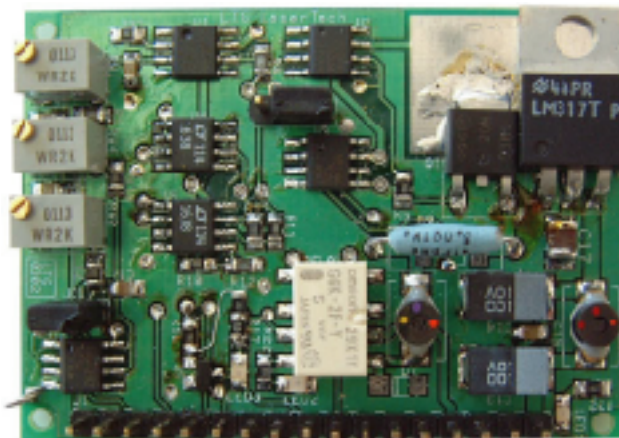


Features

- Supplies up to 300mA to laser diodes
- Low noise and high stability
- Constant current or constant power modes
- Set-point and current limiting adjustment:
On board trimpots or DC signal
- Analog modulation available
- Laser diode protection: Current limit, Soft start,
Output disable with mechanical relay to short
the laser diode

**Description**

The module LDC-300 is a Laser Diode Current Driver that provides 300mA of ultra-stable current. Set-point and current limit are adjusted by on board trimpots or by 0-5VDC input for remote control. On board jumper configures LDC-300 to operate in either constant current or constant power mode. Current and power monitoring is available on the pins of the LDC-300. The LDC-300 is designed to drive cathode-grounded laser diodes. Compared with a floating driver, it gives a higher security for the laser diode.

Protection features included in the LDC-300 are as follows. Current limiting circuit works when the current reaches the current-limit setpoint. Soft start circuit prevents laser diodes from transients that occur when powering-on or powering-down. When the laser-disable pin is LOW, a mechanical relay shorts the laser diode to the ground.

Specifications**Constant Current**

Control range: 0 - 300 mA
Short term stability: 10 μ A
Long term stability: 20 μ A
Temperature coefficient: 50 ppm/ $^{\circ}$ C
Setting accuracy: 0.2 mA
DC setting coefficient: 1mA/mV

Constant Power

Photodiode current range: 10 - 2,000 μ A
Power range: 200 mW
Power output stability: 0.05%
DC setting coefficient: 1mW/mV

Current Limit

Current limit range: 20 - 300 mA
DC setting coefficient: 1mA/mV

Power Supply

10 - 15 VDC

We reserve the right to change the details of design, materials and finish in any way that will not alter function performance.