

## High Performance Quasi-Resonant Primary Side Regulation CV/CC Power Switch

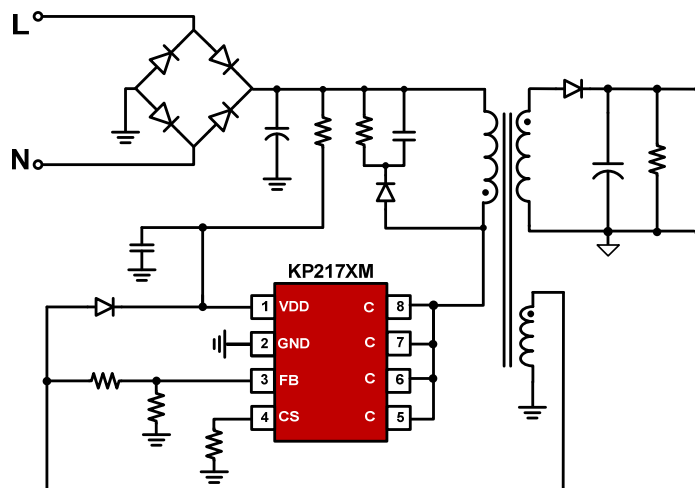
### FEATURES

- Built-in 800V High Voltage Power BJT
- Quasi-Resonant Primary Side Regulation (QR-PSR) Control with High Efficiency
- Single Failure Protections for power supply
- Multi-Mode PSR Control
- Fast Dynamic Response
- Built-in Dynamic Base Drive
- Audio Noise Free Operation
- $\pm 5\%$  CC and CV Regulation
- Low Standby Power <70mW
- Cable Drop Compensation (CDC) in CV Mode
- Build in Protections:
  - Short Load Protection (SLP)
  - Cycle-by-Cycle Current Limiting (OCP)
  - On-Chip Thermal Shutdown (OTP)
  - VDD OVP & UVP & Clamp
- Available in SOP-8Package

### APPLICATIONS

- Battery Chargers for Cellular Phones
- AC/DC Power Adapter and LED Lightings

### TYPICAL APPLICATION CIRCUIT



### GENERAL DESCRIPTION

KP217XM is a high performance Quasi Resonant (QR) Primary Side Regulation (PSR) PWM power switch with high precision CV/CC control ideal for charger applications.

In CV mode, KP217XM adopts Multi-Mode QR Control which uses the hybrid of AM (Amplitude Modulation) mode and (Frequency Modulation) FM mode to improve system efficiency and reliability. In CC mode, the IC uses PFM control with line and load CC compensation. The IC can achieve audio noise free operation and fast dynamic response. The built-in Cable Drop Compensation (CDC) function can provide excellent CV performance

KP217XM integrates functions and protections of VDD Under Voltage Lockout (UVLO), VDD over Voltage Protection (VDD OVP), AC Line OVP, AC Brownout (BOP), Cycle-by-cycle Current Limiting (OCP), Short Load Protection (SLP), On-Chip Thermal Shutdown, VDD Clamping, etc.