



46942 is a learning platform which is very useful for Students to understand the concept of DC to DC chopper on various load configuration. 46942 is provided with various devices like MOSFET, IGBT, Transistor & SCR.

Features

1. Built in Power Supply
2. On board PWM circuit
3. On board MOSFET, IGBT, Transistor & SCR assembly
4. Test points provided to check the outputs at different blocks
5. Easy to operate and understand
6. Sockets provided to make different connections

Object

Study of:

1. PWM circuit.
2. MOSFET based Step Up Chopper with R load.
3. MOSFET based Step Up Chopper with RL load.
4. IGBT based Step Up Chopper with R load.
5. IGBT based Step Up Chopper with RL load.
6. Transistor based Step Up Chopper with R load.
7. Transistor based Step Up Chopper with RL load.
8. SCR based Step Up Chopper with R load.
9. SCR based Step Up Chopper with RL load.

Technical Specifications

On board PWM circuit	:	Triangular wave comparator scheme
Frequency variation	:	27 Hz to 5 KHz (approx.)
PWM variation	:	0-50%
Interconnections	:	2 mm sockets
MOSFET	:	MOSFET IRFZ44N, 55 V, 49 A
IGBT	:	IGBT G4BC20S, 600 V, 10 A
Transistor	:	Transistor TIP122, 100 V, 5 A
SCR	:	SCR TYN 616, 600 V, 16 A
Test points	:	4 nos
Mains Supply	:	220V/110V; 50 Hz / 60Hz
Dimensions (mm)	:	W 420 x D 255 x H 100
Weight	:	1 Kg. (approximately)
Operating Conditions	:	0-40oC, 85% RH
Included Accessories	:	2mm Patch cords (Red) 16"-1 no. 2mm Patch cords (Black) 16"-1 no. 2mm Patch cords (Blue) 16"-8 nos. Mains cord-1 no.

Optional:

1. Simtel Power Electronics Simulation Software

Note: Specifications are subject to change.