

High Efficiency Boost High Brightness LED Driver

FEATURES

- Low Quiescent (Switch-off) Supply Current: 25µA
- 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

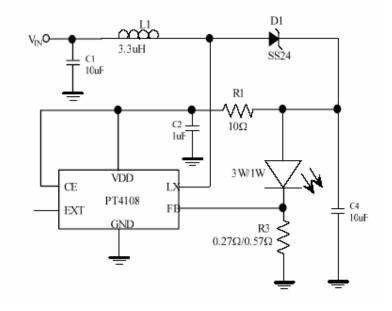
- Portable lighting
- Rechargeable Flashlights

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 25µA low quiescent current together with high efficiency maintains long battery lifetime. The LED current is set with one external resistors.



TYPICAL APPLICATIONS



PT4108-EN-BRIEF