

High Efficiency, Constant Current, Boost DC/DC White-LEDs Drive

Features

- Operating Voltage : 2.7V to 5.5V
 - High Operating Frequency : 1MHz
 - High Output Voltage : 15V
 - Shutdown Current : <1µA
 - Over-Voltage Protection
 - Digital Dimming Control
 - Built-in Cycle-by-Cycle Current-Limiting
 - Soft-Start Function
 - 0.3V Low Reference Voltage
 - SOT-23-6 Package

Applications

- LED Module
 - Compact Back Light Module
 - Constant Current Source

General Description

The G5147 boost converter contains a 0.3Ω internal switch. The IC operates at constant frequency 1MHz, allowing the use of tiny, low cost and low height inductors and capacitors. The IC operates from a 2.7V to 5.5V supply voltage. High inrush current at start-up is eliminated using the soft-start function. Constant frequency current mode PWM architecture results in low, predictable output noise. The G5147 includes cycle-by-cycle 1.2A current limiting to maximum inductor current and over-temperature protection circuit. The over-voltage protection will be enabled when VOUT exceeds 15V. The current of LED is set by a resistor connected between FB and GND. The G5147 is available in SOT-23-6 package.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Pb free)
G5147TB1U	5147x	-40°C to 85°C	SOT-23-6

Note: TB: SOT-23-6

1 : Bonding Code

U: Tape & Reel

Pin Configuration

Typical Application Circuit

