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Features

- ◆ Build-in 6.5mΩ 55V MOSFET
- ◆ Low current consumption
- ◆ Up to 70KHz operation frequency
- ◆ 1.2-Ω Sink, 3.0-Ω Source Gate-Drive Impedances
- ◆ 50ns turn-off propagation delay
- ◆ VCC range from 3V to 6V
- ◆ VCC OVP Clamping
- ◆ Cycle by Cycle MOT Check Circuit prevents multiple false trigger Gate pulses
- ◆ DCM and QR operation
- ◆ SOP8 Package

Applications

- ◆ 5V AC-DC adaptors
- ◆ Battery Powered systems
- ◆ Digital Cameras Charger

General Description

SP6503F is a smart secondary-side switch IC designed for isolated fly-back system. The IC emulate the behavior of Schottky diode rectifier for reduces power dissipation. SP6503F works in DCM and QR operation modes. Ruggedness and noise immunity are accomplished using an advanced blanking scheme and double-pulse suppression which allow reliable operation in all operating modes.

SP6503F senses the build-in MOSFET drain-source voltage, and output ideal drive signal with less external components. It only provides high performance solution for 5V output voltage application.

Simplified Application

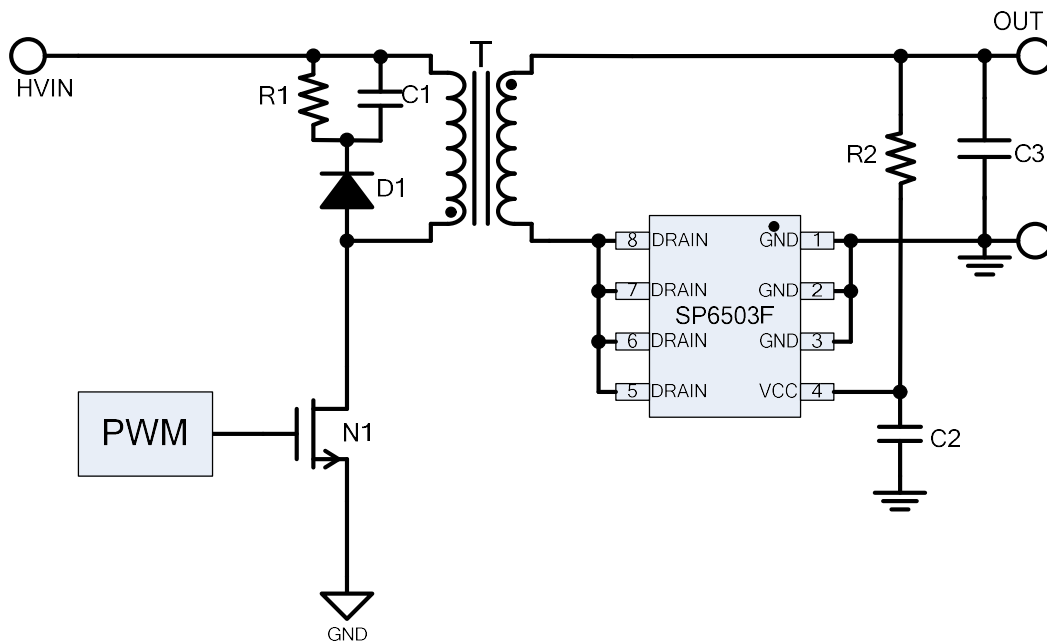


Figure 1. Simplified Application of SP6503F