Product Overview

FL6961: Single-Stage Flyback and Boundary Mode PFC Controller for Lighting

For complete documentation, see the data sheet.

The FL6961 is a general lighting power controller for low to high power lumen applications requiring power factor correction. It is designed for flyback, or boost converter operating in boundary-mode. The FL6961 provides a controlled on-time to regulate the output DC voltage and achieve natural power factor correction. The maximum on-time of the external switch is programmable to ensure safe operation during AC brownouts. An innovative multi-vector error amplifier is built in to provide rapid transient response and precise output voltage clamping. A built-in circuit disables the controller if the output feedback loop is opened. The startup current is lower than 20µA and the operating current has been reduced to under 6mA. The supply voltage can be up to 25V, maximizing application flexibility.

Features

- Boundary Mode PFC Controller
- Low Input Current THD
- Controlled On-Time PWM
- Zero-Current Detection
- Cycle-by-Cycle Current Limiting
- Leading-Edge Blanking instead of RC Filtering
- Low Startup Current: 10µA Typical
- Low Operating Current: 4.5mA Typical
- Feedback Open-Loop Protection
- Programmable Maximum On-Time (MOT)

For more features, see the data sheet

Applications

- Lighting

For more information please contact your local sales support at www.onsemi.com.

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