

DESCRIPTION

MT8803R3 is an ultra-low standby power dissipation, non-isolated, BUCK, constant voltage driver, which is suitable for non-isolated power applications with the input range from 85Vac to 264Vac.

MT8803R3 incorporates high-voltage power switcher and integrator, excellent constant voltage can be achieved without external compensation capacitor. Besides, MT8803R3 integrates CS resistor, low BOM cost is achieved.

MT8803R3 is designed with VCC sample and feedback optimization, which can accelerate the dynamic response greatly. Due to the multi-mode control technique, PWM and PFM can be toggled seamlessly. In addition, the chip gets power from VCC pin and internal JFET, the system power dissipation is further reduced.

MT8803R3 provides various protection features to enhance the system reliability, such as cycle-by-cycle current limiting (OCP), Over temperature protection (OTP), over load protection (OLP), short circuit protection (SCP), etc.

FEATURES

- Few peripheral components, low BOM cost
- Ultra-low standby power dissipation: <30mW@120Vac&230Vac
- Integrated with high-voltage power MOSFET
- 3.3V direct output
- Integrates high voltage startup and power supply circuit
- Excellent dynamic response
- Designed with amplitude reduction modulation technology to reduce audio noise
- Frequency jittering to reduce EMI
- Output voltage accuracy: $\pm 5\%$
- Soft start-up
- Various protection features
 - Cycle-by-cycle current limiting (OCP)
 - Over Temperature protection (OTP)
 - Over load protection (OLP)
 - Short circuit protection (SCP)
- Available in SOT23-3 Package

APPLICATIONS

- Auxiliary power
- Other applications

Typical Application Circuit

