



OMEGA TYPE PET-470 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

- 01 Study PWM circuit.
- 02 Study MOSFET based Step Down Chopper with R load.
- 03 Study MOSFET based Step Down Chopper with RL load.
- 04 Study MOSFET based Step down Chopper with Motor load.
- 05 Study IGBT based Step Down Chopper with R load.
- 06 Study IGBT based Step Down Chopper with RL load.
- 07 Study IGBT based Step down Chopper with Motor load.
- 08 Study Transistor based Step Down Chopper with R load.
- 09 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

- 01 Built in DC Power Supply
- 02 On board PWM circuit
- 03 On board MOSFET, IGBT, Transistor & SCR
- 04 Test points provided to check outputs at different blocks
- 05 DC motor 12V 100mA with 100 RPM as load
- 06 Easy to operate and understand
- 07 Sockets provided to make different connections

Technical Specifications

The Board consists of the following built in parts

- 01 On board PWM circuit : Triangular Comparator circuit
- 02 Frequency variation : 27 Hz to 5 KHz (approx.)
- 03 PWM variation : 0-90%
- 04 DC Geared motor : 12V/ 0.1A, 100 RPM
- 05 Interconnections : 4 mm sockets
- 06 MOSFET : MOSFET IRF830, 55V,49A
- 07 IGBT : IGBT G4BC20S, 600V, 10A
- 08 Transistor : Transistor TIP122, 100V,5A
- 09 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 : W340 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:

- 01 Dual Trace CRO 20MHz OMEGA TYPE CRO-20

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS