

500mA Low Dropout Linear Regulator

Features

- Input Voltage as Low as 1.5V
- 240mV Dropout @ 300mA, as VO is 1.5V
- ±2% Output Voltage
- Output range from 0.8V to 1.8V (50mV increments)
- Over Current and Over Temperature Protection
- Max. Supply Current is Shutdown Mode <math><1\mu\text{A}</math>
- Small Ceramic Output Capacitors
- Enable Pin
- SOT-89, SOT-223, SOT-23-5 and ADFN1.5X1.5-6 Packages

Applications

- VID Power Supplies
- PDAs
- Notebook Computers
- Cell Phones

General Description

The G9184 is a high performance positive voltage regulator designed for use in applications requiring very low Input voltage and low dropout voltage. It operates with a V_{IN} as low as 1.5V with output voltage 1.2V. The supply current is 80 μA . The G9184 features low dropout, ideal for applications where V_{OUT} is very close to V_{IN} . The over-current protection limit is set at 550mA typical. An overtemperature protection circuit is built-in in the G9184 to prevent thermal overload. Additionally, the G9184 has an enable pin to further reduce power dissipation while shutdown. In the shutdown mode, the maximum supply current is less than 1 μA . The G9184 provides excellent regulation over variations in line, load and temperature.

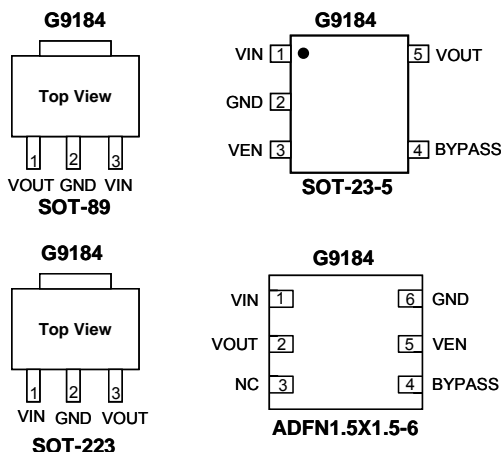
The G9184 is available in the power SOT-89, SOT-223, SOT-23-5 and ADFN1.5X1.5-6 package. It is available from 0.8V to 1.8V, 0.05V increments, internally preset outputs.

Ordering Information

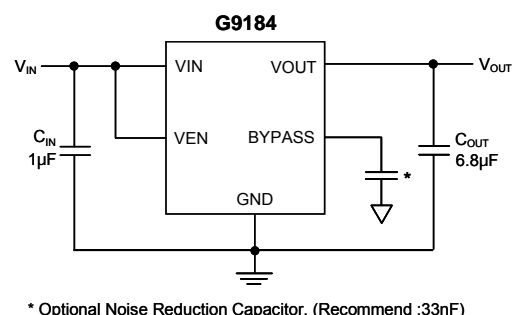
ORDER NUMBER	MARKING	OUTPUT VOLTAGE	TEMP. RANGE	PACKAGE (Green)
G9184-120T21U	9184D	1.20V	-40°C to +85°C	SOT-89
G9184-110T65U	9184I	1.10V	-40°C to +85°C	SOT-223
G9184-115T65U	9184J	1.15V	-40°C to +85°C	SOT-223
G9184-120T65U	9184D	1.20V	-40°C to +85°C	SOT-223
G9184-080T11U	914Ax	0.80V	-40°C to +85°C	SOT-23-5
G9184-100T11U	914Bx	1.00V	-40°C to +85°C	SOT-23-5
G9184-105T11U	914Cx	1.05V	-40°C to +85°C	SOT-23-5
G9184-120T11U	914Dx	1.20V	-40°C to +85°C	SOT-23-5
G9184-135T11U	914Hx	1.35V	-40°C to +85°C	SOT-23-5
G9184-150T11U	914Ex	1.50V	-40°C to +85°C	SOT-23-5
G9184-160T11U	914Fx	1.60V	-40°C to +85°C	SOT-23-5
G9184-180T11U	914Gx	1.80V	-40°C to +85°C	SOT-23-5
G9184-120A31U	94 Dx	1.20V	-40°C to +85°C	ADFN1.5X1.5-6

Note: T2: SOT-89 T6: SOT-223 T1: SOT-23-5 A3: ADFN1.5X1.5-6
 1& 5: Bonding Code
 U: Tape & Reel

Pin Configuration



Typical Application Circuit



* Optional Noise Reduction Capacitor. (Recommend :33nF)