RC Circuit
- 1.5 Study of Series LC Circuit
- 1.6 Study of Parallel RC Circuit
- 1.7 Study of Parallel LC Circuit

02 SERIES & PARALLEL RESONANCE CIRCUIT :

- 2.1 Study of Series LCR Resonance Circuit and determination of 'Q'
- 2.2 Study of Parallel LCR Resonance Circuit
- 2.3 Determination of impedance & reactance of reactive elements and plotting of reactive curves

03 GERMANIUM & SILICON DIODES :

- 3.1 Characteristics of a germanium/ silicon diode reverse
- 3.2 Characteristics of a germanium/ silicon diode forward
- 3.3 Application of a diode as a half wave rectifier
- 3.4 Application of four diodes as full wave bridge rectifier

04 ZENER DIODE :

- 4.1 Characteristics of a Zener Diode
- 4.2 Application of a Zener Diode as a voltage regulator
- 4.3 Determination of line regulation of a zener diode regulator circuit
- 4.4 Determination of load regulation of a zener diode regulator circuit

05 CLIPPING & CLAMPING CIRCUITS :

- 5.1 Study of single level clipping circuits
- 5.2 Study of two level clipping circuits
- 5.3 Study of clamping circuits

06 COMMON EMITTER CONFIGURATION OF A TRANSISTOR:

- 6.1 Input characteristics of common emitter configuration
- 6.2 Output characteristics of common emitter configuration
- 6.3 Study of common emitter amplifier

07 COMMON BASE CONFIGURATION OF A TRANSISTOR:

- 7.1 Input characteristics of common base configuration
- 7.2 Output characteristics of common base configuration
- 7.3 Study of common base amplifier



08 COMMON COLLECTOR CONFIGURATION OF A TRANSISTOR :

- 8.1 Transfer characteristics of common collector configuration

09 EMITTER FOLLOWER (TRANSISTOR) :

- 9.1 Study of emitter follower configuration

10 CASCADED AMPLIFIER :

- 10.1 Study of two stage cascaded amplifier

11 POWER AMPLIFIER

- 11.1 Study of class-A power amplifier.

12 DIFFERENTIAL AMPLIFIER :

- 12.1 Study of a differential amplifier and determination of its CMRR

13 FEED BACK AMPLIFIER

- 13.1. Study of current series feedback
- 13.2. Study of current shunt feedback

14 SELECTIVE AMPLIFIER :

- 14.1. Study of frequency selective amplifier

15 FET CHARACTERISTICS & SOURCE FOLLOWER :

- 15.1. Study of static characteristics of an FET
- 15.2. Application as source follower

16 FET CHOPPER & V.V.R. (Voltage Variable Resistor)

- 16.1. Application as a Chopper
- 16.2. Application as Voltage Variable Resistor (VVR)

17 R.C. PHASE SHIFT OSCILLATOR :

- 17.1. Study of R.C. Phase Shift Oscillator

18 U.J.T. CHARACTERISTICS & RELAXATION OSCILLATOR:

- 18.1. Study of UJT Characteristics
- 18.2. Application of UJT as relaxation oscillator

Continue...

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

OMEGA ELECTRONICS