

## 2A Low Input /Low Dropout Linear Regulator

### Features

- Input Voltage as Low as 1.4V
- 400mV Dropout @ 2A, as VO is 1.2V
- ±2% Output Voltage
- Output Range from 0.5V to 3.8V
- Over Current and Over Temperature Protection
- Max. Supply Current is Shutdown Mode <math><1\mu\text{A}</math>
- Small Ceramic Output Capacitors
- Enable Pin
- SOP-8 (FD) Packages

### Applications

- Telecom/Networking Cards
- Motherboards/Peripheral Cards
- Industrial Applications
- Wireless Infrastructure
- Set top Boxes
- Notebook Computers
- Medical Equipment
- Battery Powered Systems

### General Description

The G9185 is a high performance positive voltage regulator designed for use in applications requiring very low Input voltage and low dropout voltage at up to 2Amperes. It operates with a  $V_{IN}$  as low as 1.4V with output voltage programmable as low as 0.5V. The supply current is 350 $\mu\text{A}$  while  $V_{IN}$  is 3.3V. The G9185 features low dropout, ideal for applications where  $V_{OUT}$  is very close to  $V_{IN}$ . The over-current protection limit is set at 3A typical. An over temperature protection circuit is built-in in the G9185 to prevent thermal overload. Additionally, the G9185 has an enable pin to further reduce power dissipation while shutdown. In the shutdown mode, the maximum supply current is less than 1 $\mu\text{A}$ . The G9185 provides excellent regulation over variations in line, load and temperature.

The G9185 is available in the SOP-8 (FD) package. The output voltage can be set via an external divider or to fixed settings of 0.5V and 1.2V depending on how FB pin is configured.

### Ordering Information

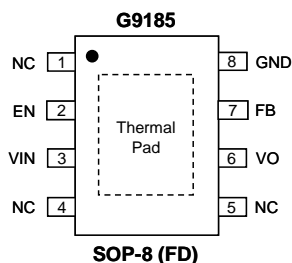
ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G9185F11U	G9185	-40°C ~ +85°C	SOP-8 (FD)

Note: F1: SOP-8 (FD)

1: Bonding Code

U : Tape & Reel

### Pin Configuration



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

### Typical Application Circuit

