High Performance Low Cost Off-line PWM Power Switch

FEATURES

- **Integrated with 500V Power MOSFET and HV Startup Circuit**
- **Integrated with Freewheeling Diode**
- **Multi-Mode Control with Audio Noise Free Operation**
- **Supports Buck and Buck-Boost Topologies**
- **Support Ultra-low Input Voltage (>20V)**
- **Less than 100mW Standby Power**
- **Up to 30kHz Maximum Frequency**
- **Good Line and Load Regulation**
- **Built-in Soft Start**
- **Build in Protections:**
  - **Over Load Protection (OLP)**
  - **Cycle-by-Cycle Current Limiting (OCP)**
  - **Output OVP**
  - **On-chip OTP**
- **Available with SOP-8 Package**

APPLICATIONS

- **BLUE Module**

GENERAL DESCRIPTION

KP35062 is a high performance Switch Mode Power Supply Switcher for low power off-line application with minimum components in typical buck solution. This IC has built-in high break down voltage MOSFET to withstand high surge input.

Unlike conventional PWM control, there's no fixed internal clock in KP35062 to trigger the GATE driver, the switching frequency is changed according to the load condition. The multi mode PWM control is integrated to simplify circuit design and achieve good line and load regulation without audio noise generated. The peak current limit changes according to the real load condition for low standby power in no load.

KP35062 integrates functions and protections of Under Voltage Lockout (UVLO), Cycle-by-cycle Current Limiting (OCP), Output OVP, On-chip Thermal Shutdown, Over Load Protection (OLP) with Auto Recovery Mode Protection, etc.

TYPICAL APPLICATION CIRCUIT