



An ISO 9001:2015 Co.

## Varactor Diode Characteristics

### Model : SA-106

**SINCOM SA-106 Varactor Diode Characteristics** are useful to study the V-I characteristics of Varactor diode and note the change in capacitance offered for the applied reverse voltage. This trainer is simply designed to study the variation in junction capacitance of the varactor diode in a simple experimental way. The trainer is without meters and has the facility to connect the external analog or digital Voltmeter and Capacitance meter in the circuit.

### Features

- ❖ DO-41 Silicon Diodes package
- ❖ Low power Varactor Diode is provided
- ❖ Large variation in junction capacitance
- ❖ Current control resistor in series
- ❖ Facility to vary wide range of applied reverse voltage
- ❖ In-Built Variable regulated DC Power Supply
- ❖ Circuit Diagram printed in multi color on the front of the board
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- ❖ Facility to connect the external Digital/ Analog Voltmeter and Capacitance meter
- ❖ User friendly Designed
- ❖ Very Easy for Operation
- ❖ 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 variable 0V to +12V / 500mA
▪ Diodes Used	: Varactor Diode (01 No.)
▪ Current Controlling Resistor	: MFR 1K $\Omega$ , $\pm$ 5% in series
▪ Diode Package	: DO-41 Tape and Reel type
▪ Capacitance Ratio	: High
▪ Maximum Reverse Voltage	: 30V
▪ Power dissipation	: 1W maximum
▪ 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 the V- I characteristics of Varactor Diode.
- To Observe & Note the change in Capacitance C with respect to change in applied reverse Voltage across Varactor Diode.

**Other Instruments Required :** SINCOM Digital VI meter (DVI) : Model DVI-01 Range V-20V,I-20mA DC. Capacitance Meter or Digital Multimeter.

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