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Features

- ◆ Less than 75mW standby power consumption at 230VAC with typical application circuit
- ◆ Integrated 750V BJT
- ◆ Primary-side sensing and regulation without TL431 and opto-coupler
- ◆ BCM fast start up technology
- ◆ No need for control loop compensation
- ◆ Less than $\pm 5\%$ constant voltage and current regulation at universal AC input
- ◆ Ultra Low start-up and low operation current
- ◆ Built-in Leading Edge Blanking(LEB)
- ◆ Programmable cable drop compensation
- ◆ Multi-mode PWM and PFM operation for efficiency improving.
- ◆ Output Over Voltage Protection,VDD OVP and Clamp,Cycle-by-Cycle Current Limiting
- ◆ SOP7 Package

Applications

- ◆ Small Power Adapter
- ◆ Cell Phone Charger
- ◆ Digital Cameras Charger
- ◆ Linear Regulator/RCC Replacement

General Description

SP2608F is a high performance offline PSR power switch for low power AC/DC charger and adapter applications. It operates in primary-side sensing and regulation. Thus, opto-coupler and TL431 are not required. In CC control, the output current and power setting can be adjusted externally by the sense resistor R_{CS} at CS PIN. In CV control, multi-mode operations are utilized to achieve high performance and high efficiency. In addition, good load regulation is achieved by the built-in cable drop compensation. SP2608F operates in PFM in CC mode, and it operates in PWM+PFM in CV mode with frequency reduction at light/medium load. The chip consumes very low operation current. It achieves less than 75mW standby power to meet all global energy efficiency regulations.

SP2608F offers comprehensive protection coverage with auto-recovery feature including Cycle-by-Cycle current limiting, VDD over voltage protection (OVP), output over voltage protection, load short circuit protection, VDD under voltage lockout (UVLO), OTP etc.

SP2608F is offered in SOP7 packages.

Simplified Application

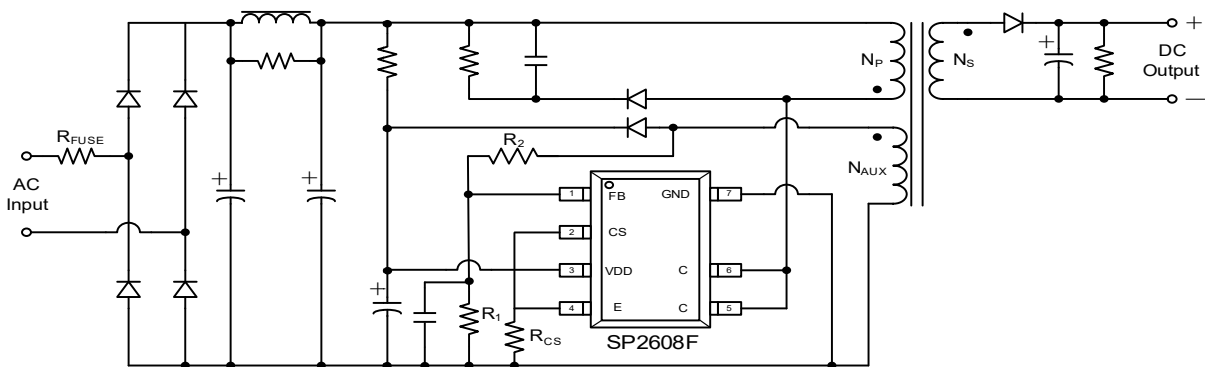


Figure 1. Simplified Application of SP2608F