

Features

- Low power dissipation
- Reduced parts count from the conventional solution
- User-selectable frequency from 60MHz to 600MHz controlled with a single resistor
- User-selectable amplitude from 10mA pk-pk to 100mA pk-pk controlled by 0.2mA to 2mA input current
- Auto turn-off threshold
- Soft edges for reduced EMI
- Small 6-pin SOT23 package

Applications

- DVD players
- DVD-ROM drives
- Combo drives
- MO drives
- General purpose laser noise reduction
- Local oscillator capability

Ordering Information

Part No.	Package	Tape & Reel	Outline #
EL6205CW	6-Pin SOT23		MDP0038

General Description

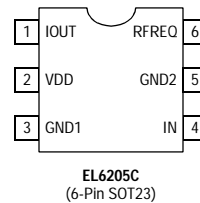
The EL6205C consists of a variable amplitude, push only, oscillator that also supplies the laser DC current. It is designed to easily interface to existing ROM controllers, reducing parts count, and power dissipation.

The reduction of parts count and the small package allows the oscillator to be placed closer to the laser, thus reducing EMI. Also, the turn-on and turn-off edges are slew rate limited to reduce higher harmonics.

The total current drawn from the power supply can be less than the laser threshold current due to the unique push-only modulation method. The average current is less than the peak oscillator current, and can be less than half of the oscillator current. The power control current supplied from the main board is reduced from many tens of mA to less than 2mA.

One external resistor sets the oscillator frequency. A current applied to the IIN terminal determines the amplitude of the oscillator and laser DC current. If the oscillator amplitude is set very low, the output and oscillator are disabled. The part is available in the space-saving 6-pin SOT23 package. It is specified for operation from -0°C to 70°C.

Connection Diagram



EL6205C - Product Brief

Laser Driver Oscillator

General Disclaimer

Specifications contained in this data sheet are in effect as of the publication date shown. Elantec, Inc. reserves the right to make changes in the circuitry or specifications contained herein at any time without notice. Elantec, 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

Elantec Semiconductor, Inc.

675 Trade Zone Blvd.

Milpitas, CA 95035

Telephone: (408) 945-1323

(888) ELANTEC

Fax: (408) 945-9305

European Office: +44-118-977-6020

Japan Technical Center: +81-45-682-5820

WARNING - Life Support Policy

Elantec, Inc. products are not authorized for and should not be used within Life Support Systems without the specific written consent of Elantec, Inc. Life Support systems are equipment intended to support or sustain life and whose failure to perform when properly used in accordance with instructions provided can be reasonably expected to result in significant personal injury or death. Users contemplating application of Elantec, Inc. Products in Life Support Systems are requested to contact Elantec, Inc. factory headquarters to establish suitable terms & conditions for these applications. Elantec, Inc.'s warranty is limited to replacement of defective components and does not cover injury to persons or property or other consequential damages.