



An ISO 9001:2015 Co.

HW/FW Voltage Doublers

Model : SB-122

SINCOM SB-122 HW/FW Voltage Doublers is very useful simply designed trainer to study the operation and output voltages of Half Wave (HW) and Full Wave (FW) types Voltage Doublers 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

- ❖ Separate modules of Half wave and Full wave Voltage Doublers circuit
- ❖ Two Diodes and Two capacitors based HW doublers circuit
- ❖ Two Diodes and Two capacitors based FW doublers circuit
- ❖ Double 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 Vi | : 12V AC, 50Hz |
| ▪ DC Output Voltage Vo | : + 24V DC, \pm 20% |
| ▪ Circuit Types | : Half Wave and Full Wave type |
| ▪ 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/50V |
| ▪ 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 Half wave Voltage Doublers circuit. To Observe & Note the (Double) DC O/P Voltage w.r.t. AC I/P Voltage Vm.
- To Study the Operation of Full wave Voltage Doublers circuit. To Observe & Note the (Double) 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