

IC 723 as Negative Voltage Regulator with Digital Meters

Model : SB-114DM

SINCOM SB-114DM IC723 as Negative 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 Negative 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, Capacitive and PNP Transistor network as a linear Negative Low Voltage Regulator
- ❖ Adjustable Regulated Negative DC Output voltage between -2V to -7V.
- ❖ Output Voltage Control by two Resistors
- ❖ High operating Temperature range
- ❖ Variable Resistive Load
- ❖ Facility to vary wide range of applied negative DC Input voltage
- ❖ Facility to vary negative regulated Output DC Voltage
- ❖ In-Built Variable regulated negative 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^{1/2} 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 Two fixed Resistors at 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 Ω Variable Resistive Load
▪ Regulation type	: Line and Load Regulation
▪ Total Digital Meters	: 03 (2 Voltmeter and 1 Milliammeter)
▪ Digital Voltmeter	: 0-20V (2 No.)
▪ Digital Ammeter	: 0-20mA (1No.)
▪ Meter Display	: Red Color, 3 ^{1/2} Digit , LED Display



An ISO 9001:2015 Co.

- 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 IC 723 as (adjustable) Negative 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

SINCOM Digital Multi VI meter (DMVI) : Model DMVI-03 Range V₁-20V, I₁-20mA, V₂-20V, I₂-200mA DC

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