



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

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|-------------------------|---|
| ▪ AC Mains Power Supply | : 230V \pm 10%, 50Hz |
| ▪ AC Input Supply Vi | : 12V AC, 50Hz |
| ▪ DC Output Voltage Vo | : + 36V DC Triple and +48VDC Quadruple, \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 μ F -1000 μ 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°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 Vm.
- To Study the Operation of Voltage Quadrupler circuit. To Observe & Note Quadruple DC O/P Voltage w.r.t. AC I/P Voltage Vm.

Other Instruments Required

SINCOM Digital V V meter (DVV) : Model DVV-01 Range V₁-20V, V₂-20V DC, Digital Multimeter

Accessories Included : Set of Patch Cord and Details Instruction Manual