

## 7A Low Dropout Regulator with Enable

### Features

- Adjustable Output Low to 0.8V
- Input Voltage as Low as 1V and VPP Voltage 5V
- 140mV Dropout @ 7A, VO 1.05V
- Over Current and Over Temperature Protection
- Enable Pin
- Low Reverse Leakage (Output to Input )
- Power SOP-8 (FD) Packages with Thermal Pad
- $\pm 1.5\%$  Output Voltage
- VO Power OK Signal
- VO Pull Low Resistance when Disable
- VO Soft Start when Enable

### Applications

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

### Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G977F11U	G977	-40°C~+85°C	SOP-8 (FD)

Note: F1: SOP-8 (FD)

1: Bonding Code

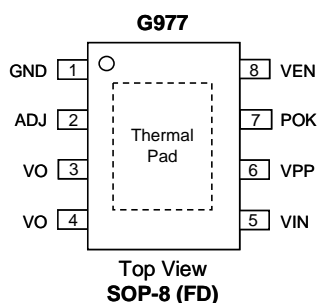
U: Tape & Reel

### General Description

The G977 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 7 amps. It operates with VPP voltage 5V and output voltage programmable as low as 0.8V. The G977 features ultra low dropout, ideal for applications where  $V_{OUT}$  is very close to  $V_{IN}$ . Additionally, the G977 has an enable pin to further reduce power dissipation while shutdown. The G977 provides excellent regulation over variations in line, load and temperature. The G977 provides a power OK signal to indicate if the voltage level of VO reaches 92% of its rating value.

The G977 is available in the power SOP-8 (FD) package. It is adjustable using external resistors.

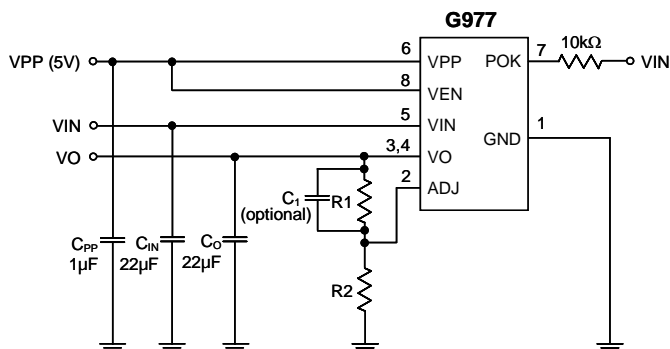
### Pin Configuration



\* Thermal Pad can be connected to VIN

\*\* Connect Thermal Pad to ground plate will have better thermal performance

### Typical Application Circuit



$$1. VO = \frac{0.8 (R1+R2)}{R2} \text{ Volts, } R2 < 120k\Omega \text{ is recommended}$$

2.  $C_1$  is not necessary. VO is also stable if  $C_1 = 22pF \sim 150pF$