

Green Mode AC/DC PWM Controller with Ultra Low Startup Current

Specification Rev. V2.4

FEATURES

- Ultra Low Startup Current (3 μ A typ.)
- Current Mode Control
- Fixed 65KHz or 100KHz Switching Frequency
- OCP (Cycle-by-cycle Over Current Protection)
- OLP (Over Load Protection) with 60ms Delay for 65KHz version and 40mS Delay for 100KHz version
- OVP (Over Voltage Protection) through VCC Pin (Preset Level) and PT Pin (Level Adjustable)
- OTP (Over Temperature Protection) through NTC
- Embedded Soft Start

APPLICATIONS

- Switching AC/DC Adapter
- Switching Battery Charger
- Open Frame Power Supply

GENERAL DESCRIPTION

With the proprietary low power technology, PF6001 start up with the current as low as only several Micro-Amps (μ A). Therefore, the PF6001 startup resistor value can be very high to reduce the power dissipation and the requirement of 100mW no-load power consumption on AC/DC adapters can be easily achieved.

When the output loading is getting lower, the PF6001 switching frequency decreases from 65/100 KHz to 25KHz gradually then further gets into burst mode operation for light load efficiency. In addition, all the required protections, including OLP, OVP, and OTP integrated in a tiny SOT-26 package, can be completely fulfilled with minimized external components.

TYPICAL APPLICATION

