

# <u>G5244</u>

# **High-Side Power Distribution Switch**

#### Features

- 120mΩ High-Side MOSFET
- 2.5A of Current Limits with Foldback
- Operating Range:2.7V to 5.5V
- 1.9ms Typical V<sub>OUT</sub> Turn-On Rise Time
- Under voltage Lockout
- 65µA Quiescent Supply Current
- 1µA Maximum Standby Supply Current
- Active-High Enable Pin
- No Reverse Current when Power Off
- Shutdown Discharge Function at DSG Pin
- SOT-23-5 and ADFN1.5X1.5-6 Package Available

### **Applications**

- High-Side Power Protection Switch
- USB Power Management
- USB Host and Self-Powered Bubs
- USB Bus-Powered Hubs
- Hot Plug-In Power Supplies
- Battery-Charger Circuits

#### **General Description**

The G5244 is an  $120m\Omega$  power switch for self-powered and bus-powered Universal Serial Bus (USB) applications.

Several Protection features such as current limiting with foldback, and thermal shutdown are included to prevent catastrophic switch failure caused by increasing power dissipation when continuous heavy loads or short circuit occurs. A built-in charge pump is used to drive the N-channel MOSFET that makes it free of parasitic body diode to eliminate any reversed current flow across the switch when it is powered off. The G5244 has a shutdown discharge function when power switch is turned off. User could realize the shutdown discharge function by adding an external resistor between OUT PIN and DSG PIN.

Its low quiescent supply current and small package SOT-23-5 and ADFN1.5X1.5-6 is particularly suitable in battery-powered equipment, like PDA, mobile phone.

#### **Ordering Information**

| ORDER<br>NUMBER | MARKING  | TEMP.<br>RANGE | PACKAGE<br>(Green) |
|-----------------|----------|----------------|--------------------|
| G5244T11U       | 5244x    | -40°C to +85°C | SOT-23-5           |
| G5244A31U       | 54<br>xx | -40°C to +85°C | ADFN1.5X1.5-6      |

Note: T1: SOT-23-5 A3: ADFN1.5X1.5-6

1: Bonding Code

U: Tape & Reel

#### **Pin Configuration**

## **Typical Application Circuit**



