

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)
- Power SOP-8 (FD) Packages with Thermal Pad
- ±2% Output 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 G966A 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 G966A features ultra low dropout, ideal for applications where V_{OUT} is very close to V_{IN} . Additionally, the G966A has an enable pin to further reduce power dissipation while shutdown. The G966A provides excellent regulation over variations in line, load and temperature. The G966A provides a power OK signal to indicate if the voltage level of VO reaches 92% of its rating value.

The G966A is available in the power SOP-8 (FD) 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 (Pb free/Green)
G966A-25ADJF11U	966A-25	-40°C~+85°C	SOP-8 (FD)

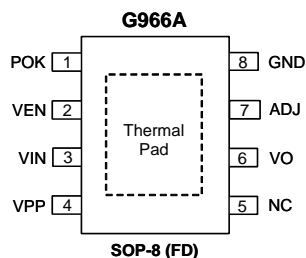
Note: F1: SOP-8 (FD)

1: Bonding Code

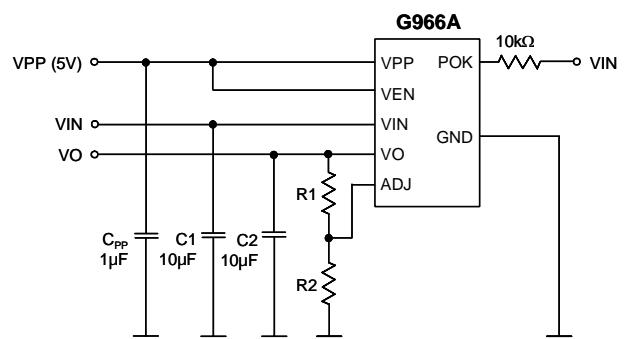
U : Tape & Reel

e.g. 25 denotes the 2.5V output voltage

Pin Configuration



Typical Application Circuit



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

$R2 < 120k\Omega$ is recommended