



OPTO Coupler IC MCT2E Characteristics

Model : SA-127

SINCOM SA-127 OPTO Coupler IC MCT2E Characteristics is remarkable useful trainer to study Opto coupler IC MCT2E with in-built IR LED as an Optical Transmitter and Photo Transistor as an Optical Receiver with internal optical link wired with suitable resistive network at Transmitting and Receiving end. The trainer is simply designed to study the optical transmitter and receiver link and determine its various parameters in a simple experimental way. The trainer is without meters and has the facility to connect the external analog or digital voltmeter and ammeter in the circuit.

Features

- ❖ Industry Standard Dual-in line 6-pin package
- ❖ Opto coupler IC MCT2E wired with resistive network at input and output side
- ❖ Gallium arsenide infra-red LED as Opto Transmitter
- ❖ Silicon NPN phototransistor as Opto Receiver
- ❖ Fast response time and High photo sensitivity
- ❖ Variable DC Input signal link with resistive network
- ❖ Resistive load at output
- ❖ Current controlling resistor in Transmitter and Receiver side
- ❖ Facility to vary wide range of DC Input signal voltage
- ❖ In-Built Variable regulated DC Power Supply
- ❖ Multi color Circuit Diagram printed on the front of the white 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

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| ▪ AC Mains Power Supply | : 230V \pm 10%, 50Hz |
| ▪ DC Power Supply | : IC Regulated variable 0 to +12V/500mA |
| ▪ Opto Coupler Used | : IC MCT2E |
| ▪ Input Signal | : DC Input signal 0 to 5 V |
| ▪ Max. Collector Emitter Voltage | : 12V DC |
| ▪ Input Controlling Resistor | : MFR 1K Ω , \pm 5% |
| ▪ Output Load Resistor | : MFR 10K Ω , \pm 5% |
| ▪ Input Diode Forward Voltage | : 1.25V |
| ▪ On-State Collector Current | : 5mA |
| ▪ Weight | : 2.0 kg (approx) |
| ▪ Dimensions (mm) | : L 220 x W 270 x H 110 |



An ISO 9001:2015 Co.

- Interconnections : 2mm Banana sockets
- Operating Temperature : 0-50°C, 80% RH

Learning Scope

- To Study the characteristics of Opto-Coupler IC MCT2E.
- To Observe & Note Change in O/P Current & Voltage w.r.t. Change in applied I/P Voltage.

Other Instruments Required

SINCOM Digital Multi VI meter (DMVI) : Model DMVI-06 Range V_1 -20V, I_1 -20mA, V_2 -20V, I_2 -20mA DC

Accessories Included

Set of Patch Cord and Details Instruction Manual