

# IC 723 as Positive Low and High Voltage Regulator

Model : SB-115



**SINCOM SB-115 IC723 as Positive Low and High Voltage Regulator** is a Two-In-One simply designed trainer very useful to study the operation, line and load regulation characteristics of IC723 as Positive Low and High Voltage Regulator with variable load 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
- ❖ Two separate modules of IC723 as a Positive Low and High Voltage Regulator circuits
- ❖ IC723 wired with Resistive and Capacitive network as a linear Positive Low and High Voltage Regulator
- ❖ Adjustable Low Regulated DC Output voltage between 2V to 7V
- ❖ Adjustable High Regulated DC Output voltage between 7V to 27V
- ❖ Output Voltage Control by two separate Potentiometers
- ❖ High operating Temperature range
- ❖ Variable Resistive Load
- ❖ Facility to vary wide range of applied DC Input voltage
- ❖ Facility to vary regulated Output DC Voltage
- ❖ 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 +40V/500mA



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▪ Unregulated Low DC Input Vin	: 0 to +12V DC Input for Low Voltage
▪ Unregulated High DC Input Vin	: 0 to +40V DC Input for High Voltage
▪ Regulated DC Low Output Vo	: Adjustable low voltage between 2V to 7V
▪ Regulated DC High Output Vo	: Adjustable high voltage between 7V to 27V
▪ Output Voltage Control	: By two separate 10KΩ Potentiometer
▪ IC Used	: IC LM723 Monolithic Programmable IC Voltage regulator
▪ Total ICs provided	: Two IC LM723
▪ IC Package	: 14 Pin DIP Plastic Package
▪ IC Output Current	: 150mA Max without external pass transistor
▪ Load Resistor	: Two Separate 10KΩ Variable Resistive Load
▪ Regulation type	: Line and Load Regulation
▪ Weight	: 3.0 kg (approx)
▪ Dimensions (mm)	: L 245 x W 320 x H 115
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-50°C, 80% RH

### Learning Scope

- To Study IC 723 as (adjustable) Positive Low voltage regulator. Compare theoretical & Practical values.
- To Study IC 723 as (adjustable) Positive High 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)
- To Study Change in O/P Voltage w.r.t change in Load RL with I/P voltage constant (Load Regulation)

### Other Instruments Required

SINCOM Digital Multi VI meter (DMVI) : Model DMVI-03 Range V<sub>1</sub>-20V, I<sub>1</sub>-20mA, V<sub>2</sub>-20V, I<sub>2</sub>-200mA DC

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