

1 Amp Current Limited Load Switch

DESCRIPTION

The EUP3510/3511 are Current Limited P-channel MOSFET power switches designed for high-side load-switching applications. The internal current-limiting circuit protects the input supply against large output short circuit current which may cause the supply to fall out of regulation. The current limit threshold is programmed with an external resistor from SET Pin to ground. The quiescent supply current is typically $8\mu\text{A}$, making the device ideal for portable battery-operated equipment. In shutdown mode, the supply current decreases to less than $0.1\mu\text{A}$.

Additional features include thermal shutdown to prevent catastrophic switch failure from high current loads, under-voltage lockout (UVLO) to ensure that the device remains off unless there is a valid input voltage present.

The EUP3510/3511 are available in 5 pin SOT-23 packages.

FEATURES

- 2.4V to 5.5V Input voltage range
- Programmable Over Current Threshold
- Fast Transient Response:
- Low Quiescent Current
 - $8\mu\text{A}$ Normal Operation
 - $1\mu\text{A}$ Max in Shutdown
- $115\text{m}\Omega$ typical $R_{\text{DS(ON)}}$
- Only 1.8V needed for ON/OFF Control
 - EUP3510 ENB Active Low
 - EUP3511 EN Active High
- Under-Voltage Lockout
- Thermal Shutdown
- 4kV ESD Protection
- Available in SOT23-5 Package
- RoHS Compliant and 100% Lead(Pb)-Free

APPLICATIONS

- Peripheral ports
- Notebook computers
- Personal communication devices
- Hot swap supplies

Typical Application Circuit

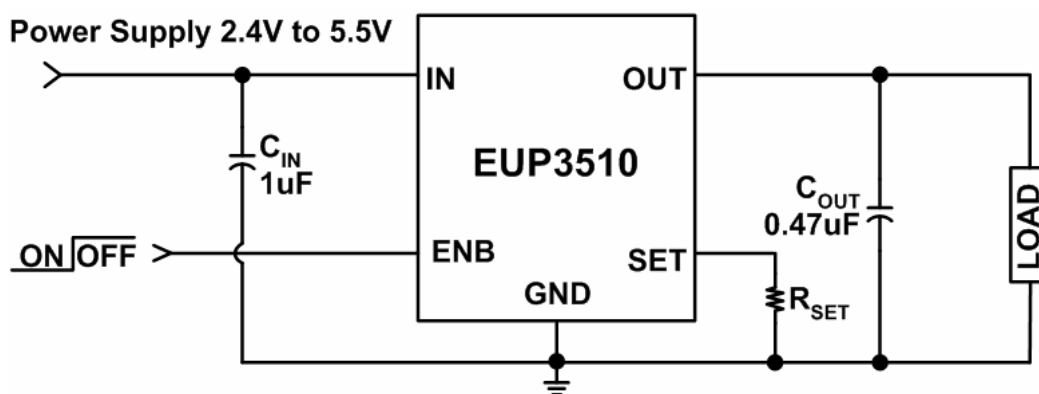


Figure 1.