

# High Efficiency, Constant Current 40V White-LEDs Driver

#### **Feature**

Operating Voltage: 2.5V to 5.5V.
 High Operating Frequency: 1MHz
 High Output Voltage: Up to 40V(Typ.)

■ Digital Dimming Control.

■ Built-in Cycle-by Cycle Current-Limiting.

■ Built-in Soft-Start Function.

■ 0.2V Low Reference Voltage

**■ Thermal Overload Protection** 

■ SOT-23-6 Package

#### **Application**

**■** GPS Navigation System

■ Compact Back Light Module

**■** Constant Current Source

■ LED Module

#### **Description**

The G2621 step-up converter drives white LEDs with a constant current to provide backlight in cell phones, PDAs, and other hand-held devices. It features allowing series connection of the white LEDs so that the LED currents are identical for uniform brightness. An enable input can be pulsed repeatedly to adjust LED's brightness. The fast 1.0MHz current-mode PWM control allows for smaller capacitor and inductor. Fault condition protection uses cycle-by-cycle current limiting to sense maximum inductor current, thermal protection and over-voltage protection. Also included soft-start eliminates inrush current during start-up. The 0.2V low reference voltage minimized the power loss across the current-setting resistor.

The G2621 is available in SOT-23-6 packages.

### **Ordering Information**

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Green)
G2621TB1U	2621x	-40°C to 85°C	SOT-23-6

Note: TB: SOT23-6 1: Bonding Code U: Tape & Reel

#### **Pin Configuration**

## **Typical Application Circuit**

We use the tantalum capacitor to eliminate inductor noise on
output terminal when you want to control dimming function.

\*\*Total Control of the Control



