

40V, 200mA, Low quiescent current, Voltage Linear Regulator

PRELIMINARY DATASHEET

Description

The FH68401 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 2.0μA 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 100nA(typ.).

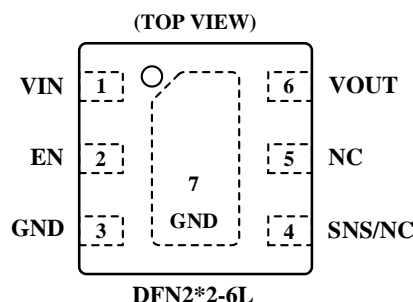
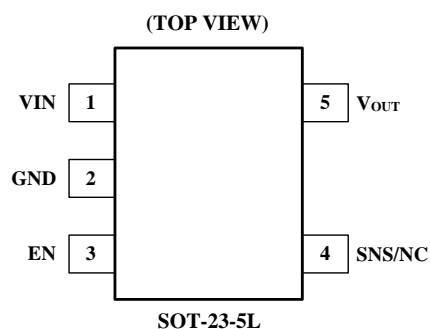
The FH68401 series of linear regulators are stable with the ceramic output capacitor over its wide input range from 2.5V ~ 40V and the entire range of output load current (0mA ~ 200mA).

Datasheet brief

Key Features

- Wide Operating Input Voltage Range: 2.5V to 40V
- Output Peak Current: 200mA(std)
- 2μA Ground Current at no Load
- Output Accuracy: ±1%
- 100nA Disable Current
- Dropout Voltage: 0.35V at 100mA / VOUT 5V
- Support Fixed Output Voltage 1.8V, 3.3V, 5V, 12V.
- Adjustable Output Voltage Available by Specific
- Stable with Ceramic or Tantalum Capacitor
- Current Limit Protection
- Over-Temperature Protection
- SOT-23-5L & DFN2*2-6L Package Available

Pin Configurations



Typical Application Circuits

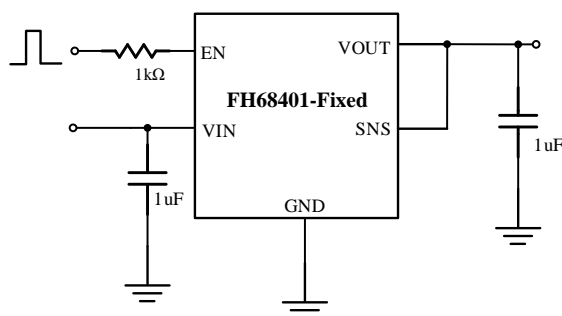
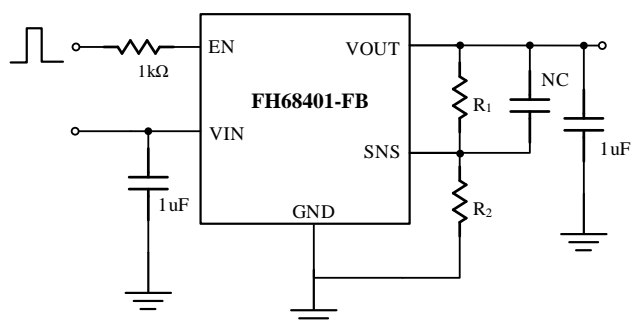


Figure 1. Application circuit of Fixed VOUT with enable and sense functions



Notes : $V_{OUT} = (R_1 + R_2) / R_2 \times 1.8V$, and $R_2 < 36K\Omega$.

Figure 2. Adjustable output voltage application circuit

Applications

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