Global Mixed-mode Technology Inc.

Power Distribution Switch

General Description

switch when it is powered off.

(USB) applications.

Features

- 100m Ω High-Side MOSFET
- Available with 4 Versions of Current Limits with Foldback
- Operating Range:2.7V to 5.5V
- 400µS Typical Rise Time
- 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 Resister
- SOP-8, MSOP-8, TDFN3X3-8 Packages
- UL Approved_#E232223
- Nemko IEC 60950-1 CB/CCA_scheme certification Report #67291

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**

Pin Configuration



*Pin#6 should be considered as OUT when circuit design and PCB layout, but it is NC pin actually.



*: 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.



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

The G545 is an integrated $100m\Omega$ power switch for

self-powered and bus-powered Universal Serial Bus

Several Protection features include current limiting

with foldback, and thermal shutdown to prevent catas-

trophic switch failure caused by increasing power dis-

sipation 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

Typical Application Circuit