

Schottky Diode Characteristics

Model : SA-105

SINCOM SA-105 Schottky Diode Characteristics is useful to study the rectification characteristics of Schottky Diode for the applied high frequency sinusoidal input. The schottky Diode is low voltage drop, low power device which is widely used in different applications like a mixer, in radio frequency applications, and as a rectifier in power applications. The trainer is simply designed to plot the Schottky Diode characteristics and determine its parameters in a simple experimental way. The trainer is without meters and has the facility to connect the external analog or digital voltmeter and ammeter in the circuit.

Features

- ❖ Low power Schottky Diode in DO-41 package
- ❖ One Schottky Diode is provided
- ❖ Low forward voltage drop
- ❖ High operating Temperature range and High Operating frequency
- ❖ 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 Ammeter
- ❖ 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	: 230 \pm 10%, 50Hz
▪ DC Power Supply	: IC Regulated Variable 0V to +12V / 500mA
▪ Diodes Used	: One Schottky Diode-Si type
▪ Diode Package	: DO-41 Tape and Reel type
▪ Input Signal Frequency	: Sine wave 2MHz max
▪ Forward current	: 1A
▪ Operating Junction Temperature	: -65 to +125 $^{\circ}$ C
▪ Forward Voltage Drop	: 1.0 V @
▪ 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 characteristics of Schottkey Diode.
- To Study the rectification characteristics of Schottkey Diode with respect to change in Input Signal frequency upto 2MHz.

Other Instruments Required :

SINCOM Digital VI meter (DVI) : Model DVI-01 Range V-20V,I-20mA DC. Oscilloscope, Function Generator.

Accessories Included : Set of Patch Cords and Details Instruction Manual.