

IC 78XX and 79XX as Positive & Negative Voltage Regulator

Model : SB-119

SINCOM SB-119 IC 78XX and IC 79XX as Positive & Negative Voltage Regulator is very useful simply designed trainer to study the operation and line regulation characteristics of IC 7805 and IC7905 as a Positive and Negative Voltage Regulator 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

- ❖ User friendly Design
- ❖ TO220 three pin IC Package
- ❖ IC LM7805 as a positive voltage regulators
- ❖ IC LM7905 as a negative voltage regulators
- ❖ +5V and -5V Two Fixed Regulated DC Output voltage
- ❖ IC includes Current limiting, thermal over load protection and safe operating area protection
- ❖ Low Output voltage Ripples and High operating Temperature range
- ❖ Variable Unregulated DC Input source using Center Tap Full Wave Rectifier and Capacitor Filter circuit
- ❖ Separate Facility to vary wide range of applied DC Input voltages for IC7805 and IC7905
- ❖ In-Built Variable regulated DC Power Supply
- ❖ Very Easy for Operation
- ❖ Multi color Circuit Diagram is screen printed on the front of the white board
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Imported 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
■ DC Power Supply	: IC Regulated Variable 0V to \pm 12V/500mA
■ Transformer ratings	: Center tap Step Down 12V-0V-12V/500mA/50Hz
■ Rectifier and Filter	: Full Wave Bridge Rectifier with Capacitor filter
■ Unregulated DC Input Vin1	: Variable 0V to +12V DC Input for IC7805
■ Unregulated DC Input Vin2	: Variable 0V to -12V DC Input for IC7905
■ Regulated DC Outputs Vo	: +5V and -5V
■ Input Voltage Control	: By two 10K Ω Potentiometers
■ IC Used	: IC LM7805 positive and 7905 negative Voltage regulator
■ IC Package	: 3 Pin TO-220 Package
■ IC Output Current	: 0.5A Max
■ Load Resistor	: 10K Ω Resistive Load
■ Regulation type	: Line Regulation
■ Weight	: 2.0 kg (approx)



An ISO 9001:2015 Co.

- 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 IC 7805 as a Positive voltage regulator. Compare theoretical & Practical values.
- To Study IC 7905 as a Negative voltage regulator. Compare theoretical & Practical values.
- To Study Change in O/P Voltage w.r.t. change in I/P Voltage with Load RL constant (Line Regulation)

Other Instruments Required

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

Accessories Included : Set of Patch Cord and Details Instruction Manual