



OMEGA TYPE ETB-53 Experimental Training Board has been designed specifically to study the characteristics of a Field Effect Transistor. 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

To study the characteristics of Field Effect Transistor.

- 01 Measurement of a saturation current for zero gate bias I_{DSS} .
- 02 Plot the static drain characteristics of FET
 - 2.1 Drain Current V/s Drain Voltage (Drain or output) Characteristics for different fixed values of V_{GS}
 - 2.2 Drain Current V/s Gate Bias (Mutual or Transfer) Characteristics for different fixed values of V_{DS}
- 03 Show that FET work as VVR (voltage variable resistance).
- 04 Calculate the FET parameters (drain dynamic resistance r_d , mutual conductance g_m , and amplification factor μ) at a given operating point.

FEATURES

- The Board consists of the following built-in parts:
- 01 0 to 20V DC at 50mA, continuously variable Power Supply.
 - 02 0 to 12V DC at 50mA, continuously variable Power Supply.
 - 03 Two Digital Voltmeter DC 3½ Digit Having range of 0-20V.
 - 04 Digital Current meter DC 3½ Digit Having range of 0-20mA
 - 05 Field Effect Transistor.
 - 06 Adequate no. of other electronic components.
 - 07 Mains ON/OFF switch, Fuse and Jewel light.
 - 08 The unit is operative on 230VAC $\pm 10\%$ at 50Hz.
 - 09 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections /observation of waveforms.
 - 10 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

- 11 Weight : 2.700 Kg. (Approx.)
- 12 Dimension : W 340 x H 125 x D 210

LIST OF ACCESSORIES:

- 01 Patch cords 4 mm length 50cm Red.....06
- 02 Patch cords 4 mm length 5cm Black.....09

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

OMEGA ELECTRONICS