



White LED Step-Up Converter (Preliminary)

CYT2506

Description

The CYT2506 is a step-up DC/DC converter specifically designed to drive white LEDs with a constant current. The device can drive two, three or four LEDs in series from a Li-Ion cell. Series connection of the LEDs provides identical LED current resulting in uniform brightness and eliminating the need for ballast resistors. The CYT2506 switches at 1.2MHz, allowing the use of any tiny external components. The output capacitor can be as small as 0.22 μ F, saving space and cost versus alternative solutions. A low 95mV feedback voltage minimizes power loss in the current setting resistor for better efficiency.

CYT2506 is available in low profile SC70 and SOT packages.

Features

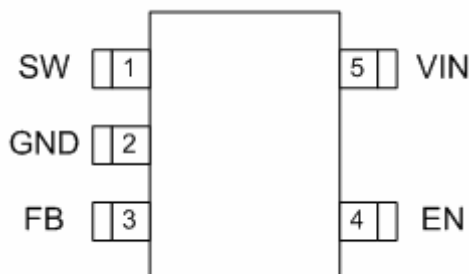
- Inherently Matched LED Current.
- High Efficiency: 84% Typical.
- Drives Up to Four LEDs from a 3.2V Supply.
- Drives Up to Six LEDs from a 5V Supply.
- Fast 1.2MHz Switching Frequency.
- Uses Tiny 1mm Tall Inductors.
- Requires Only 0.22 μ F Output Capacitor.
- Low Profile SC70 and SOT Packaging.

Application

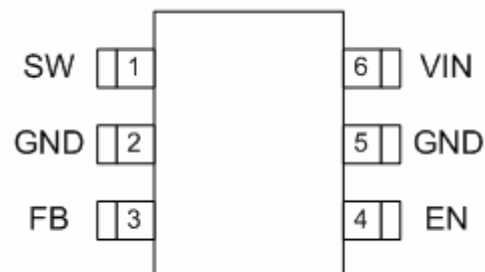
- Cellular Phones
- PDAs, Handheld Computers
- Digital Camera
- MP3 Players
- GPS Receivers

Pin Configuration

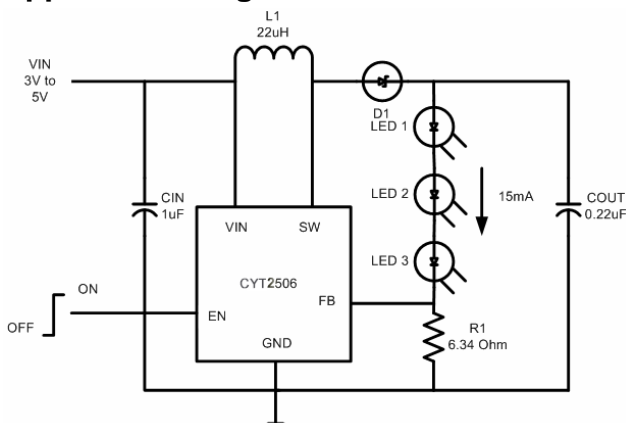
5 Lead TSOT-23



6 Lead SC70



Application Diagram





White LED Step-Up
Converter
(Preliminary)

CYT2506

OUTLINE DRAWING SOT-23-5L

