

JFET Characteristics with Digital Meters

Model : SA-117DM



SINCOM SA-117DM JFET Characteristics with Digital meters is comprehensive remarkable trainer is useful to study Drain and Transfer characteristics of JFET. The JFET is widely used as a switching and an amplification device in many electronics circuits. The trainer is simply designed to plot its characteristics and determine the various operational parameters in a simple experimental way. The trainer is equipped with on board Digital voltmeter and Digital Ammeter.

Features

- ❖ N-Channel JFET of TO-72 Metal Transistor package is provided
- ❖ Low Power, High Frequency Device
- ❖ Individual control of Gate and Drain Input DC voltages
- ❖ Current controlling resistors in Gate and Drain
- ❖ In-Built Variable regulated DC Power Supply
- ❖ Multi color Circuit Diagram printed on the front 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
- ❖ User friendly Designed
- ❖ Very Easy for Operation
- ❖ Interconnections by 2mm high quality banana sockets and pins
- ❖ Maximum Test points to explore all the corners of experiment
- ❖ 1 Year Warranty

Technical Specifications

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| ▪ AC Mains Power Supply | : 230V ±10%, 50Hz |
| ▪ DC Power Supply | : Two Nos. Variable ±12V/500mA |
| ▪ Gate-Source Voltage V_{GG} | : IC Regulated variable 0V to -12V/500mA |
| ▪ Drain-Source Voltage V_{DD} | : IC Regulated variable 0V to +12V/500mA |
| ▪ Transistor Package | : TO-72 |
| ▪ JFET Type | : N Channel Depletion |
| ▪ JFET Used | : BFW10 |
| ▪ Pin Count | : 4 Gate, Drain Source and Substrate |



An ISO 9001:2015 Co.

- Gate Current Controlling Resistor : MFR 100K Ω , $\pm 5\%$
- Drain Current Controlling Resistor : MFR 10K Ω , $\pm 5\%$
- Max. Drain-Source Voltage V_{DS} : 30V DC
- Max. Drain-Gate Voltage V_{DG} : 30V DC
- Reverse Gate-Source Voltage V_{GSR} : -30V DC
- Forward Gate Current I_{GF} : 10mA DC
- Operating Junction Temperature : -65 to +150 $^{\circ}$ C
- Total Digital Meters : 03 (2 Voltmeter and 1 Ammeter)
- Digital Voltmeters : 0-20V and 0-20V (Two Nos.)
- Digital Ammeter : 0-20mA (One No.)
- Meter Display : Red Color, 3 $^{1/2}$ 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 $^{\circ}$ C, 80% RH

Learning Scope

- To Study the Drain characteristics of JFET.
- To Study the Transfer characteristics of JFET.
- To Determine VGS Cut-off Voltage of given JFET.

Other Instruments Required : Nil

Accessories Included : Set of Patch Cord and Details Instruction Manual