

Creative TechnologyLasers

180 Alderwood Rd. Walnut Creek, CA 94598-1042 USA

925.210.1330 Phone

www.LASER66.com

SMALL CONSTANT CURRENT LASER DIODE DRIVER

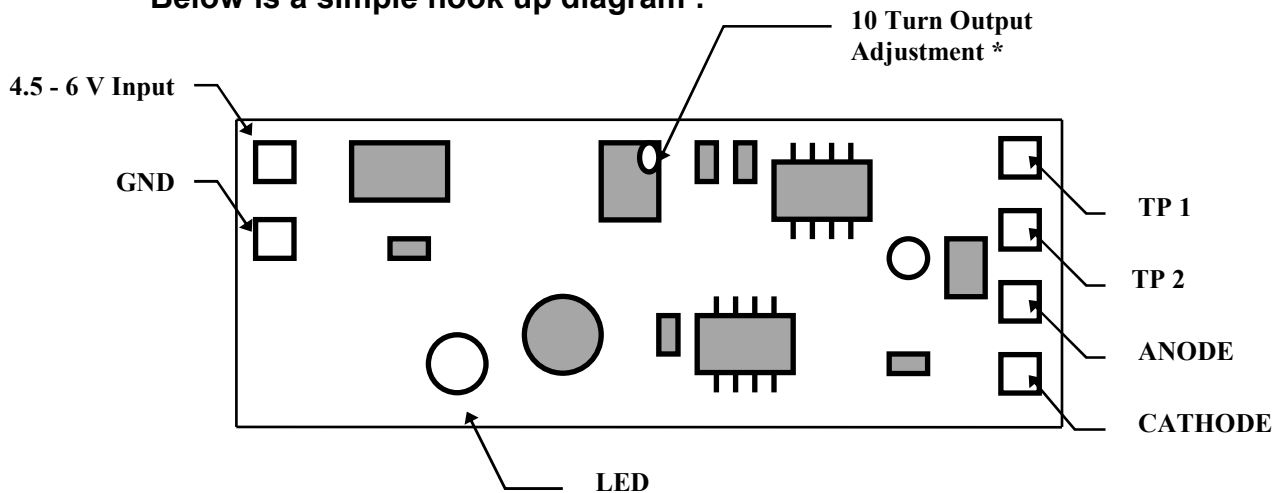
“DCPCB”

This small driver board will drive many laser diodes currently on the market, as well as higher voltage diodes.

Heat sinking is **CRITICAL** for correct operation.

Motorola MJF 122 output device.

Below is a simple hook up diagram :



INPUT: 4.5 to 6 VDC, 10 to 1550 mA OUTPUT: 1.2 to 2.5 VDC, 0- 1500 mA

* Current Adjustment: R5 is a 10 turn pot (Min. to Max.)

CLOCKWISE = Decrease Current

COUNTER CLOCKWISE = Increase Current

Test Points: To monitor Current...

1 mA of Drive Current = 0.1 mV between Test Points (TP1 +, TP2 -)

i.e. 50 mV across TP1 & TP2 means 500 mA of Drive Current through the diode.

NOTE:

Always wear anti-static wrist band on mat when handling raw diodes. Hook up the laser diode first before applying power to the PCB, or laser diode damage could occur. GND. (NEGATIVE) Input and CATHODE Output are common. Careful, because many diodes have a Positive Case (ANODE). Input is REVERSE POLARITY PROTECTED. Transistor can be heat sunk to metal body if desired- Transistor Body is ISOLATED

It is also required that the laser diode has a sufficient heat sink.

Can be utilized to control other loads including: TE Coolers, resistive heaters, etc.