

300mA Low Dropout Regulator with External Bias Supply

Features

- Input Voltage as Low as 1.25V and 5V Input Bias Supply current
- 100mV Dropout @ 300mA, as VO is 1.2V
- ±2% Output Voltage
- Adjustable Output Low to 0.8V
- 0.9V, 1.0V, 1.2V, 1.5V and 1.8V Options by Setting ADJ Pin Below 0.2V and Adjustable Externally Using Resistors
- VO Power OK Signal with 2ms Rising Edge Propagation delay
- Over Current and Over Temperature Protection
- Enable Pin
- TSOT-23-6, SOT-23-6 and SOP-8 Packages

Applications

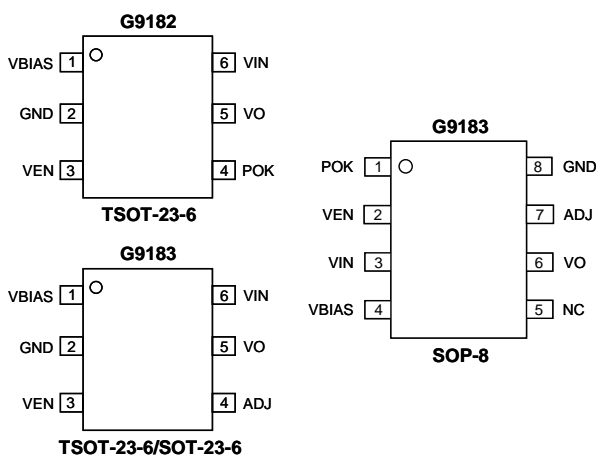
- VID Power Supplies
- PDAs
- Notebook Computers
- Cell Phones

General Description

The G9183 is a high performance positive voltage regulator designed for use in applications requiring very low Input voltage and very low dropout voltage at up to 300mA. It operates with a V_{IN} as low as 1.25V and V_{BIAS} voltage 3V with output voltage programmable as low as 0.8V. The G9183 features ultra low dropout, ideal for applications where V_{OUT} is very close to V_{IN} . Additionally, the G9183 has an enable pin to further reduce power dissipation while shutdown. The G9183 provides excellent regulation over variations in line, load and temperature. The G9183 provides a power OK signal to indicate if the voltage level of VO reaches 92% of its rating value.

The G9183 is available in the power TSOT-23-6, SOT-23-6 and SOP-8 package. It is available with 0.9V, 1.0V, 1.1V, 1.2V, 1.5V, 1.6V, 1.7V and 1.8V internally preset outputs that are also adjustable using external resistors.

Pin Configuration



Typical Application Circuit

