

3A, 30V, 500KHz Step-Down Converter

DESCRIPTION

The EUP3451 is current mode, step-down switching regulator capable of driving 3A continuous load with excellent line and load regulation. The EUP3451 can operate with an input voltage range from 4.5V to 30V and the output can be externally set from 0.8V to 12V with a resistor divider.

Fault condition protection includes cycle-by-cycle current limiting and thermal shutdown. In shutdown mode the regulator draws 1 μ A of supply current. Programmable soft-start minimizes the inrush supply current and the output overshoot at initial startup.

The EUP3451 require a minimum number of external components.

FEATURES

- 35V Input Surge Protection
- 3A Output Current
- 0.135 Internal DMOS Output Switch
- 4.5V to 30V Input Operating Range
- Output Adjustable from 0.8V to 12V
- Up to 95% Efficiency
- 1 μ A Shutdown Current
- Fixed 500KHz Frequency
- Thermal Shutdown and Overcurrent Protection
- Input Supply Overvoltage and Undervoltage Lockout
- Available SOP-8 Package
- RoHS Compliant and 100% Lead(Pb)-Free

APPLICATIONS

- PC Monitors
- Distributed Power Systems
- Networking Systems
- Portable Electronics

Typical Application Circuit

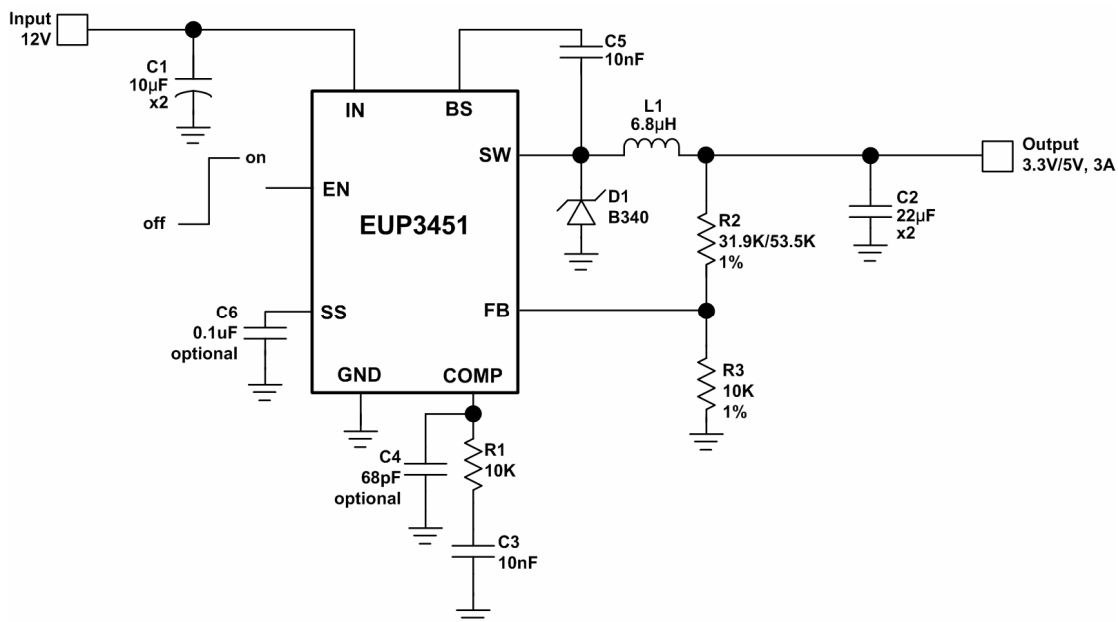


Figure 1. 12V to 3.3V/5V Application Circuit