LC3032

REV1.0-Revised DEC 2007

White LED PFM Step-up DC/DC Converter

DESCRIPTION

LC3032 is a PFM step-up DC-DC converter specifically designed to drive white LEDs with a constant current. It can deliver stable constant output current from 0mA to 500mA by adjusting the external resistor.

LC3032 can drive one or more LEDs in parallel connection, also it can drive two in series, several in parallel connection from one or two battery cells. With overvoltage limit protection circuit interiorly, the chip and the external circuits will be safe even if the load is not connected. The device also can deliver steady constant output voltage from 2.5V to 6.0V by adjusting the external resistor.

LC3032 integrates stable reference circuits and it uses trimming technology in the process, so it can afford high precision and low temperature-drift coefficient output current or output voltage.

LC3032 devices are available in SOT-89-5 package.

FEATURES

- Low start-up voltage (when the output current is 1mA)----------0.8V
- The converter can output constant voltage from 2.5V to 6.0V or it can output constant current from 0 to 500mA by adjusting the external resistor.
- Output current accuracy ----------±10％
- Low temperature-drift coefficient of the output current----------±100ppm/℃
- Only four external components are necessary: an inductor, a Schottky diode, an output filter capacitor and a resistor.
- High conversion efficiency (When Vin=2.5V, for 1W LED)----------80％

APPLICATIONS

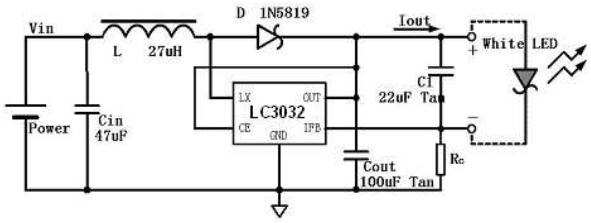
- Power source for white LED
- Supply constant current
- Power source for a single or dual-cell battery-powered equipments

ORDERING INFORMATION

LC3032 [1][2][3][4]

Code	Description
[1]	Temperature&Rohs: C:-40~85°C ,Pb Free Rohs Std.
[2]	Package type: C5:SOT-89-5
[3]	Packing type: TR:Tape&Reel (Standard)
[4]	Feedback Voltage: e.g. 10=100mV 20=200mV 30=300mV 40=400mV

TYPICAL APPLICATION



PIN CONFIGURATION