

Diode as Thermistor Device

Model : SE-1014

SINCOM SE-1014 Diode as Thermistor Device is a simply designed trainer for studying the operation of a Diode as a thermo-resistive switching device to drives the Relay and DC LED load for the change in temperature Input.

Features

- ❖ DC LED load
- ❖ Diode as Temperature switching
- ❖ Wide Temperature Range
- ❖ External Electrical Heating System
- ❖ In-Built Fixed regulated DC Power Supply
- ❖ Presents a multi-color Circuit Diagram printed on the front panel of the white board
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- ❖ Interconnections by 2mm high quality banana sockets and pins.

Technical Specifications

▪ AC Mains Power Supply	: 230V $\pm 10\%$, 50Hz
▪ Fixed Regulated DC Power Supply	: +12V /500mA
▪ Temperature Sensor	: Diode wired with IC 555 and controller circuit
▪ Load	: LED
▪ Load Driver	: Relay SPDT
▪ Heating Source	: Electrical Heating system
▪ Temperature Range	: Upto 100°C
▪ Maximum Output Voltage	: 12V
▪ Weight	: 3.0 kg (approx)
▪ Dimensions (mm)	: L 220 x W 270 x H 110
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-100°C, 80% RH

Learning Scope

- To Study Diode as a temperature sensor act as a Thermo-resistive device using IC555 and relay driver circuit.
- To Study Effect of heating I/P on diode sensor and note the corresponding change in DC LED load.

Other Instruments Required :

Accessories Included : Electrical Heating System, Digital Temperature Indicator with sensor, Set of Patch Cords, Detail Instruction Manual.