

## APFC Buck LED Power Switch

### FEATURES

- Active Power Factor Correction
- High PF Value >0.9
- Built-in HV Power Supply Circuit
- Internal 650V/600V Power MOSFET
- No VDD, COMP Capacitor Design
- Programmable OVP
- QR Operation Mode for High Efficiency
- High Output Current Accuracy <math>\pm 3\%</math>
- Ultra-low Operation Current
- Good Line and Load Regulation
- Built-in Protections:
  - Output Over Voltage Protection (OVP)
  - Cycle by Cycle Current Limit (OCP)
  - Leading Edge Blanking (LEB)
  - LED Open and Short Protection
  - Thermal Fold-back (OTP)
- Package Available with SOP-7, DIP-7

### APPLICATIONS

- LED Driver

### TYPICAL APPLICATION CIRCUIT

### GENERAL DESCRIPTION

KP126X is a family of highly integrated Constant Current LED power switch. The IC utilizes Quasi-Resonant (QR) Buck topology with active PFC control for high PF, low THD, and high efficiency.

KP126X integrates internal demagnetization detection circuit and 650V/600V power MOSFET with high voltage startup, which eliminates auxiliary winding for power supply and demagnetization and simplifies the design and production cost of the system. The IC adopts accurate current sensing, close loop constant current control to achieve high precision CC control with excellent line and load regulation.

KP126X integrates functions and protections of Cycle-by-cycle Current Limiting (OCP), Thermal Fold-back (OTP), Output Over Voltage Protection (OVP), LED Open/Short Protection, etc.

