

UJT as a Relaxation Oscillator

Model : SE-115



SINCOM SE-115 UJT as a Relaxation Oscillator is a useful trainer to study the concept and operation of UJT as a Relaxation Oscillator with different resistors and capacitor bank to produce multiple frequency outputs in a simple experimental way.

Features

- ❖ UJT of TO-18 metal package transistor
- ❖ UJT circuit of a RC component bank at emitter
- ❖ Current controlling resistors in Base-1 and Base-2
- ❖ Wide range of relaxation oscillator frequencies
- ❖ RC Bank to provide different output frequency signals
- ❖ Facility to note different signals at Emitter and Base 2.
- ❖ In-Built Fixed regulated DC Power Supply
- ❖ User friendly Design
- ❖ Very Easy for Operation
- ❖ Multi color Circuit Diagram is printed on the front panel of the white board
- ❖ Enclosed in an attractive, light weight, High Quality, Poly Coated Imported Pine Wooden cabinet
- ❖ Facility to connect external Oscilloscope and Digital Meters.
- ❖ 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 Fixed $+12V/300mA$
▪ UJT Type and Package	: UJT 2N2646 Silicon PN Uni-Junction Transistor, TO-18
▪ Intrinsic Standoff Ration η	: 0.56 -0.75 ($V_{B2B1}=10V$)
▪ Emitter control	: RC bank



An ISO 9001:2015 Co.

▪ Load type	: Resistive 1KΩ.
▪ Output Control by	: Two resistors and two capacitors
▪ Output Frequencies	: Wide variable in KHz.
▪ Max. Base 2-Base-1 Voltage	: 12 VDC
▪ 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 operation of UJT as Relaxation oscillator Circuit.
- To Study waveforms at Capacitor, Base1 & Base2.
- To Observe & Note Change in Frequency/Time Period of Oscillation w.r.t. change in R & C connected at Emitter of UJT.
- Compare the Theoretical & Practical values.

Other Instruments Required : Digital Multimeter and Oscilloscope

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