

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

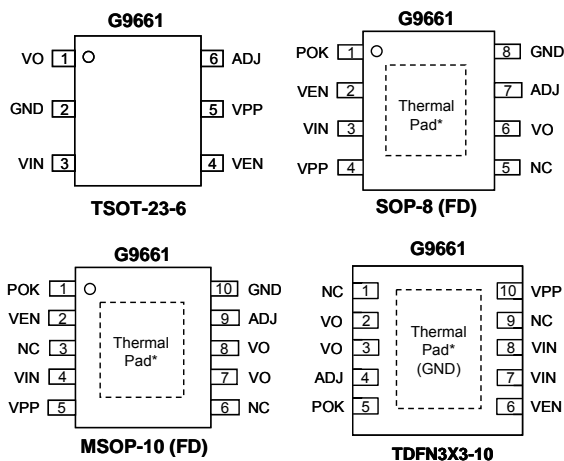
Note: TP: TSOT-23-6 F1: SOP-8 (FD) F6: MSOP-10 (FD) RE: TDFN3X3-10

1: Bonding Code

U : Tape & Reel

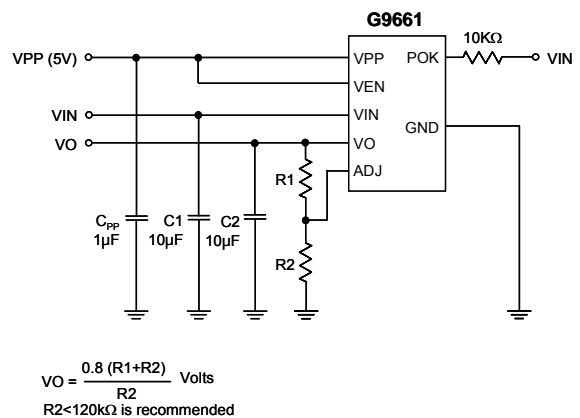
e.g. 25 denotes the 2.5V output voltage

Pin Configuration



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

Typical Application Circuit



$$V_O = \frac{0.8(R_1 + R_2)}{R_2} \text{ Volts}$$

$R_2 < 120k\Omega$ is recommended