

2A Low Dropout Regulator with Enable

Features

- Adjustable Output Low to 0.8V
- 260mV Dropout @ 2A, VO 1.2V
- 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
- 1.05V, 1.2V, 1.8V and 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 G975 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 VPP voltage 5V and output voltage programmable as low as 0.8V. The G975 features ultra low dropout, ideal for applications where V_{OUT} is very close to V_{IN}. Additionally, the G975 has an enable pin to further reduce power dissipation while shutdown. The G975 provides excellent regulation over variations in line, load and temperature. The G975 provides a power OK signal to indicate if the voltage level of VO reaches 92% of its rating value.

The G975 is available in the power SOP-8 (FD) package. It is available with 1.05V, 1.2V, 1.8V and 2.5V internally preset outputs that are also adjustable using external resistors.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Pb free)
G975-105ADJF11U	975-105	-40°C~+85°C	SOP-8 (FD)
G975-120ADJF11U	975-120	-40°C~+85°C	SOP-8 (FD)
G975-180ADJF11U	975-180	-40°C~+85°C	SOP-8 (FD)
G975-250ADJF11U	975-250	-40°C~+85°C	SOP-8 (FD)

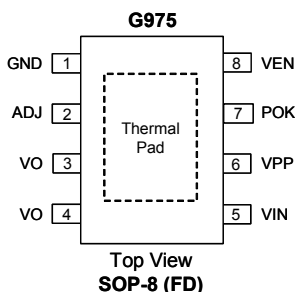
Note: F1: SOP-8 (FD)

1: Bonding Code

U : Tape & Reel

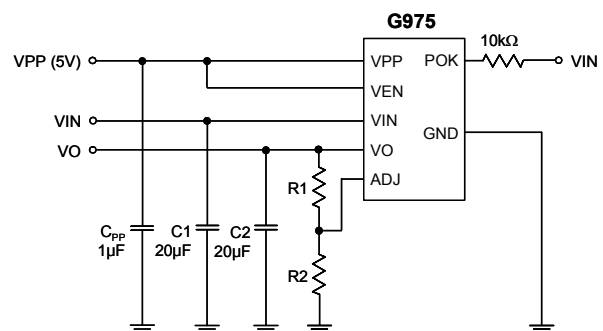
e.g. 105 denotes the 1.05V output voltage

Pin Configuration



- * Thermal Pad can be connected to VIN
- ** Connect Thermal Pad to ground plate will have better thermal performance

Typical Application Circuit



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

R2 < 120kΩ is recommended