

Non-isolated Quasi-Resonant Buck LED Controller

FEATURES

- Integrated HV VDD Power Supply Circuit
- $\pm 5\%$ 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
 - Sense-resistor Short Protection
 - Leading Edge Blanking (LEB)
 - LED Short/Open Protection
 - On-Chip Thermal Fold-back (OTP)
- Available with SOP-8 Package

APPLICATIONS

- High Power LED Lighting

GENERAL DESCRIPTION

KP107 is a highly integrated LED Controller with Quasi-Resonant Buck (QR-Buck) constant current (CC) control for LED lighting applications without auxiliary winding.

KP107 integrates with high voltage startup and IC supply circuit, 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.

KP107 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.

TYPICAL APPLICATION CIRCUIT

