

## Power Distribution Switch

### Features

- 70mΩ High-Side MOSFET
- Internal Current Limit to 3.3A (TYP)
- Operating Range: 2.7V to 5.5V
- 1mS Typical Rise Time
- Fast Overcurrent Response: 3μS (TYPICAL)
- Under voltage Lockout
- 100μA 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 ( $\overline{OC}$ )
- MSOP-8 Package

### Applications

- High-Side Power Protection Switch
- USB Power Management
- Hot Plug-In Power Supplies
- Battery-Charger Circuits

### General Description

The G543 is an integrated power switch for self-powered. The G543 has a typical  $R_{DS(ON)}$  of 70mohm.

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. 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.

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

### Ordering Information

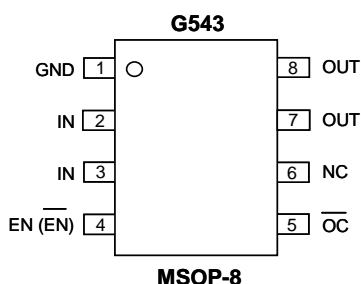
ORDER NUMBER	MARKING	ENABLE	Current Limit	Output MOS $R_{DS(ON)}$	Output Shutdown Resistor	TEMP. RANGE	PACKAGE (Green)
G543A1P81U	G543A1	Active High	3.3A	70mohm	No	-40°C to +85°C	MSOP-8
G543A2P81U	G543A2	Active Low	3.3A	70mohm	No	-40°C to +85°C	MSOP-8

Note: P8: MSOP-8

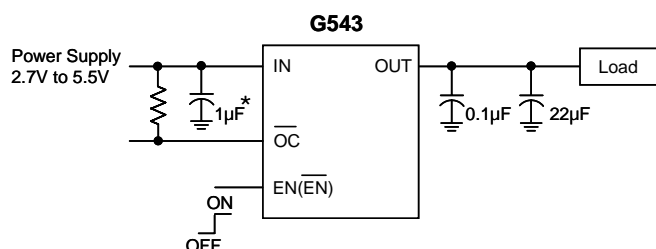
1: Bonding Code

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.