

Features

- Low power dissipation
- User-selectable frequency from 60MHz to 600MHz controlled with a single resistor
- User-specified amplitude from 10mA pk-pk to 100mA pk controlled with a single resistor
- Auto turn-off threshold
- Soft edges for reduced EMI
- Small 5-pin SOT23 package

Applications

- DVD players
- DVD-ROM drives
- CD-RW drives
- MO drives
- General purpose laser noise reduction

Ordering Information

Part No	Package	Tape & Reel	Outline #
EL6203CW	5-Pin SOT23		MDP0038

General Description

The EL6203C is a push-pull oscillator used to reduce laser noise. It uses the standard interface to existing ROM controllers. The frequency and amplitude are each set with a separate resistor connected to ground. The tiny package and harmonic reduction allow the part to be placed close to a laser with low RF emissions. An auto turn-off feature allows it to easily be used on combo CD-RW plus DVD-ROM pick-ups.

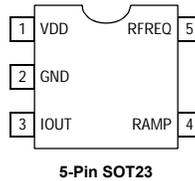
One external resistor sets the oscillator frequency. Another external resistor sets the oscillator amplitude. If the APC current is reduced such that the average laser voltage drops to less than 1.1V, the output and oscillator are disabled, reducing power consumption to a minimum.

The current drawn by the oscillator consists of a small bias current, plus the peak output amplitude in the positive cycle. In the negative cycle the oscillator subtracts peak output amplitude from the laser APC current.

This part is pin-compatible to the EL6201C. It is superior to the EL6201C in several ways: It has up to 100mA output capability, it is more power-efficient, it has less harmonic content, and it has an auto shut-off feature activated at 1.1V.

The part is available in the space-saving 5-pin SOT23 package. It is specified for operation from -0°C to 70°C.

Connection Diagram



Note: All information contained in this data sheet has been carefully checked and is believed to be accurate as of the date of publication; however, this data sheet cannot be a "controlled document". Current revisions, if any, to these specifications are maintained at the factory and are available upon your request. We recommend checking the revision level before finalization of your design documentation.

EL6203C - Product Brief

Laser Driver Oscillator

General Disclaimer

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