

DESCRIPTION

MT7952 is a primary-side controller for AC-DC LED lighting. It operates in constant current control mode and works in discontinuous conduction mode, suitable for flyback converter under universal input, the output power of the system should be less than 5W.

MT7952 adopts primary side sensing and regulation technology, no secondary side feedback circuit is needed. Further, the loop compensation components are also eliminated while maintaining system stability. With building in 600V power MOSFET, low component counts and low BOM cost are achieved.

By using Maxic proprietary current regulation method, the MT7952 achieves $\pm 3\%$ accuracy of LED current along with excellent line regulation and load regulation.

MT7952 provides plenty of protections, such as LED short circuit protection, LED open circuit protection, over-temperature protection, VDD over voltage protection, VDD under voltage lock-out, etc.

FEATURES

- Build in 600V power MOSFET
- 85V to 265V AC line voltage range
- Primary side sensing and regulation, no need of secondary side feedback
- High precision constant LED current ($\pm 3\%$)
- Cycle-by-cycle peak current control
- LED short-circuit/open circuit protection
- VDD under voltage lock-out protection
- VDD over voltage protection
- Over temperature protection
- Suitable for less than 5W applications
- Built-in leading edge blanking (LEB)
- Extremely minimum external components
- Available in SOP8 package

APPLICATION

- GU10/E27 LED lamp, spot light
- 1-5W LED lighting application

Typical Application Circuit

