Transistor as Temperature Sensor

Model : SE-1015

SINCOM SE-1015 Transistor as Temperature Sensor is a simply designed trainer for studying the operation of a Transistor as a thermo-resistive switching device to drives the Relay and DC LED load for the change in temperature Input.

Features

- ❖ DC LED load
- ❖ NPN Transistor 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 ±10%, 50Hz
▪ Fixed Regulated DC Power Supply	:	+12V /500mA
▪ Temperature Sensor	:	NPN Transistor 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^{0}C, 80% RH

Learning Scope

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

Other Instruments Required : Digital Multimeter

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

Subject to Change