

LASER Diode Characteristics

Model : SA-107



SINCOM SA-107 LASER Diode Characteristics are useful to study the V-I characteristics of LASER diode in forward bias mode. The Laser Diodes are often used as an optical signal source in optical communications, as a laser pointer and basic laser sources widely used in Blu-ray players and barcode readers. The trainer is simply designed to study V-I characteristics and determine the parameters of the Laser diode in a simple experimental way. The trainer is without meters having facility to connect the external analog or digital voltmeter and ammeter in the circuit.

Features

- ❖ On Board 2 LASER Diodes are provided
- ❖ CAN type Red Color package
- ❖ Current controlling resistor in series
- ❖ Facility to vary wide range of applied DC input voltage
- ❖ In-Built Variable regulated DC Power Supply
- ❖ Easy to select the different Laser Diodes
- ❖ 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	: 230V \pm 10%, 50Hz
▪ DC Power Supply	: IC Regulated variable 0V to +12V / 500mA
▪ Total Diodes Used	: Two
▪ Diodes Used	: LASER Diodes
▪ Pin Count	: Two
▪ Diode Package	: CAN type- Hole mounting



An ISO 9001:2015 Co.

▪ Peak Wavelength	: 650nm
▪ Current Controlling Resistor	: MFR 1KΩ, ±5% in series
▪ Typical single supply voltage	: 3.3V
▪ Maximum Forward Current	: 25mA
▪ Operating Temperature range	: -10 to +55 ⁰ C
▪ Power Dissipation	: 5mW maximum
▪ Weight	: 2.0 kg (approx)
▪ Dimensions (mm)	: L 220 x W 270 x H 110
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-50 ⁰ C, 80% RH

Learning Scope

- To Study the Forward characteristics of Semiconductor LASER Diode.
- To plot light Vs Current of a LASER Diode.

Other Instruments Required

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

Accessories Included

Set of Patch Cord and Details Instruction Manual