



## Boot-Strap Sweep Generator

### Model : SE-127

**SINCOM SE-127 Boot-strap Sweep Generator** is a useful trainer with two NPN Transistors in CE mode wired as to produce Boot-strap voltage time base generator sweep Output for the applied trigger Input signals in a simple experimental way.

### Features

- ❖ Silicon NPN BJT of TO-92 package on board
- ❖ Two NPN Transistors BC548 in CE mode wired with resistors, inductors and capacitors to produce Voltage Time Base Generator (Sweep) outputs using Boot-Strap method.
- ❖ Resistive load
- ❖ Wide range of Voltage Time base Sweep output
- ❖ Facility to connect square wave Input signal
- ❖ 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 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

|                                  |                                             |
|----------------------------------|---------------------------------------------|
| ▪ DC Power Supply                | : IC Regulated Fixed +12V/300mA             |
| ▪ Transistor Type and Package    | : Two BJT Silicon NPN BC548, TO-92 Package  |
| ▪ Amplifier Type                 | : CE Switching Amplifier                    |
| ▪ Feedback Elements              | : RLC network                               |
| ▪ External Trigger Input         | : Square Input                              |
| ▪ Collector load                 | : Resistive load of 10KΩ                    |
| ▪ Output waveform                | : Boot-strap Voltage Time base Sweep signal |
| ▪ Max. Collector Emitter Voltage | : 12 VDC                                    |
| ▪ AC Mains Power Supply          | : 230V ±10%, 50Hz                           |
| ▪ 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                            |

### Learning Scope

- To Study operation of transistor Voltage time base (sweep) generator using Boot-Strap method.
- To Observe & Note Sweep time (Ts) & Restoration time TR. To Observe & Note Voltage Time Base (Sweep) waveforms w.r.t. change in Trigger I/P.

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

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