

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 1K Ω , $\pm 5\%$ in series
- Typical single supply voltage : 3.3V
- Maximum Forward Current : 25mA
- Operating Temperature range : -10 to +55⁰c
- 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 : 0-50⁰C, 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