

DESCRIPTION

MT971X is a high precision LED constant current driver IC with full range analog dimming, which is applied to non-isolated buck topology. Without any peripheral RC components, directly input PWM dimmable signal into MT971X to realize no flicker analog dimming.

With MAXIC proprietary technology, MT971X has good dimming consistency. And the moisture-proof OVP can be realized to the full range of dimming.

The typical standby current is 120uA, which can achieve low power consumption.

MT971X is suitable for full range input voltage (85Vac~265Vac) applications with excellent line regulation and load regulation. MT971X integrates high precision current sensing circuit, which is ideal for high precision LED constant current output and high frequency operation.

With the embedded high voltage startup circuit and integrated 500V power MOSFET, VCC capacitor and startup resistor are not needed. The peripheral circuit is extremely simplified, and the BOM cost is reduced accordingly.

MT971X supports various protections, such as moisture-proof OVP, thermal regulation, output short circuit protection, etc., to improve system reliability.

APPLICATIONS

- LED bulb
- LED ceiling lamp
- Other LED lighting applications

FEATURES

- Full range analog dimming without flicker
- Supports 100%~1% analog dimming
- 120uA typical standby current
- No startup resistor and VCC capacitor
- Adjustable moisture-proof OVP
- No flicker at low line voltage
- Irrelevant OVP to inductor and output current
- OVP for full range dimming
- Thermal regulation function
- Available in SOP8 packages

TYPICAL APPLICATION CIRCUIT

