

High Performance Low Cost Off-line PWM Power Switch

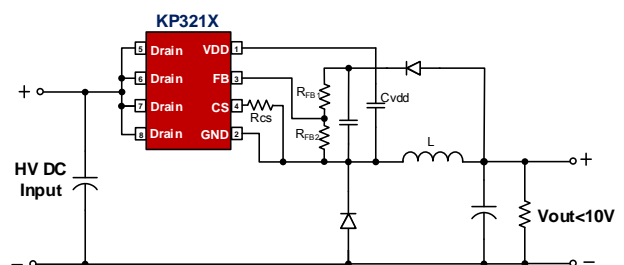
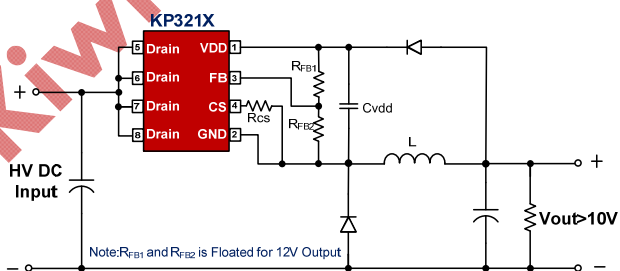
FEATURES

- Integrated with 650V Power MOSFET and HV Startup Circuit
- Multi Mode Control with Audio Noise Free Operation
- Supports Buck and Buck-Boost Topologies
- Default 12V Output with FB floated
- Less than 50mW Standby Power
- Green Mode Operation for High Efficiency
- Good Line and Load Regulation
- Built-in Soft Start
- Build in Protections:
 - Over Load Protection (OLP)
 - Cycle-by-Cycle Current Limiting (OCP)
 - Output OVP
 - VDD OVP, UVLO & Clamp
- Available with SOP-8 and DIP-8 Package

APPLICATIONS

- Small Home Appliance
- Industry Controls

TYPICAL APPLICATION CIRCUIT



GENERAL DESCRIPTION

KP321X family is a high performance Switch Mode Power Supply Switcher for low power off-line application with minimum components in typical buck solution. This family has built-in high break down voltage MOSFET to withstand high surge input.

Unlike conventional PWM control, there's no fixed internal clock in KP321X family 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.

KP321X 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), VDD OVP with Auto Recovery Mode Protection, etc.