

High Efficiency Wide Input Buck Power Switch

FEATURES

- Integrated with 150V Power MOSFET and HV Startup Circuit
- Optimized Audible Noise & System Stability
- Multi-Mode Control
- Supports Buck Topology
- FB Divider Resistors Can be Saved in 12V Output Application
- Good Line and Load Regulation
- Built-in Soft Start Function
- Build in Protections:
 - Over Load Protection (OLP)
 - Cycle-by-Cycle Current Limiting (OCP)
 - FB Over Voltage Protection (FB OVP)
 - On-Chip Thermal Shutdown (OTP)
 - VDD OVP, UVLO & Clamp
- Available with SOP-8 Package

GENERAL DESCRIPTION

KP35112 is a high performance Buck power switch for wide input range D2D application

Unlike conventional PWM control, there's no fixed internal clock in KP35112 family to trigger the GATE driver, the switching frequency varies with load condition. The multi-mode PWM control is integrated to simplify circuit design and achieve good line and load regulation without audio noise. The peak current limit varies with load condition for low standby power.

KP35112 integrates functions and protections of Under Voltage Lockout (UVLO), Cycle-by-cycle Current Limiting (OCP), FB Over Voltage Protection (FB OVP), On-chip Thermal Shutdown, Over Load Protection (OLP), VDD OVP with Auto Recovery Mode Protection, etc.

APPLICATIONS

- Electric Bicycle
- POE
- Power Tools

TYPICAL APPLICATION CIRCUIT

