



**46960** Understanding Characteristics of MOSFET, FET & UJT is a compact, ready to use experiment board. This is useful for students to plot different characteristics of n-channel MOSFET, n-channel FET and UJT and to understand operation of these power electronics devices in various regions. Using this product student can also evaluate FET parameters (Drain resistance, Transconductance, and Amplification factor) & UJT parameters (Inter base resistance and intrinsic standoff ratio). In-built DC power supply, voltmeter and ammeter with DPM features make this product easy to operate and can be used as standalone system. Bread-board allows student to construct circuits using external components along with on-board resources

### Features

1. Generalized design
2. Standalone operation
3. Inbuilt fixed and variable power supply
4. Toggle switch for selection of variable power supply
5. Inbuilt Ammeter and Voltmeter
6. Bread board
7. Resistance bank
8. 10 turn potentiometer

### Object

1. To study and plot the Drain Characteristics of n channel MOSFET
2. To study and plot the Transfer Characteristics of n channel MOSFET
3. To study and plot the V-I characteristics of JFET
4. Evaluation of following parameters of JFET:
  - DC Drain resistance
  - Transconductance

- Amplification factor
5. To plot the VI characteristics of UJT
  6. Evaluation of following parameters of UJT:
    - Intrinsic Stand- off Ratio
    - Inter base resistance

### Technical Specifications

Mains Supply	: 90-230V, 50Hz
DC Fixed Power Supply	: -5V, +15V, +35V
DC Variable Power Supply	: 1.5V to 14 V 1.5V to 34V
Voltmeter	: 0-200V
Ammeter	: 0-200mA
<b>Bread Board</b>	
Dimension (mm)	: 175 x 61 x 10
Distribution strips	: 2
Distribution holes	: 200
Terminal Strips	: 1
Terminal holes	: 640
Resistor Bank	: M.F.R. 100E 1W (3 Nos.) M.F.R. 470E 1W (3 Nos.) M.F.R. 1K 1W(3 Nos.)

### Variable Resistances :

5 KW Ten turn Potentiometer	(1 No.)
10 KW Ten turn Potentiometer	(1 No.)
5 K Single turn Potentiometer	(1 No.)
Fuse	: 500 mA, slow blow
Dimensions (mm)	: 350 x D 280 x H 55

Note: Specifications are subject to change.