



DESCRIPTION

The AA1700 is a high frequency boost DC/DC converter with constant current output that drives white LEDs or similar. The LED current is set with the external resistor. Soft start circuitry prevents excessive current drawn from the supply during power on. Any number of LEDs can be connected in series as long as the summed forward voltages do not lead to exceed the specified operating output voltage range. This IC works with a wide operating supply range (1.8V to 15V) and low current consumption, is optimal for use in high-efficiency white LED driver.

FEATURES

- Drives Up to 8 LEDs in Series
- Second or more string of LEDs can be added
- Low current consumption: Typically 5.5 mA in operation, 1 μ A or less in stand-by
- PWM mode operation of the boost circuit (frequency range: 10 KHz to 1MHz)
- Incorporates a soft start circuit and adjustable soft start time
- Timer latch LED short-circuits protection circuit (SP)
- On/Off control function

APPLICATIONS

- LCD Bias Supplies
- White LED Backlighting
- Handheld Devices
- Digital Cameras
- Portable Applications

BLOCK DIAGRAM

