

DESCRIPTION

MT7818C is a high precision LED constant current controller operating at critical conduction mode (CRM) with zero current switched-on and peak current switched-off. It's mainly targeted for non-isolated buck LED power systems and PWM/Analog dimmable application.

Critical conduction mode ensures that the MT7818C turns on the internal switch when the inductor current reaches zero, reducing the switch-on switching losses, and achieving more than 93% efficiency.

With critical conduction mode, and the input compensation, MT7818C outputs high accuracy LED current, and further achieves excellent line regulation and load regulation.

MT7818C has wide working voltage range, which is suitable for full-range AC input or 12V ~ 500V DC input voltage. MT7818C provides various protection features to improve the system reliability, including over current protection (OCP), short circuit protection (SCP), adjustable over voltage protection (OVP) and over temperature regulation (OTR), etc.

FEATURES

- Internal 500V power MOSFET
- Critical Conduction Mode, insensitive to the inductance
- PWM/ Analog dimming function
- High efficiency (up to 93%)
- Highly accurate constant LED current
- Cycle-by-cycle current limiting
- LED short circuit protection
- Adjustable LED over voltage protection
- Leading edge blanking technique
- Under-voltage lockout (UVLO) protection
- Over temperature regulation (OTR)
- Available in SOP8 / DIP7package

APPLICATIONS

- LED tube, signal lamp, landscape lamp
- LED stage light, etc
- Intelligent LED lighting application

Typical Application Circuit

