



- Constant Current Operation
- Output Currents up to 1A
- Versions for grounded anode or grounded cathode laser diodes
- On-board Protection and Shutdown:
 - Over current
 - Over temperature
- Soft-start Enable
- Reference Voltage and Temperature Outputs
- 3.3V or 5V Operation
 - MOT5550GC is single supply
 - MOT5550GA is dual supply
- -40 – 85°C Operating Temperature



Description

The MOT5550 series is designed to drive laser diodes with drive currents up to 1A. The output laser current is precisely regulated over voltage and temperature. The laser output current may be monitored by means of a voltage output from the module.

Family members are available to allow use with laser diodes where the anode is grounded / connected to the case or where the cathode is grounded / connected to the case.

The module's internal temperature and the laser output current are constantly monitored and, if out of range, the module will shutdown the output and set a warning flag. A reset input is provided to clear this condition.

The output current may be set by applying a control voltage, either from a simple potentiometer or from the output of a DAC. Provision is also made to precisely set the zero output current, if required.

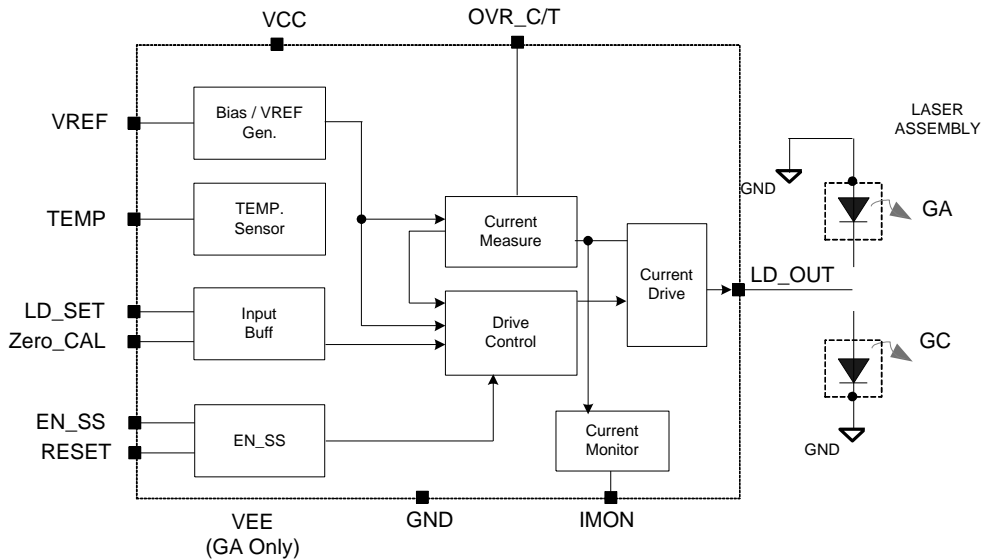
Internal circuitry provides a soft start function to ramp the output current up slowly on power up or after the module is enabled.

The MOT5550 series operates from 3.3V or 5V supplies and is characterized for operation over the -40 to +85°C temperature range. It is available in a 14-pin, 27.5mm x 20mm package.

The MOT600_xxGC and MOT605_xxGC OEM boards are available to allow quick and easy evaluation and implementation of the MOT5550 series and your chosen laser diode. Please visit our website for complete specifications and additional information about the MOT5550 series and the OEM boards.



Block Diagram



Selection Table

Output Current (max)	Configuration / Part Number	
	Grounded Anode	Grounded Cathode
250mA	MOT5550GA-25	MOT5550GC-25
500mA	MOT5550GA-50	MOT5550GC-50
1A	MOT5550GA-100	MOT5550GC-100

Contact Information:

ModularOne Technology
 5902 Wessex Court
 Parker TX 75002

TEL: 214-566-3708
 Email: Info@modularonetechnology.com
 Web: www.modularonetechnology.com