

30V, 400mA, High PSRR, Low Dropout Voltage Linear Regulator

Description

Datasheet brief

The FH6301/A series are a group of low-dropout(LDO) voltage regulators offering the benefits of wide input voltage range, low dropout voltage, low power consumption, and miniaturized packaging.

Quiescent current of only 2.2 μ A makes these devices ideal for powering the battery-powered, always-on systems that require very little idle-state power dissipation to a longer service life.

There is a shutdown mode by pulling the EN pin low. The shutdown current in this mode goes down to only 10nA (typical).

The FH6301/A series of linear regulators are stable with the ceramic output capacitor over its wide input range from 2.0V to 30V and the entire range of output load current (0mA to 400mA).

Typical Application Circuits

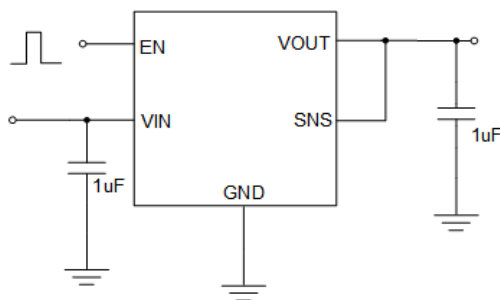


Figure 1. : Application circuit of Fixed VOUT
LDO with enable and sense functions

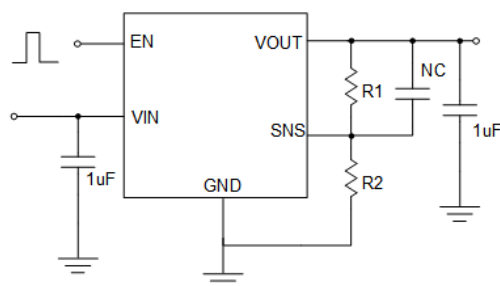


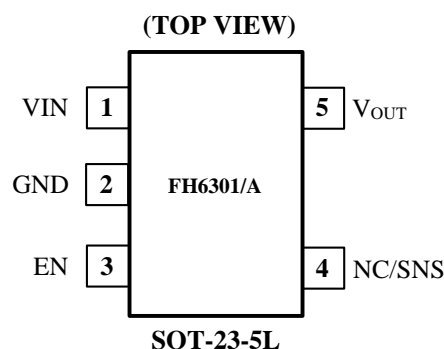
Figure 2. Adjustable output voltage for FH6301/A-FB

Key Features

PRELIMINARY DATASHEET

- Wide Operating Input Voltage Range: 2V to 30V
- $\pm 2\%$ Output Accuracy
- Output Current: 400mA(FH6301A), 200mA(FH6301)
- 10nA Disable Current
- 2.2 μ A Ground Current at no Load
- Dropout Voltage: 0.15V at 100mA / V_{OUT} : 5V
- Fixed Output Voltage 1.2V, 1.8V, 3.3V, 5V, 9V, 12V
- Adjustable Output Voltage Available by Specific
- Stable with Ceramic or Tantalum Capacitor
- Current Limit Protection
- Over-Temperature Protection
- SOT-23-5L Package Available

Pin Configurations



Applications

- Portable, Battery Powered Equipment
- Low Power Microcontrollers
- Wireless Communication Equipment
- Audio/Video Equipment
- Car Navigation Systems
- Industrial Controls
- Home Automation