

# Constant Current Laser Diode Driver Circuit Using OPA2350 Op-Amp

The voltage-controlled current source circuit can be used to drive a constant current into a signal or pump laser diode. This simple linear driver provides a cleaner drive current into a laser diode than switching PWM drivers. The basic circuit is that of a Howland current pump with a current booster (Q1) on the output of a R-R CMOS OPA2350 op amp (U1). Laser diode current is sensed by differentially measuring the voltage drop across a shunt resistor (RSHUNT) in series with the laser diode. The output current is controlled by the input voltage (VIN) that comes from Trim pot PR1, or from a voltage-output DAC.

## Features,

- Supply 3,3V DC
- Load Up to 300mA
- PR1 Trimpot Current Adjust



