500mA Low-Dropout Linear Regulators

Features

- Low, 100µA No-Load Supply Current
- 500mA Output Current Limit Minimum
- 500mA Available at V_o=3.3V, V_{IN}=4.3V
- 300mA Current Rating
- Over-Temperature Protection and Short-Circuit Protection
- Max. Supply Current in Shutdown Mode < 1µA
- Stable with Low Cost Ceramic Capacitors

Applications

- Notebook Computers
- **■** Cellular Phones
- PDAs
- Digital still Camera and Video Recorders
- Hand-Held Devices
- **■** Bar Code Scanners

General Description

The G9001 is a low supply current, low dropout linear regulator. The supply current at no-load is $100\mu A$. In the shutdown mode, the maximum supply current is less than $1\mu A$. Output current minimum limit is 500m A, and over-current protection limit is set at 860m A typical. An overtemperature protection circuit is built-in in the G9001 to prevent thermal overload. These power saving features make the G9001 ideal for use in the battery-powered applications such as notebook computers, cellular phones, and PDA's.

These devices feature a shutdown function and are offered in active low with auto discharge. The G9001 is specifically designed to employ ceramic output capacitors. The G9001 comes in a space saving SOT-89, SOT-23-5 and TSOT-23-5 package.

Ordering Information

ORDER NUMBER	MARKING	VOLTAGE	TEMP. RANGE	PACKAGE (Pb free)
G9001-120T11U	900Ax	1.20V	-40°C~ +85°C	SOT-23-5
G9001-180T11U	900Fx	1.80V	-40°C~ +85°C	SOT-23-5
G9001-250T11U	900lx	2.50V	-40°C~ +85°C	SOT-23-5
G9001-260T11U	900Jx	2.60V	-40°C~ +85°C	SOT-23-5
G9001-330T11U	900Px	3.30V	-40°C~ +85°C	SOT-23-5
G9001-250TO1U	900lx	2.50V	-40°C~ +85°C	TSOT-23-5
G9001-250T21U	90011	2.50V	-40°C~ +85°C	SOT-89

For other output voltage, please contact us at sales@gmt.com.tw

Note:T1: SOT-23-5 TO: TSOT-23-5 T2: SOT-89

1: Bonding Code U: Tape & Reel

Pin Configuration

G9001 Top View GND 2 1 2 3 VOUT GND VIN SOT-89 G9001 VIN 1 GND 2 4 NC SOT-23-5/TSOT-23-5

Typical Application Circuit

