



Armstrong Oscillator

Model : SE-107

SINCOM SE-107 Armstrong Oscillator (Meissner Oscillator) is a useful trainer to study the concept and operation of Armstrong Oscillator with LC positive feedback to generate RF Output Frequency using BJT with facility to select multiple radio frequencies in a simple experimental way.

Features

- ❖ BJT Transistor circuit of a self bias CE Amplifier mode with LC Feedback elements.
- ❖ Two Inductor and Two Capacitors 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

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| ▪ AC Mains Power Supply | : 230V \pm 10%, 50Hz |
| ▪ DC Power Supply | : IC Regulated Fixed +12V/300mA |
| ▪ Transistor Type and Package | : BJT Silicon-NPN BC548, TO-92 Package |
| ▪ Amplifier Type | : BJT Single Stage CE Amplifier in a Self Bias mode |
| ▪ Feedback Type | : Positive |
| ▪ Feedback Elements | : Two Inductors and Two Capacitors |
| ▪ Output Control | : By two capacitors |
| ▪ Output Frequencies | : Two RF O/Ps in MHz |
| ▪ Max. Collector Emitter 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 Armstrong Oscillator 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.