

1A Ultra Low-Dropout Linear Regulator

DESCRIPTION

The EUP7961 is a 1A low-dropout linear regulator that provides a low voltage, high current output with minimum external components. The features include precision output voltage, ultra-low dropout voltage, and low ground current.

The EUP7961 operates from an input of 2.5V to 5.5V. This regulator uses a 1 μ F ceramic input capacitors and a 4.7 μ F ceramic output capacitor to deliver 1A output current. High bandwidth provides excellent transient response. It is designed to power digital circuits requiring low voltage with high currents (i.e., PLDs, DSPs, microcontrollers, etc.).

Other features include thermal and current limit protection, a logic-control shutdown mode and an error flag output that goes low when the output voltage drops 10% below the nominal value.

It is available in adjustable output voltage with a 0.8V feedback voltage. The adjustable output voltage can be set from 0.8V to 4.5V.

FEATURES

- 1A Guaranteed Output Current
- 300mV Dropout Voltage at 1A Output
- Stable with Ceramic Capacitors
- $\pm 1.8\%$ Output Voltage Accuracy
- 300 μ A Low-Ground Pin Current
- 0.1 μ A Quiescent Current in Shutdown Mode
- Excellent Line and Load Regulation
- Thermal Shutdown and Current Limit Protection
- Available in SOP-8 Package
- RoHS Compliant and 100% Lead (Pb)-Free

APPLICATIONS

- Supply for Low-Voltage Digital IC
- PC Add-In Cards
- High Efficiency Linear Power Supplies
- Post Regulator

Typical Application Circuit

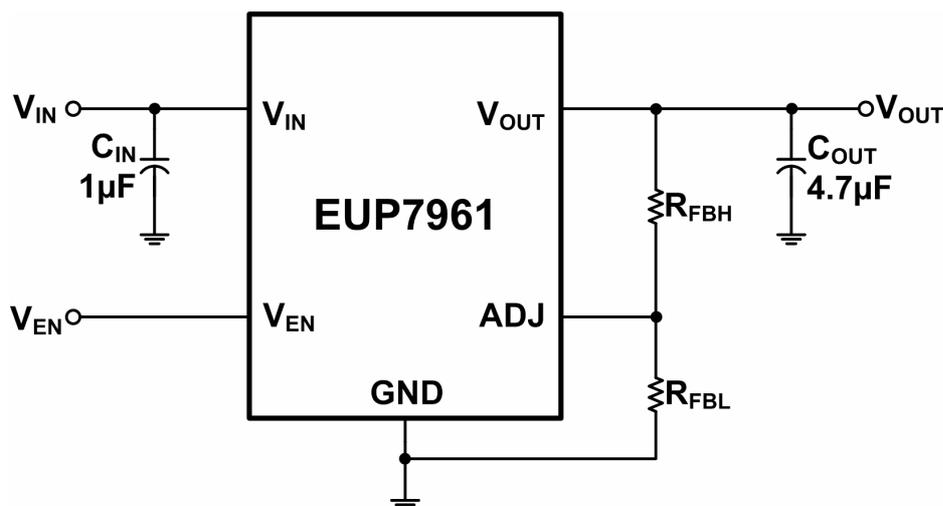


Figure1.