



46711 is a learning platform which is very useful for Students to understand the concept of DC to DC chopper on various load configurations. PET-470 is provided with various devices like MOSFET, IGBT, Transistor & SCR.

Object

1. Study PWM circuit.
2. Study MOSFET based Step Down Chopper with R load.
3. Study MOSFET based Step Down Chopper with RL load.
4. Study MOSFET based Step down Chopper with Motor load.
5. Study IGBT based Step Down Chopper with R load.
6. Study IGBT based Step Down Chopper with RL load.
7. Study IGBT based Step down Chopper with Motor load.
8. Study Transistor based Step Down Chopper with R load.
9. Study Transistor based Step Down Chopper with RL load.
10. Study Transistor based Step down Chopper with Motor load.
11. Study SCR based Step Down Chopper with R load.
12. Study SCR based Step Down Chopper with RL load.
13. Study SCR based Step down Chopper with Motor load.

Features

1. Built in DC Power Supply
2. On board PWM circuit
3. On board MOSFET, IGBT, Transistor & SCR
4. Test points provided to check outputs at different blocks
5. DC motor 12V 100mA with 100 RPM as load
6. Easy to operate and understand
7. Sockets provided to make different connections

Technical Specifications

The Board consists of the following built in parts

1. On board PWM circuit : Triangular Comparator circuit
2. Frequency variation : 27 Hz to 5 KHz (approx.)
3. PWM variation : 0-90%
4. DC Geared motor : 12V/ 0.1A, 100 RPM
5. Interconnections : 4 mm sockets
6. MOSFET : MOSFET IRF830, 55V,49A
7. IGBT : IGBT G4BC20S, 600V, 10A
8. Transistor : Transistor TIP122, 100V,5A
9. SCR : SCR TYN 612, 600 V, 12A
10. Test points : 2 nos
11. Mains Supply : 230V AT 50 Hz
12. Good Quality, reliable safety Shrouded sockets are provided at appropriate places on panel for connections/observation of waveforms.
13. Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
14. Weight : 2.60 Kg. (Approx.)
15. Dimension : W 340 x H 125x D 210 .

Accessories Included

- 01 Patch cords 4mm length 50CM Red ----- 10
- 02 Patch cords 4mm length 50CM black ----- 10

Other Apparatus Required:

1. Dual trace CRO 20MHz

Note: Specifications are subject to change.