

High Efficiency QR Buck Power Switch with External OTP

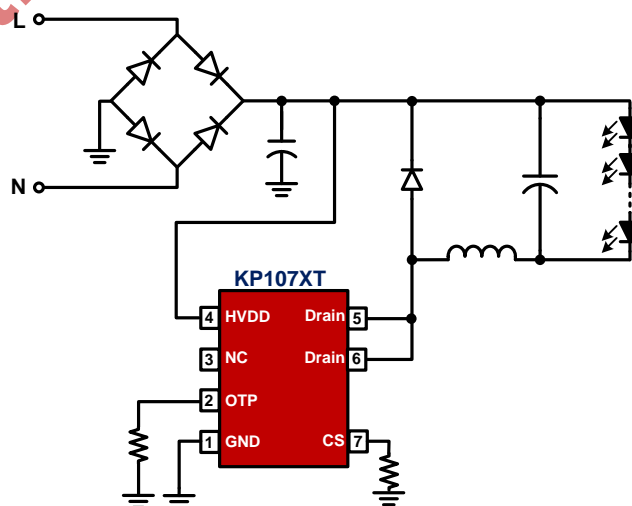
FEATURES

- Integrated with 500V MOSFET
- Integrated HV VDD Power Supply Circuit
- No VDD Cap Design
- $\pm 5\%$ CC Regulation
- Quasi-Resonant for High Efficiency
- Very Low VDD Operation Current
- Built-in AC Line CC Compensation
- Adjustable OTP Function by External Resistor
- Build in Protections:
 - Cycle-by-Cycle Current Limiting
 - Leading Edge Blanking (LEB)
 - LED Short Protection
 - On-Chip Thermal Fold-back (OTP)
- Available with SOP-7 Package

APPLICATIONS

- High Power LED Lighting

TYPICAL APPLICATION CIRCUIT



GENERAL DESCRIPTION

KP107XT is a highly integrated power switch with Quasi-Resonant Buck (QR-Buck) constant current (CC) control for LED lighting applications without auxiliary winding.

KP107XT combines a 500V power MOSFET and high voltage startup/IC supply circuit in one chip which reduced system design cost. The IC also adopts high accuracy current sensing control method which maintains accurate output current and good line/load regulation. At the same time, OTP protection point can be adjusted by external resistance in different grades.

KP107XT integrates functions and protections of Current Limit and Leading-Edge Blanking, Under Voltage Lockout (UVLO), Cycle-by-cycle Current Limiting (OCP), Thermal Fold back (OTP), LED Short Protection, etc.