

## Isolated PSR Constant Current LED Controller

### FEATURES

- Built-in HV Power Supply Circuit
- No VDD Capacitor Design
- PSR CC Control
- $\pm 5\%$  CC Regulation
- 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

### APPLICATIONS

- Down Light, Ceiling Light, Panel Light
- Other High Power LED Lighting

### GENERAL DESCRIPTION

KP119 is a highly integrated Controller with DCM (Discontinuous Conduction Mode) Primary Side Regulation (PSR) constant current (CC) control for high power isolated LED lighting applications.

KP119 integrates high voltage startup/IC supply circuit and a novel transformer demagnetization circuit, which eliminates transformer auxiliary winding and reduces system design cost. The IC also adopts high accuracy current sensing control method which maintains accurate output current and good line/load regulation.

KP119 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

