

# Multi-Mode CV/CC PSR Power Switch with HV Start Up Function

#### **FEATURES**

- Integrated with 650V MOSFET
- With HV Start Up Function, Start Up Resistor can be Removed
- Supports 2 Winding Transformer PSR
- Multi Mode PSR Control
- Audio Noise Free Operation for PSR
- Optimized Dynamic Response for PSR
- Low Standby Power <50mW</li>
- ±4% CC and CV Regulation
- Programmable Cable Drop Compensation (CDC) in PSR CV Mode
- Built-in AC Line & Load CC Compensation
- Build in Protections:
  - Short Load Protection (SLP)
  - On-Chip Thermal Shutdown (OTP)
  - Cycle-by-Cycle Current Limiting
  - Over Voltage Protection (OVP)
  - VDD UVLO, OVP & Clamp
- Available with SOP-7 and DIP-7 Package

## **APPLICATIONS**

- Battery Chargers for Cellular Phones
- AC/DC Power Adapter

## **GENERAL DESCRIPTION**

KP216X is a family of high performance Primary Side Regulation power switch with high precision CV/CC control ideal for charger applications.

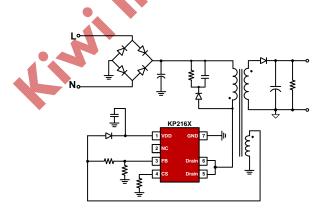
With HV start up function, no start up resistor is needed, thus standby power is reduced. Besides, KP216X also supports 2 winding transformer PSR, which can save cost further.

In CV mode, KP216X adopts Multi Mode Control which uses the hybrid of AM mode and 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 optimized dynamic response.

KP216X integrates functions and protections of Under Voltage Lockout (UVLO), VDD over Voltage Protection (VDD OVP), Cycle-by-cycle Current Limiting (OCP), Short Load Protection (SLP), Over Voltage Protection (OVP) and VDD Clamping.

## TYPICAL APPLICATION CIRCUIT

Charger Application (3 winding Tx)



#### **Charger Application (2 winding Tx)**

