Power Switch with Over-Voltage and User-Programmable Current Limit Protection

Features

- **200 mΩ High-Side MOSFET**
- **User-Programmable Current Limit**
- **Build-in Thermal Shutdown**
- **VIN range up to 30V**
- **Fast Over-Voltage Lockout (<1us)**
- **Battery Over-Voltage Lockout**
- **Under-Voltage Lockout**
- **Logic Level Enable Pin**
- **Protection Status Flag Output**
- **TDFN2X2-8 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 G562 is an integrated power switch with over-voltage and user-programmable current limit protection. The current limiting and thermal shutdown prevent failures caused by increasing power dissipation when continuous heavy loads or short circuit occurs. The current limit is user programmable.

It disconnect power from output rapidly if over voltage is detected. In the case of an overcurrent condition, it limits the system current at the threshold value, and if the over current persists, switches the pass element OFF after a blanking period. A built-in charge pump is used to drive the N-channel MOSFET.

Other features include under-voltage lockout, battery over-voltage lockout, and fault FLAG output that indicate fault events.

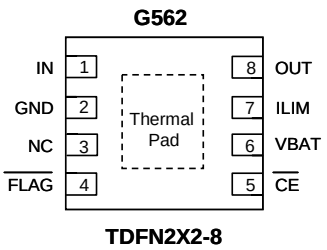
The G562 is available in TDFN2X2-8 Package.

Ordering Information

ORDER NUMBER	MARKING	OV THRESHOLD	TEMP. RANGE	PACKAGE (Green)
G562ARC1U	562A	5.85V	-40℃ to +85℃	TDFN2X2-8
G562BRC1U	562B	6.80V	-40℃ to +85℃	TDFN2X2-8

Note: RC: TDFN2X2-8
1: Bonding Code
U: Tape & Reel

Pin Configuration



TDFN2X2-8

Note: Recommend connecting the Thermal Pad to the Ground for excellent power dissipation.

Typical Application Circuit

