Non-isolated Quasi-Resonant Buck LED Controller

FEATURES

- **Integrated HV VDD Power Supply Circuit**
- **No VDD Cap Design**
- **±5% CC Regulation**
- **Quasi-Resonant for High Efficiency**
- **Very Low VDD Operation Current**
- **Built-in AC Line CC Compensation**
- **Build in Protections:**
  - **Cycle-by-Cycle Current Limiting**
  - **Leading Edge Blanking (LEB)**
  - **LED Short Protection**
  - **On-Chip Thermal Fold-back (OTP)**
- **Available with SOP-8 Package**

APPLICATIONS

- **High Power LED Lighting**

GENERAL DESCRIPTION

KP107L is a highly integrated LED Controller with Quasi-Resonant Buck (QR-Buck) constant current (CC) control for LED lighting applications without auxiliary winding.

KP107L combines a 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.

KP107L integrates functions and protections of Current Limit and Leading-Edge Blanking, Under Voltage Lockout (UVLO), Cycle-by-cycle Current Limiting (OCP), Thermal Foldback (OTP), LED Short Protection, etc.

TYPICAL APPLICATION CIRCUIT