

### FEATURES

- 1.0MHz Constant Frequency Operation
- Up to 2.0A LED Current
- No Schottky Diode Required
- 2.5V to 5.5V Input Voltage Range
- Feedback Voltage as Low as 0.1V
- 100% Duty Cycle in Dropout
- Low Quiescent Current: 50 $\mu$ A
- Short Circuit Protection
- Thermal Fault Protection
- Input over voltage protection (OVP)
- <1 $\mu$ A Shutdown Current
- SOT23-5 Package

### GENERAL DESCRIPTION

The TCS5104 is a constant frequency, current mode PWM step-down LED driver with 2A output current and 1.0MHz switch frequency. The device integrates a main switch and a synchronous rectifier for high efficiency without an external Schottky diode. This device offers two operation modes, PWM control and PFM Mode switching control, which allows a high efficiency over the wider range of the LED current. The feedback voltage is 0.1V typically. The device also integrates many protection features included input OVP, cycle-by-cycle current limit, over temperature protection.

### APPLICATIONS

- LED Drivers

### TYPICAL APPILICATION

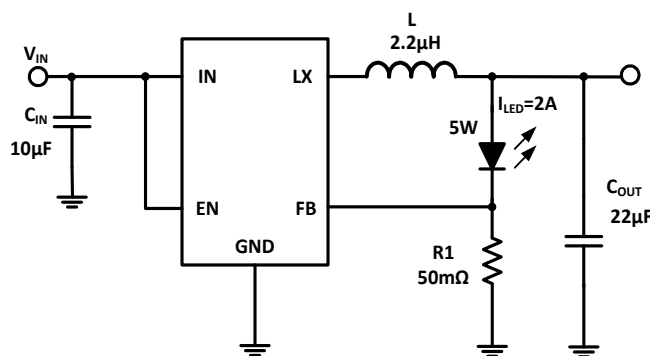


Figure 1. Typical Application Circuits