
High Efficiency Boost High Brightness LED Driver

FEATURES

- Low Quiescent (Switch-off) Supply Current: 25 μ A
- High Supply Capability: Drive 3W LED with lithium cell or 2Alkaline Cell
- Zero Shutdown Mode Supply Current
- High efficiency up to 90%
- Fixed switching frequency: 500KHz
- Options for internal or external power switches
- MSOP-8 and SOT-89-5 packages are available

APPLICATION

- Portable lighting
- Rechargeable Flashlights

GENERAL DESCRIPTION

The PT4108 is a compact, high efficiency, and low voltage step-up high brightness LED Driver with an Adaptive Current Mode PWM control loop. It comprises of an error amplifier, a ramp generator, a PWM comparator, a switch pass element and driver. It provides stable and high efficient operation over a wide range of load currents. The feedback loop is internally compensated to minimize component size. It provides a constant current drive for 3W LED with 2 Alkaline Cells or 1 lithium cell. It limits the output voltage to 5V if the output load is disconnected. The 500KHz high switching rate reduces the size of external components. Besides, the 25 μ A low quiescent current together with high efficiency maintains long battery lifetime. The LED current is set with one external resistors.

TYPICAL APPLICATIONS

