

Non-isolated Quasi-Resonant Buck LED Power Switch

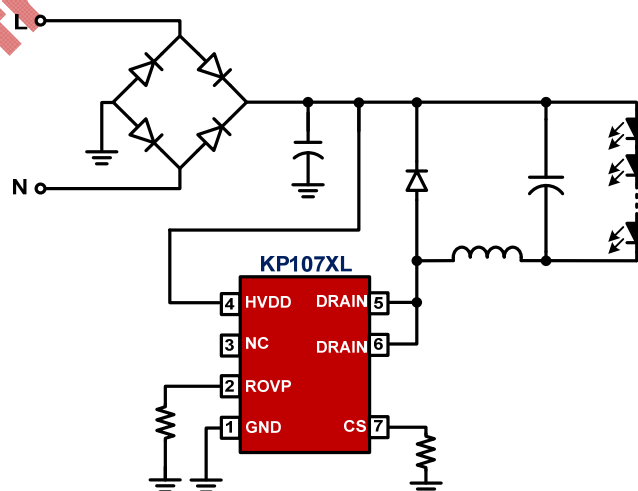
FEATURES

- Integrated with 500V MOSFET
- Integrated HV VDD Power Supply Circuit
- NoVDDCap Design
- $\pm 5\%$ CC Regulation
- Quasi-Resonant for High Efficiency
- Very Low VDD Operation Current
- Built-in AC Line CC Compensation
- Build in Protections:
 - Output Over Voltage Protection (OVP)
 - Cycle-by-Cycle Current Limiting
 - Leading Edge Blanking (LEB)
 - LED Short/Open Protection
 - On-Chip Thermal Fold-back (OTP)
- Available with SOP-7 and DIP-7 Package

APPLICATIONS

- High Power LED Lighting

TYPICAL APPLICATION CIRCUIT



GENERAL DESCRIPTION

KP107XL is a highly integrated power switch with Quasi-Resonant Buck (QR-Buck) constant current (CC) control for LED lighting applications without auxiliary winding.

KP107XL 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.

KP107XL integrates functions and protections of Current Limit and Leading-Edge Blanking, Under Voltage Lockout (UVLO), Cycle-by-cycle Current Limiting (OCP), Thermal Foldback (OTP), Output Over Voltage Protection (OVP), LED Open/Short Protection, etc.