Maximizing IC Performance

Ultra-Low Standby Power Dissipation, Non-Isolated, Buck, Constant Voltage Driver

DESCRIPTION

MT8813S0 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 of 85Vac~264Vac.

MT8813S0 incorporates high-voltage power switcher, a freewheeling diode, a VCC power supply diode and current sense resistor, excellent constant voltage can be achieved without external compensation capacitor, saving system cost and the BOM size greatly.

MT8813S0 is designed with multi-mode control technology. The chip gets power through both VCC and JFET and can effectively reduce system power consumption.

MT8813S0 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

- Ultra-low standby power dissipation:
 <20mW@120Vac&230Vac
- Integrated with high-voltage power MOSFET
- Integrates freewheeling diode and VCC power supply diode
- Selectable output voltage: 3.3V or 5V
- Integrates high voltage startup and power supply circuit
- Excellent dynamic response
- Frequency jittering technology to reduced EMI
- Output voltage accuracy: ±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 SOP8 Package

APPLICATIONS

- Auxiliary power
- Other applications

TYPICAL APPLICATION CIRCUIT

