

Small Package, High Performance Asynchronies Boost for 10 WLED Driver

General Description

The PN2130 is a step-up DC/DC converter specifically designed for driving white LEDs with a constant current. The internal MOSFET can support up to 10X5 White LEDs for backlighting application, and the internal soft start function can reduce the inrush current. The PN2130 uses current mode, fixed frequency of approximately 1.0MHz architecture to regulate the LED current through an external current sense resistor. The low feedback voltage of 300mV can minimize power dissipation.

Other features include current limit protection, thermal shutdown protection, under-voltage lockout (UVLO), and over-voltage function.

The PN2130 is available in space saving SOT-23-6L package.

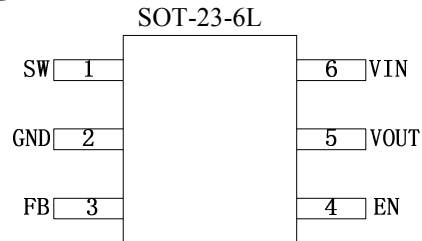
Applications

- Cellular Phones and Digital Cameras
- PDAs and Smart Phones and MP3 and OLED
- Portable Instruments
- LCD Display Power
- High-light LED Flash

Features

- VIN Operating Range : 2.5V to 5.5V
- Internal Power N-MOSFET Switch
- Wide Range for PWM Dimming (100Hz to 200kHz)
- 1.0MHz Switch Frequency
- 300mV Feedback Voltage
- 2A SW Current Limit
- Minimize the External Component Counts
- Internal Compensation
- Over Voltage Protection

Package



Typical Application Circuit

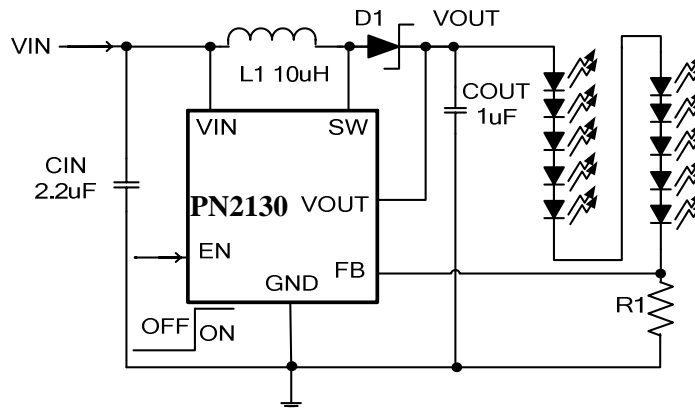


Figure 1. Basic Application Circuit with PN2130