



An ISO 9001:2015 Co.

BJT as a Switch

Model : SE-139

SINCOM SE-139 BJT as a Switch is a useful trainer to study the operation of BJT switching characteristics and application as relay switching with reset facility in a simple experimental way.

Features

- ❖ Two different circuits BJT as a Switch.
- ❖ Silicon NPN BJT of TO-92 package on board
- ❖ BJT Switching Characteristics in CE mode
- ❖ BJT with Relay driver as switching application
- ❖ LED and Buzzer Indicator
- ❖ Trigger and Reset Push switch
- ❖ DC Input voltage on board
- ❖ 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 Function Generator, 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/500mA
▪ Transistor Type and Package	: Two BJT Silicon-NPN BC548, TO-92 Package
▪ Transistor Configuration	: CE mode
▪ Switching circuits	: 2 (Characteristics and Application)
▪ DC Input voltage	: Variable 0-12V
▪ Trigger Switch	: One Push-to-ON
▪ Reset Switch	: One Push-to-Off
▪ Load	: Resistive and LED
▪ Output Indicator	: LED and Buzzer
▪ 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°C, 80% RH



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Learning Scope

- To Study BJT as a switch circuit. To Observe & Note the various timings w.r.t. applied I/P Square signal or DC Variable input signal.
- To Determine ON & OFF Resistance of transistor. To study the input and output characteristics.
- To Study the Implementation of BJT as a Switch as Relay driver in real.

Other Instruments Required : Oscilloscope, Digital Multimeter and Function Generator 1MHz.

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