

PT5107

300mA High PSRR LDO

GENERAL DESCRIPTION

The PT5107 is a low-dropout voltage regulator designed for portable and wireless applications that require high PSRR, low quiescent current and excellent line and load transient response. The PT5107 is designed to work with small 1 μ F input and output ceramic capacitors. Its quiescent current is as low as 25 μ A. With its better than 70dB PSRR at 10kHz, the PT5107's performance is ideal for battery powered systems for delivering low dropout voltage and low quiescent current.

The device can be used for mobile phones and similar battery powered wireless applications. It provides up to 300mA, from a 2.0V to 5.5V input. The PT5107 consumes less than 0.1 μ A in shutdown mode. The PT5107 is available in 5 pin SOT23 and SC70 packages. The output standards of 1.5V, 1.8V, 2.5V, 2.8V, 3.0V, and 3.3V are available.

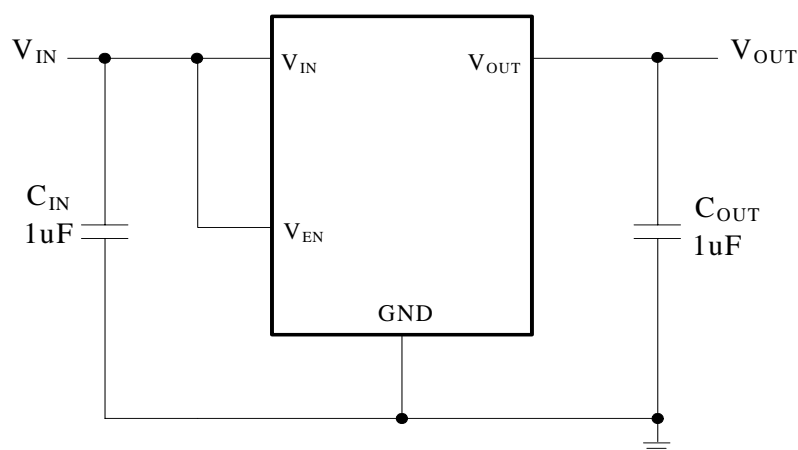
FEATURES

- ◆ 2.0V to 5.5V input range
- ◆ 300mA guaranteed output current
- ◆ High PSRR: 75dB at 1KHz, 70dB at 10KHz
- ◆ Low quiescent current: 25 μ A (Typ.)
- ◆ < 1 μ A current at shutdown mode
- ◆ 180mV maximum low dropout voltage with 100mA load
- ◆ -40°C to +85°C junction temperature for operation

APPLICATIONS

- ◆ CDMA/GSM mobile phones
- ◆ Cordless telephones
- ◆ WLAN and bluetooth appliances
- ◆ PDAs/MP3
- ◆ Battery powered portable devices

TYPICAL APPLICATIONS



*Note:

C_{OUT} : Recommended ceramic capacitor