

## PSR Fly back APFC Offline LED Power Switch

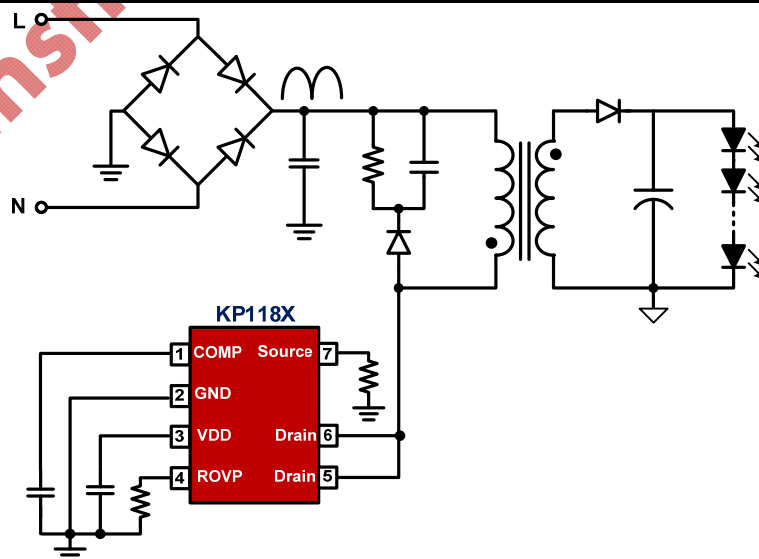
### FEATURES

- Support No Auxiliary Windings Design
- Single Stage APFC Solution
- PF>0.95 and THD<10% with Universal Input
- Fast Startup < 500ms
- $\pm 3\%$  CC Regulation
- Built-in 650V MOSFET and Power Supply Circuit
- Proprietary Programmable OVP
- Quasi-Resonant for High Efficiency
- Very Low VDD Operation Current
- Excellent Line and Load Regulation
- Built-in Protections:
  - Output Over Voltage Protection (OVP)
  - Cycle-by-Cycle Current Limiting (OCP)
  - Leading Edge Blanking (LEB)
  - LED Open/Short Protection
  - On-Chip Thermal Fold back (OTP)
- Available in SOP-7, DIP-7 Package

### APPLICATIONS

- LED Panel Light

### TYPICAL APPLICATION CIRCUIT



### GENERAL DESCRIPTION

KP118X is a family of highly integrated LED power switch with primary side regulation (PSR) constant current (CC) control for LED lighting applications. The IC utilizes Quasi-Resonant (QR) Fly back topology with active PFC control for high PF, low THD, and high efficiency.

KP118X integrates with demagnetization signal detection technology, 650V MOSFET and power supply circuit, which eliminates auxiliary windings for demagnetization detection and power supply, simplifies system design and lower cost. The IC also integrates high precision inductance current sampling technology and high precision current comparator for reference threshold voltage. Line voltage compensation is integrated for good constant current output characteristics.

KP118X integrates functions and protections of Under Voltage Lockout (UVLO), Cycle-by-cycle Current Limiting (OCP), Thermal Fold back (OTP), Output Over Voltage Protection (OVP), LED Open/Short Protection, etc.