



An ISO 9001:2015 Co.

## MOSFET as a Switch

### Model : SE-140

**SINCOM SE-140 MOSFET as a Switch** is a useful trainer to study the operation of MOSFET switching characteristics in a simple experimental way.

### Features

- ❖ N Channel E type MOSFET with LED load in CS mode operates as a MOSFET Switching circuit
- ❖ N-Channel Enhancement type power MOSFET of TO-220 package on board
- ❖ LED Drain Load
- ❖ Variable DC Control voltage on board
- ❖ In-Built Fixed regulated DC Power Supply
- ❖ User friendly Design
- ❖ Very Easy for Operation
- ❖ Multi color Circuit Diagram is printed on the front panel of the white acrylic board
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- ❖ Facility to connect Digital Meters.
- ❖ Interconnections by 2mm high quality banana sockets and pins
- ❖ Maximum Test points to explore all the corners of experiment
- ❖ 1 Year Warranty

### Technical Specifications

- |                               |   |
|-------------------------------|---|
| ▪ AC Mains Power Supply       | : 230V $\pm$ 10%, 50Hz                                    |
| ▪ DC Power Supply             | : IC Regulated Fixed +12V/500mA                           |
| ▪ Transistor Type and Package | : N Channel Enhancement type MOSFET, TO-220 Package       |
| ▪ MOSFET Used                 | : IRF540/840  |
| ▪ MOSFET Configuration        | : Common Source (CS) mode                                 |
| ▪ Switching circuits          | : One   |
| ▪ DC Control voltage          | : Gate DC 0-12V variable, Drain DC 0-12V variable voltage |
| ▪ Load                        | : Resistive and LED                                       |
| ▪ Output Indicator            | : LED   |
| ▪ Max. Drain Source Voltage   | : 12 VDC  |
| ▪ Weight                      | : 2.0 kg (approx)   |
| ▪ Dimensions (mm)             | : L 220 x W 270 x H 110                                   |
| ▪ Interconnections            | : 2mm Banana sockets                                      |
| ▪ Operating Temperature       | : 0-50°C, 80% RH  |

### Learning Scope

- To study the MOSFET as a Switch.
- To Determine MOSFET ON & OFF Resistance.
- To study the input and output characteristics.

**Other Instruments Required :** Digital Multimeter

**Accessories Included :** Set of Patch Cord and Details Instruction Manual.