



An ISO 9001:2015 Co.

## Voltage Tripler and Quadrupler

### Model : SB-123

**SINCOM SB-123 Voltage Tripler and Quadrupler** is very useful simply designed trainer to study the operation and output voltages of Voltage Tripler and Quadrupler circuit 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

- ❖ Diode and Capacitor based single circuit
- ❖ Voltage Tripler circuit uses three Diodes and three Capacitors
- ❖ Voltage Quadrupler circuit uses four Diodes and four Capacitors
- ❖ Triple and Quadruple DC Output voltage
- ❖ Step Down Transformer as an AC Input source
- ❖ In-Built AC Input Power Supply
- ❖ User friendly Design and Very Easy for Operation
- ❖ Multi color Circuit Diagram is screen printed on the front of the white color acrylic board
- ❖ Enclosed in an attractive, light weight, High Quality, Imported Poly Coated Pine Wooden cabinet
- ❖ Facility to connect external Digital/Analog Voltmeter and Ammeter
- ❖ 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
▪ AC Input Supply $V_i$	: 12V AC, 50Hz
▪ DC Output Voltage $V_o$	: + 36V DC Triple and +48VDC Quadrupole, $\pm 20\%$
▪ Circuit Types	: Cascaded Half Wave
▪ AC Input Source	: Step Down Transformer 12V-0V/500mA/50Hz
▪ Diodes Used	: Four Silicon PN Junction Diodes 1N4007
▪ Capacitors Used	: Four Electrolytic Capacitors 100 $\mu$ F -1000 $\mu$ F/100V
▪ 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

### Learning Scope

- To Study the Operation of Voltage Tripler circuit. To Observe & Note Triple DC O/P Voltage w.r.t. AC I/P Voltage  $V_m$ .
- To Study the Operation of Voltage Quadrupler circuit. To Observe & Note Quadrupole DC O/P Voltage w.r.t. AC I/P Voltage  $V_m$ .

### Other Instruments Required

SINCOM Digital V V meter (DVV) : Model DVV-01 Range  $V_1$ -20V,  $V_2$ -20V DC, Digital Multimeter

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