G9661

Peak 3A, Low Dropout Regulator with Enable

Features

- **Adjustable Output Low to 0.8V**
- **Input Voltage as Low as 1.4V and VPP Voltage 5V**
- **300mV Dropout @ 2A, VO 2.5V**
- **Over Current and Over Temperature Protection**
- **Enable Pin**
- **Low Reverse Leakage (Output to Input)**
- **TSOT-23-6, SOP-8(FD), MSOP-10(FD) and TDFN3X3-10 Packages**
- **±1.5% ADJ Voltage**
- **VO Power OK Signal**
- **2.5V Options by Setting ADJ Pin Below 0.2V and Adjustable Externally Using Resistors**
- **VO Pull Low Resistance when Disable**
- **VO Soft Start When Enable**

Applications

- **Motherboards**
- **Peripheral Cards**
- **Network Cards**
- **Set Top Boxes**
- **Notebook Computers**

General Description

The G9661 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 2 amps. It operates with a V_{IN} as low as 1.4V and VPP voltage 5V with output voltage programmable as low as 0.8V. The G9661 features ultra low dropout, ideal for applications where V_{OUT} is very close to V_{IN}. Additionally, the G9661 has an enable pin to further reduce power dissipation while shutdown. The G9661 provides excellent regulation over variations in line, load and temperature. The G9661 provides a power OK signal to indicate if the voltage level of VO reaches 92% of its rating value.

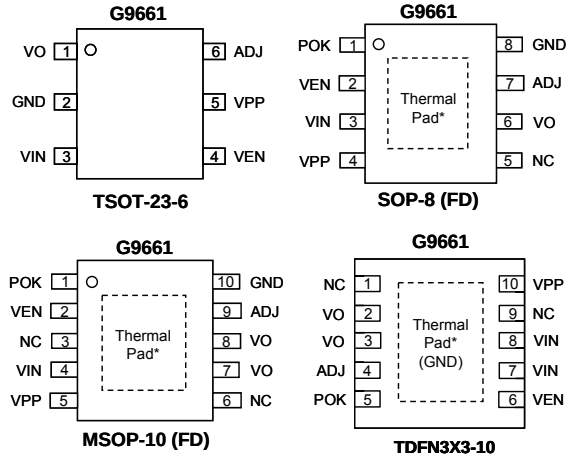
The G9661 is available in the power TSOT-23-6, SOP-8(FD), MSOP-10(FD) and TDFN3X3-10 package. It is available with 2.5V internally preset outputs that are also adjustable using external resistors.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G9661-25ADJTP1U	961Ax	-40°C~+85°C	TSOT-23-6
G9661-25ADJF11U	9661-25	-40°C~+85°C	SOP-8 (FD)
G9661-25ADJF61U	9661-25	-40°C~+85°C	MSOP-10 (FD)
G9661-25ADJRE1U	9661A	-40°C~+85°C	TDFN3X3-10

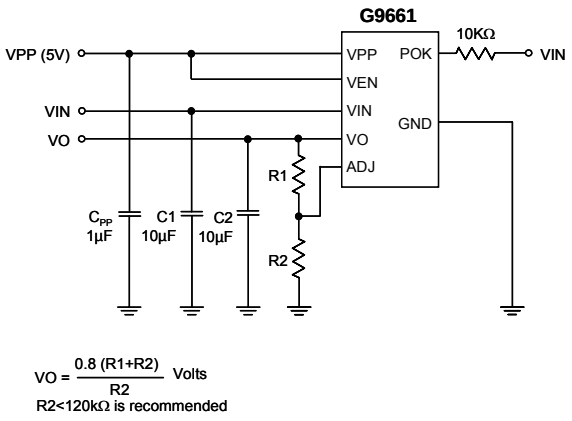
Note:TP: TSOT-23-6 F1: SOP-8 (FD) F6: MSOP-10 (FD) RE: TDFN3X3-10
1:Bonding Code
U : Tape & Reel
e.g. 25 denotes the 2.5V output voltage

Pin Configuration



* Recommend connecting the Thermal Pad to the Ground for excellent power dissipation.

Typical Application Circuit



$$VO = \frac{0.8\,(R1+R2)}{R2}\ \text{Volts}$$

R2<120kΩ is recommended