

High Primary Side Control IC For Off-line Battery Chargers ME8300

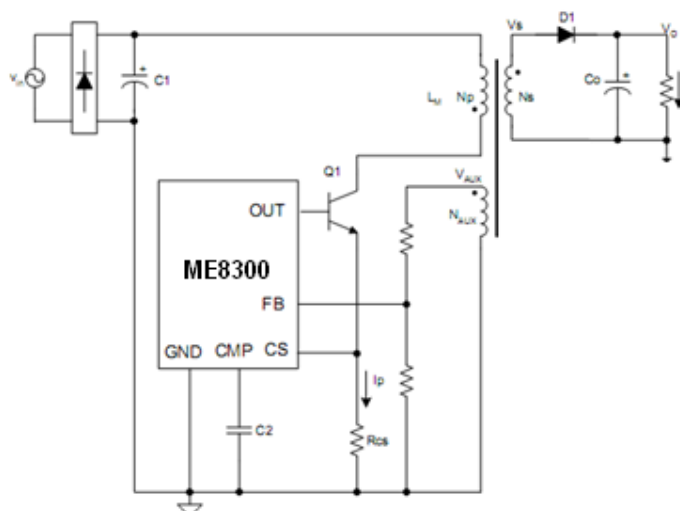
General Description

The ME8300 is a high performance AC/DC power supply controller for battery charger and adapter applications. The device uses Pulse Frequency Modulation (PFM) method to build discontinuous conduction mode (DCM) flyback power supplies. The ME8300 provides accurate constant voltage, constant current (CV/CC) regulation without requiring the opto-coupler and the secondary control circuitry. It also eliminates the need of loop compensation circuitry while maintaining stability. The ME8300 achieves excellent regulation and high power efficiency, the no-load power consumption is less than 200mW at 265VAC input. The ME8300 is available in SOP-8 package.

Features

- Primary Side Control for Rectangular Constant Current and Constant Voltage Output
- Eliminates Opto-Coupler and Secondary CV/CC Control Circuitry
- Eliminates Control Loop Compensation Circuitry
- Output Cable Resistor Compensation
- Flyback Topology in DCM Operation
- Random Frequency Modulation to Reduce System EMI
- Valley Turn on of External Power NPN Transistor
- Built-in Soft Start
- Over Voltage Protection
- Short Circuit Protection

Typical Application Circuit



Typical Application

- Adapters/Chargers for Cell/Cordless Phones, PDAs, MP3 and Other Portable Apparatus
- Standby and Auxiliary Power Supplies