

# IC 723 as Positive Low Voltage Regulator with Digital Meters

## Model : SB-112DM

**SINCOM SB-112DM IC723 as Positive Low Voltage Regulator** with Digital meters is a remarkable self contained simply designed trainer useful to study the operation, line and load regulation characteristics of IC723 as Positive Low Voltage Regulator with variable load in a simple experimental way. The trainer is equipped with on board Digital voltmeter & Digital Ammeter

### Features

- ❖ User friendly Design
- ❖ IC723 wired with Resistive and Capacitive network as a linear Positive Low Voltage Regulator
- ❖ Adjustable Regulated DC Output voltage between 2V to 7V.
- ❖ Output Voltage Control by Potentiometer
- ❖ 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 printed on the front panel of the white board.
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- ❖ On Board 3<sup>1/2</sup> Digit Digital 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 +12V/500mA
▪ Unregulated DC Input Vin	: 0 to 12V DC Input
▪ Regulated DC Output Vo	: Adjustable between 2V to 7V
▪ Output Voltage Control	: By 10K $\Omega$ Potentiometer at Reference and Error amplifier IN
▪ IC Used	: IC LM723 Monolithic Programmable IC Voltage regulator
▪ IC Package	: 14 Pin DIP Plastic Package
▪ IC Output Current	: 150mA Max without external pass transistor
▪ Load Resistor	: 10K $\Omega$ Variable Resistive Load
▪ Regulation type	: Line and Load Regulation
▪ Total Digital Meters	: 03 (2 Voltmeter and 1 Ammeter)
▪ Digital Voltmeter	: 0-20V (2 No.)
▪ Digital Ammeter	: 0-20mA (1No.)



An ISO 9001:2015 Co.

▪ Meter Display	: Red Color, 3 <sup>1/2</sup> Digit , LED Display
▪ Weight	: 2.0 kg (approx)
▪ Dimensions (mm)	: L 220 x W 270 x H 110
▪ Interconnections	: 2mm Banana sockets
▪ Operating Temperature	: 0-50 <sup>0</sup> C, 80% RH

### Learning Scope

- To Study IC 723 as (adjustable) Positive low 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 : Nil

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