High-Side Power Distribution Switch

Features

- 120mΩ High-Side MOSFET
- 2A of Current Limits with Foldback
- Operating Range:2.7V to 5.5V
- 150µS Typical Rise Time
- Under voltage Lockout
- 65µA Quiescent Supply Current
- 1µA Maximum Standby Supply Current
- Active-High Enable Pin
- Shutdown Pull Low Function at OUT Pin
- No Reverse Current when Power Off
- SOT-23-5 Package

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 G5241 is an integrated $120m\Omega$ power switch for self-powered and bus-powered Universal Serial Bus (USB) applications.

G5241

Several Protection features include current limiting with foldback, and thermal shutdown to prevent catastrophic switch failure caused by increasing power dissipation when continuous heavy loads or short circuit occurs. And a built-in charge pump is used to drive the N-channel MOSFET that is free of parasitic body diode to eliminate any reversed current flow across the switch when it is powered off. There is shutdown pull-low function at OUT pin.

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

Ordering Information

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Pb free)
G5241T1U	5241xx	-40°C to +85°C	SOT-23-5

Note:T1: SOT-23-5 U: Tape & Reel

Pin Configuration

Typical Application Circuit



