

## Features

- Low output noise = 4.0nA/rt-Hz
- High-performance laser diode driver
- Pin compatible with EL6257
- Voltage-controlled output current source to 150 mA per channel, requiring one external set resistor per channel
- Current-controlled output current source to 150 mA per channel
- Rise time = 1.0 ns
- Fall time = 1.1 ns
- On chip oscillator with frequency and amplitude control by use of external resistors to ground
- Oscillator to 500 MHz
- Oscillator to 100 mA pk/pk
- Single +5V supply ( $\pm 10\%$ )
- Disable feature for power-up protection and power savings
- TTL/CMOS control signals

## Applications

- DVD-RAM high speed drives
- CD-RW applications
- Writable optical drives
- Laser diode current switching

## Ordering Information

Part No	Temp. Range	Package	Outline #
EL6259CU	0°C to +70°C	QSOP-24	MDP0040

## Complete Product Specifications Elantec Technical Support:

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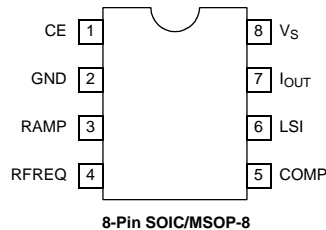
## General Description

The EL6270C is a high-performance single channel laser diode power regulator and oscillator for a grounded cathode laser diode and photodiode system. The EL6270C's APC (Automatic Power Controller) will set the average laser diode input current for a desired average photodiode output current. The APC can provide up to 100 mA of DC current.

An on-chip programable oscillator is provided to allow current modulation of the output laser current. Two external resistors control of amplitude and frequency. The Oscillator can provide up to 100mA pk/pk.

A disable function is included which reduces supply current to less than 5 $\mu$ A.

## Connection Diagram



# *EL6270C - Product Brief*

*Laser Driver with Ocillator and APC*

## **General Disclaimer**

Specifications contained in this product brief are in effect as of the publication date shown. Elantec Semiconductor, Inc. reserves the right to make changes in the circuitry or specifications contained herein at any time without notice. Elantec Semiconductor, Inc. assumes no responsibility for the use of any circuits described herein and makes no representations that they are free from patent infringement.

# ***élantec***

HIGH PERFORMANCE ANALOG INTEGRATED CIRCUITS

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