
High-PSRR 500mA LDO

FEATURES

- 2.5V to 5.5V input range
- 72dB PSRR @1kHz, $V_{IN} = V_{OUT} + 1V$
- < 0.1 μ A quiescent current at shutdown mode
- Fast turn on time: 150 μ s (typical)
- 290mV maximum dropout voltage with 400mA load
- Thermal shutdown and short-circuit current limit
- 1.5, 1.7, 1.8, 1.9, 2.0, 2.5V, 2.6V, 2.7V, 2.8V, 2.85V, 2.9V, 3.0V, 3.1V, 3.2V, 3.3V, 4.7V, 4.8V, 4.9V and 5.0V output standard
- Miniature SOT-23-5 package

APPLICATION

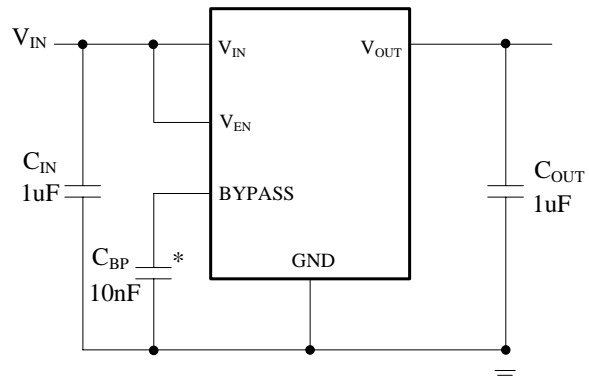
- CDMA/GSM mobile phones
- Cordless telephones
- WLAN and bluetooth appliances
- PDAs/MP3
- Battery powered portable devices

GENERAL DESCRIPTION

The PT5108 is a low-dropout voltage regulator designed for portable applications that require both low noise performance and board space. Its PSRR at 1kHz is better than 70dB. The PT5108's is ideal for battery powered systems for delivering low dropout voltage and low quiescent current. An optional external bypass capacitor reduces the output noise and increases PSRR.

The device can be used for mobile phones and similar battery powered wireless applications. It provides up to 500mA, from a 2.5V to 5.5V input. The PT5108 consumes less than 0.1 μ A in shutdown mode and has fast turn-on time less than 150 μ s. The PT5108 is available in a 5 pin SOT-23 package. Selected performances are specified for -40°C to +85°C temperature range. The output voltage is available in the range of 1.5~2.0V, 2.5~3.3V, 4.7~5.0V.

TYPICAL APPLICATIONS



C_{OUT} : Recommended ceramic capacitor C_{BP} : The optional bypass capacitor for noise reduction