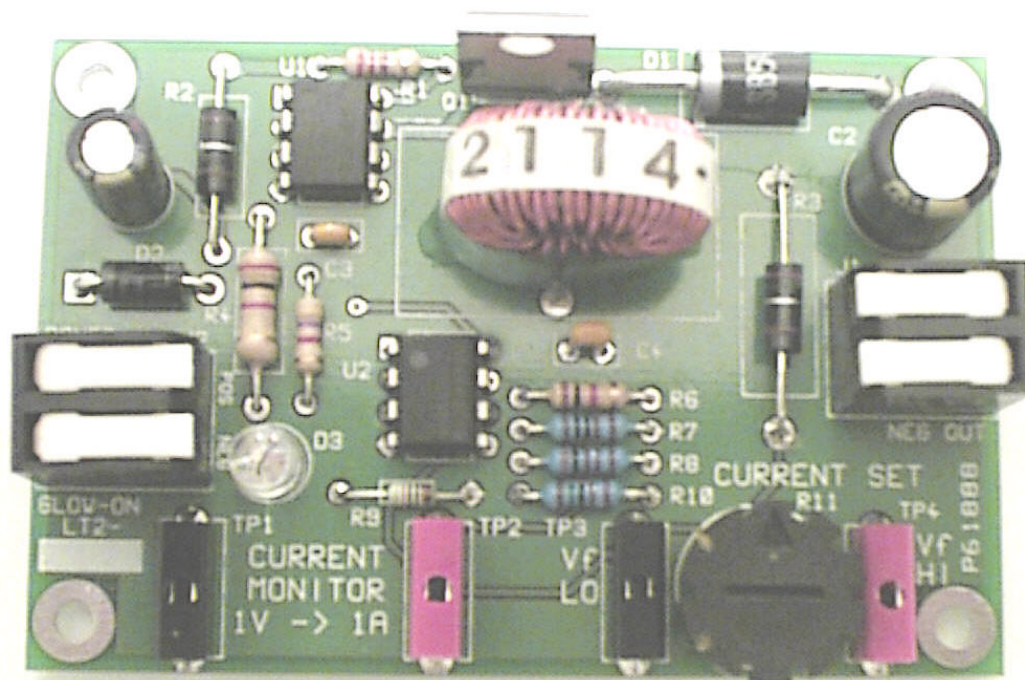


GLOW-ON LLC

LT2

Adjustable High Current LED Driver



General Description

The LT2 is a regulated constant current driver with output adjustable over the range of 360 to 1600 mA. No current limiting resistor is needed in series with the LEDs being driven which reduces heat and power consumption. Low power (< 1.2W) laser diodes may also be driven to rated specs. Output current adjustment is accomplished by rotating a pot. Test points provide a buffered voltage which represents the actual output current flowing through the connected load. This output is scaled to produce a voltage reading of 1.000 volt per 1.000 amp of output. For example, a reading of .750 volts across the current monitor test points indicates a current of 750 mA through the load. An additional set of test points is provided to measure the voltage across the load.

Features

- ❑ Low heat build up - Constant current step-down (buck) switching regulator.
- ❑ Latching clamp-type connectors for power input/output.
- ❑ Reverse polarity protected input.
- ❑ Output current adjustment pot
- ❑ LED power on indicator.
- ❑ Test points for setting output current and measuring output voltage.
- ❑ Up to 30W output capability with adequate power supply. (Heat sink recommended on output transistor for loads > 15W)
- ❑ Four isolated .125" mounting holes.

Uses

- ❑ Accurately characterize and compare LEDs under repeatable conditions.
- ❑ Sort LEDs by Vf or intensity for binning.
- ❑ Burn-in testing
- ❑ Laser diode driver
- ❑ Develop custom applications

Specifications

Input voltage: 6-24 VDC

Output current: Adjustable from 360 to 1600 mA

I/O connectors: accept 18-22 AWG

Dimensions: (LxWxH) 4.0" x 2.0" x 0.9" max

Operating Instructions

1. Turn current adjustment pot R11 to minimum (counter clockwise).
2. Connect load LED(s) to output connector observing proper polarity.

3. Connect power source to input connector.
4. Connect voltmeter to Current Monitor test points TP1 and TP2.
5. Apply input power.
6. Adjust R11 for desired output current as indicated by voltmeter connected per step 4 above.

Trouble shooting

1. Power-on LED should light when power is applied.
2. A load must be connected to output connector J1 to obtain a valid reading at Current Monitor test points.
3. With R11 set to minimum (counter clockwise), the voltage across TP1 and TP2 should be .350 to .360 volts.
4. If maximum desired current output cannot be obtained check that input voltage is at least 2 volts higher than expected output voltage.

For additional help contact support@glow-on.com.

LT2 DRIVER CONNECTIONS

