



An ISO 9001:2015 Co.

## Diode With & Without Biased Clamper (All Types)

### Model : SE-133

**SINCOM SE-133 Diode with & without Biased Clamper** is a useful trainer with PN Junction Diode, resistors, capacitors and variable positive/negative bias voltage to provide Diode Positive/Negative clamps with & without bias, with facility to vary the clamping level in a simple experimental way.

### Features

- ❖ Separate modules of Unbiased and Biased Clamper.
- ❖ Four Silicon Diodes DO-41 package
- ❖ Positive and Negative variable DC bias voltage
- ❖ AC Input on board
- ❖ Clamping level control
- ❖ Facility to select different types of clamps
- ❖ Facility to connect external AC Input
- ❖ 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 Oscilloscope and 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, -12V/500mA
▪ Clamper type	: Positive and Negative with/without Bias
▪ Diode Used and Package	: 4 Silicon Diodes 1N4007
▪ Bias Voltage	: DC Variable 0 to +12V and DC Variable 0 to -12V
▪ AC Input Voltage	: AC 12V, 50 Hz supply
▪ Output	: Positive and Negative variable clamping level
▪ Weight	: 2.0 kg (approx)
▪ Dimensions (mm)	: L 220 x W 270 x H 110
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-50 $^{\circ}$ C, 80% RH

### Learning Scope

- To Study Shunt Unbiased Positive Diode Clamper.
- To Study Shunt Unbiased Negative Diode Clamper.
- To Study Shunt Biased Positive Diode Clamper.
- To Study Shunt Biased Negative Diode Clamper.
- To Observe & Note change in Clamper O/P w.r.t. applied AC Input signal.

### Other Instruments Required :

Oscilloscope and Function Generator 1MHz.

### Accessories Included :

Set of Patch Cord and Details Instruction Manual.