

Offline Inductor-less AC Linear Regulator

FEATURES

- High Output Voltage Accuracy: 2%
- Programmable Output: 5V/3.3V/2.7V
- Smart Control to Maximize Efficiency
- Universal Input Range: 80~305VAC
- No Inductor Required
- No Bulk Capacitor Required
- Less Components and Low Cost
- Fast Line and Load Transient Response
- Short Load Protection
- Output Under Voltage Protection (UVP)
- Over Load Protection(OLP)
- On Chip Thermal Shutdown
- Available with SOP-8 and DIP-8 Package

APPLICATIONS

- Non Isolation AC/DC Converter
- Home Appliance
- Wall Switches and Dimmers

GENERAL DESCRIPTION

KP3310 is a compact, inductor-less, offline linear regulator. It steps down the AC line voltage to 5V/3.3V/2.7V based on SEL pin program. It is a simple solution to provide a bias voltage in offline applications.

KP3310 integrates a 650V power MOSFET, startup controller, voltage control circuit, AC synchronous circuit, low dropout regulator, etc. The IC also integrates smart control system using AC line power when necessary, thus minimizing device losses to achieve good efficiency. The IC can help system designs meeting new standby power specifications.

KP3310 integrates functions and protections of Under Voltage Lockout (UVLO), VDD over Voltage Protection (VDD OVP), Over Load Protection (OLP), Output Under Voltage Protection (UVP), On-chip Thermal Shutdown, etc.

TYPICAL APPLICATION CIRCUIT

