

AT731

White LED Step-Up Converter



Immense Advance Tech.

FEATURES

- Inherently Matched LED Current
- High Efficiency: 84% Typical
- Drives Up to Four LEDs from a 3.2V Supply
- Drives Up to Eight LEDs from a 5V Supply
- 36V Rugged Bipolar Switch
- Fast 1.2MHz Switching Frequency
- Uses Tiny 1mm Tall Inductors
- Requires Only 0.22μF Output Capacitor

APPLICATION

- Cellular Phones
- PDAs, Handheld Computers
- Digital Cameras
- Mp3 Players
- GPS Receivers

DESCRIPTION

The AT731 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 currents resulting in uniform brightness and eliminating the need for ballast resistors. The output capacitor can be as small as 0.22μF, saving space versus alternative solutions. A low 95mV feedback voltage minimizes power loss for better efficiency.

The AT731 are available in SOT-25 and SOT-353 packages.

TYPICAL APPLICATION CIRCUITS

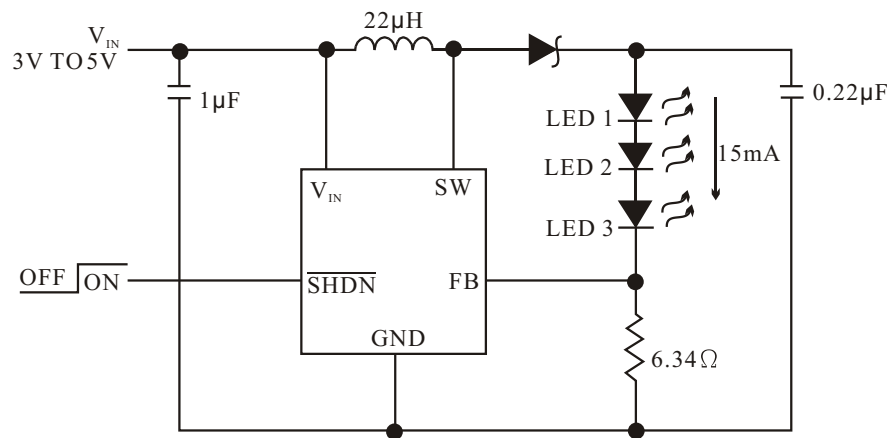


Figure 1. Li-Ion Powered Driver for Three White LEDs

