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SINC 

Sindhu ELECTRONICS & COMMUNICATIONS PVT. LTD.

Electronics Educational Trainer Kits

LASER Diode Characteristics with Digital Meters

Model : SA-107DM



SINCOM SA-107DM LASER Diode Characteristics with Digital meters is remarkable self contained trainer which is very 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 equipped with on board Digital voltmeter and Digital Ammeter.

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
- ❖ On Board 3^{1/2} Digit Digital 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
▪ Peak Wavelength	: 650nm

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|---------------------------------|---|
| ▪ 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 +55 ⁰ c |
| ▪ Power Dissipation | : 5mW maximum |
| ▪ Digital Voltmeter | : 0-20V |
| ▪ Digital Ammeter | : 0-20mA |
| ▪ Meter Display | : Red Color, 3 ^{1/2} Digit , LED Display |
| ▪ 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 : Nil

Accessories Included

Set of Patch Cord and Details Instruction Manual