

## Power Distribution Switch

### Features

- 125mΩ High-Side MOSFET
- 450mA Typical Current Limit with Foldback
- Operating Range: 2.7V to 5.5V
- Under voltage Lockout
- 65μA Quiescent Supply Current
- 1μA Maximum Shutdown Supply Current
- Logic Level Enable Pin, Available with Active-High or Active-Low Version
- No Reverse Current when Power Off
- Deglitched Open-Drain Over-Current Flag Output (OC)
- Output Shutdown Pull-low Resistor
- Turn-on Soft Start 1.5ms Typical Rise Time
- SOP-8 Packages

### 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 G553 is an integrated 125mΩ power switch for self-powered and bus-powered Universal Serial Bus (USB) applications.

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.

OC is open-drain output report over-current or over-temperature event and has typical 9ms deglitch timeout period.

### Ordering Information

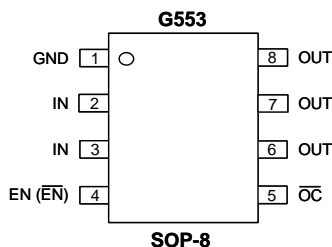
ORDER NUMBER	MARKING	ENABLE	Current Limit	TEMP. RANGE	PACKAGE (Green)
G553D1P11U	G553D1	Active High	0.45A	-40°C to +85°C	SOP-8
G553D2P11U	G553D2	Active Low	0.45A	-40°C to +85°C	SOP-8

Note: P1: SOP-8

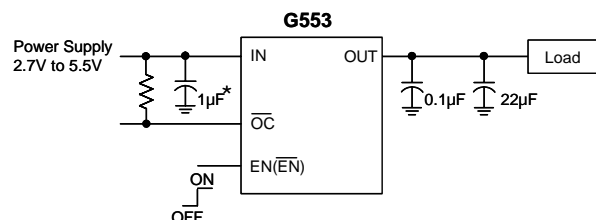
1: Bonding Code

U: Tape & Reel

### Pin Configuration



### Typical Application Circuit



\*: 1μF of input capacitor is enough in most application cases.  
If the PCB trace of power rail to IN is long, larger input capacitor is necessary.