Hartley Oscillator using JFET

Model : SE-142

SINCOM SE-142 Hartley Oscillator using JFET is a useful trainer to study the concept and operation of Hartley Oscillator with LC positive feedback to generate RF Output Frequency using JFET with facility to select multiple radio frequencies in a simple experimental way.

Features

- N Channel JFET circuit of voltage divider biased CS Amplifier with LC Feedback elements.
- N-Channel JFET of TO-72 package on board
- Two Inductors and one Capacitor Feedback components
- Capacitor Bank to provide Two output frequency in RF range.
- Facility to select the two output frequencies.
- 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 ±10%, 50Hz
DC Power Supply	: IC Regulated Fixed +12V/300mA
Transistor Type and Package	: N-Channel JFET BFW10, TO-72 Package
Amplifier Type	: JFET CS Amplifier with voltage divider bias
Feedback Type	: Positive
Feedback Elements	: Two Inductors and One Capacitor
Output Control	: By two capacitors

Office : 8, Shantiniketan Colony, Pratap Nagar, Nagpur- 440 022 (MS) INDIA, Phone: 91-712-2287174, 2293303
Mobile : 09372153411, E-mail: info@sincomindia.com, sincom22@hotmail.com, Web: www.sincomindia.com

- Output Frequencies : Two RF O/Ps in MHz
- Max. Drain Source 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^{0}C, 80% RH

Learning Scope

- To Study operation of Hartley Oscillator using JFET Circuit.
- To Determine the Quiescent Operating Point of Transistor.
- To Observe & Note Change in Frequency of Oscillation w.r.t. change in feedback elements.
- Compare the Theoretical & Practical values.

Other Instruments Required : Digital Multimeter and Oscilloscope

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

Subject to Change