

Class C Amplifier

Model : SD-107

SINCOM SD-107 Class-C Amplifier is simply designed trainer for the purpose to study the concept, operation, Frequency response and determine the Bandwidth, Voltage gain and other parameters of a Class-C Amplifier in a simple experimental way.

Features

- ❖ User friendly Design
- ❖ BJT NPN BC548 with Self base biasing and Output coupling Transformers operates as a Class-C amplifier circuit
- ❖ Silicon NPN BJT of TO-92 package on board
- ❖ Narrow Bandwidth AF Amplifier
- ❖ Output Coupling Transformer
- ❖ Resistive Output Load
- ❖ Input and Output Coupling Capacitors
- ❖ In-Built Fixed regulated DC Power Supply
- ❖ 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 Function Generator and Oscilloscope
- ❖ Interconnections by 2mm high quality banana sockets and pins
- ❖ Maximum Test points to explore all the corners of experiment
- ❖ 1 Year Warranty

Technical Specifications

▪ DC Power Supply	: IC Regulated Fixed +12V/500mA
▪ Amplifier Type	: Class-C Amplifier
▪ Transistor Type and Package	: Bi-Polar Silicon-NPN BC548, TO-92 Package
▪ Transistor Configuration	: CE mode
▪ Biasing Method	: Fixed Bias
▪ BJT Junction Voltage	: 0.7V
▪ Max. Collector Emitter Voltage	: 12 VDC
▪ Emitter Base Voltage V_{BE}	: 5V
▪ Output Coupling Transformer	: 6V AF Driver Transformer
▪ Input Output Coupling Capacitors	: Two No. Electrolytic type
▪ Output Load	: 10KΩ Fixed Resistive Load
▪ Input Signal Type	: Sine wave
▪ Max. Input Frequency Range	: 60Hz-500KHz approx.
▪ Output Frequency Response	: 1KHz-15KHz approx.
▪ AC Mains Power Supply	: 230V ±10%, 50Hz
▪ Weight	: 2.0 kg (approx)



An ISO 9001:2015 Co.

- 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 Class-C Power Amplifier circuit.
- To Observe & Note change in output w.r.t. change in I/P Frequency.
- To Plot frequency response & To Determine Resonance frequency, 3-dB Bandwidth and effective Q, Voltage Gain of class-C Power amplifier

Other Instruments Required : Oscilloscope, Function Generator 1MHz.

Accessories Included : Set of Patch Cord and Details Instruction Manual