

Monostable Multivibrator using Transistor

Model : SE-118

SINCOM SE-118 Monostable Multivibrator using Transistor is a remarkable useful trainer with two CE mode NPN Transistors and RC positive feedback to provide Monostable Multivibrator Output for the applied trigger input with facility to vary the Switching Time in a simple experimental way.

Features

- ❖ Silicon NPN BJT of TO-92 package on board
- ❖ Two NPN Transistor as CE switching Amplifier with resistive capacitive feedback elements.
- ❖ Resistive Identical collector load
- ❖ Capacitor Bank to vary output switching time
- ❖ External Trigger Input
- ❖ In-Built Fixed regulated DC Power Supply
- ❖ User friendly Design
- ❖ Very Easy for Operation
- ❖ Multi color Circuit Diagram is printed on the front panel of the white acrylic board
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- ❖ Facility to connect external Trigger Input, Oscilloscope and Digital Meters.
- ❖ 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 Fixed +12V/300mA
▪ Multivibrator type	: Monostable (One shot)
▪ Transistor Type and Package	: Two BJT Silicon NPN BC548, TO-92 Package
▪ Amplifier Type	: Base Biased CE Switching Amplifier
▪ Feedback Elements	: Two Resistors and Two Capacitors
▪ Collector load	: Identical Resistive load of 10K Ω
▪ External Trigger Input	: Square Pulse @ 100Hz-1KHz, 5Vpp
▪ Output waveform	: Square Pulse one shot output
▪ Output Switching Frequency	: Variable from @ 100 Hz to 10KHz
▪ Switching Time Control by	: One Resistor and two Capacitors
▪ Max. Collector Emitter Voltage	: 12 VDC
▪ Weight	: 2.0 kg (approx)
▪ Dimensions (mm)	: L 220 x W 270 x H 110
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-50 $^{\circ}$ C, 80% RH



An ISO 9001:2015 Co.

Learning Scope

- To Study operation of Monostable (One shot or Univibrator) Multivibrator using transistor.
- To Observe & Note the waveforms at the base & collector of two transistors w.r.t. applied trigger I/P.
- To Observe & Note Change in Switching Times w.r.t. change in R C feedback Components & time period of applied trigger I/P.
- Compare the Theoretical & Practical values.

Other Instruments Required : Oscilloscope and Function Generator 1MHz.

Accessories Included : Set of Patch Cord and Details Instruction Manual.