

5A,30V,500KHz Step-Down Converter

DESCRIPTION

The EUP3489 is current mode, step-down switching regulator capable of driving 5A continuous load with excellent line and load regulation. The EUP3489 operates with an input voltage range from 4.75V to 30V and the output voltage is externally set from 1.222V to 26V with a resistor divider.

Fault condition protection includes cycle-by-cycle current limit and thermal shutdown. In shutdown mode the regulator draws 3 μ A of supply current. Internal soft-start minimizes the inrush supply current and the output overshoot at initial startup.

The EUP3489 require a minimum number of external components.

FEATURES

- 4.75V to 30V Wide Input Operating Range
- Output Adjustable from 1.222V to 26V
- Up to 5A Output Current
- 3 μ A Low Shutdown Current
- 0.1 Ω Internal DMOS Output Switch
- Up to 90% Efficiency
- Fixed 500kHz Switching Frequency
- Internal Compensation
- Internal Soft Start
- Cycle-by-Cycle Current Limit Protection
- Thermal Shutdown Protection
- Input Supply Undervoltage Lockout
- Available SOP-8 (EP) Package
- RoHS Compliant and 100% Lead(Pb)-Free Halogen-Free

APPLICATIONS

- LCD TV
- Battery Charger
- DSL Modems
- Distributive Power Systems
- Pre-regulator for Linear Regulators

Typical Application Circuit

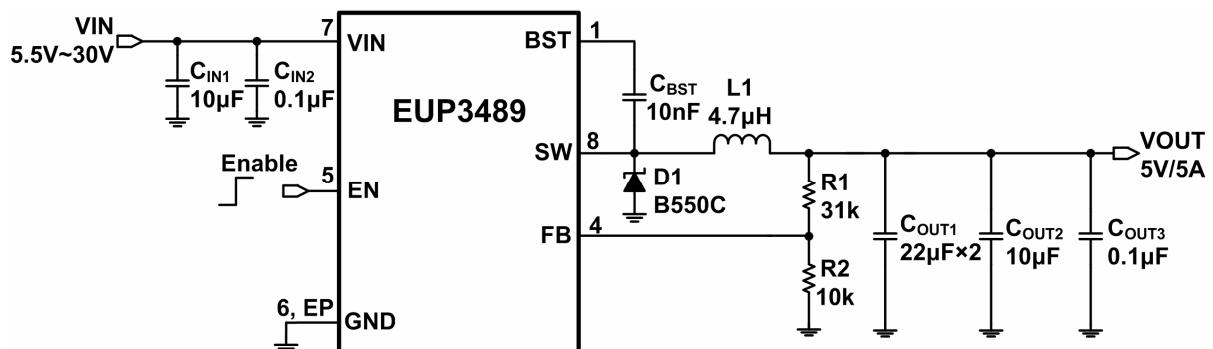


Figure 1. 5V Application Circuit