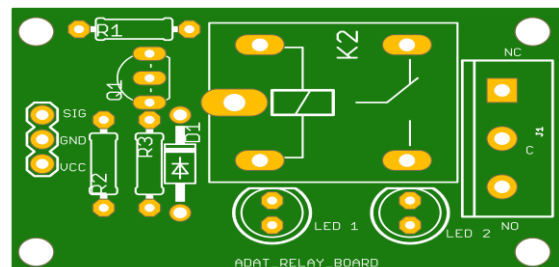
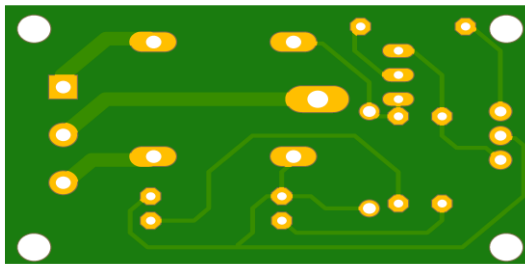


# 5V-10A ACTIVE HIGH 1-CHANNEL RELAY BOARD

## MODULE

**Description:** - This is a single channel 5V relay module. This has single 5V DC relay. The maximum current rating for the contacts of this relay is 10 A. Thus, any load that withstands maximum current of 10 A can be connected to this relay module. This is an active high relay module as the relay works when an active high signal is applied on its signal input. The switching is done by the BC547 NPN transistor. The top and bottom footprint of the PCB are shown below.



**Working:** - The relay of the circuit uses the current supply for opening or closing switch contacts. The overall circuit works when an active high signal is applied on the SIG pin of the PCB. This PCB has three inputs which are VCC, GND and SIG. Input control signal can be applied through any controller boards like Arduino, Node MCU etc. This PCB has three outputs which are NC, Common and NO. These pins are output of the Relay. Any AC or DC load can be connected to these outputs. This PCB has two LEDs, one is red and another is green. If the board receives power, then red LED is on and if the relay is activated then the green LED is on

### Application: -

- Used in over voltage/under voltage protection system
- Mains Switching
- Speed control of motors through start-delta converters
- Automatic control electrical appliances
- Electrical isolation in between high & low power sources
- AC voltage load switching using less voltage DC
- Delivery of Isolated power
- Switching with High Current

### Specifications: -

- Voltage supply ranges from 3V – 5V DC
- Quiescent current is 2mA. Once the relay is active then the current is ~70mA
- The AC range of the Relay is 10A 125VAC to 10A 250VAC
- The AC range of the Relay is 10A 30VDC to 10A 125VDC
- The dimension of this PCB is – 4.6 × 2.7 × 1.2 cm (LxWxH) and Weight – 15 gm.

