

## 300mA Low-Dropout Linear Regulators

### Features

- Low, 100 $\mu$ A No-Load Supply Current
- Guaranteed 300mA Output Current
- Dropout Voltage is 100mV @ 100mA Load
- Over-Temperature Protection and Short-Circuit Protection
- Max. Supply Current in Shutdown Mode < 1 $\mu$ A
- Stable with Low Cost Ceramic Capacitors

### Applications

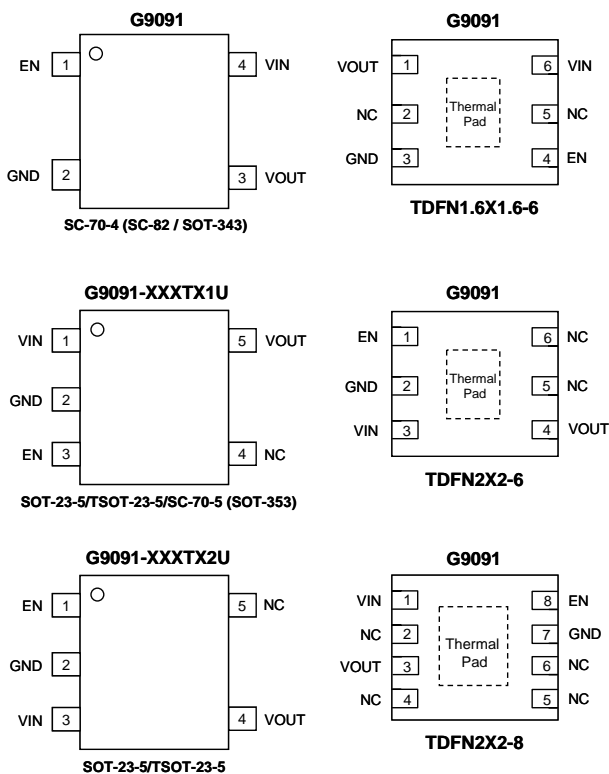
- Notebook Computers
- Cellular Phones
- PDAs
- Digital still Camera and Video Recorders
- Hand-Held Devices
- Bar Code Scanners

### General Description

The G9091 is a low supply current, low dropout linear regulator that comes in a space saving SOT-23-5, TSOT-23-5, SC-70-4 (SC-82 / SOT-343), SC-70-5 (SOT-353), TDFN1.6X1.6-6, TDFN2X2-6 and TDFN2X2-8 package. The supply current at no-load is 100 $\mu$ A. In the shutdown mode, the maximum supply current is less than 1 $\mu$ A. The over-current protection limit is set at 430mA typical. An overtemperature protection circuit is built-in in the G9091 to prevent thermal overload. These power saving features make the G9091 ideal for use in the battery-powered applications such as notebook computers, cellular phones, and PDA's.

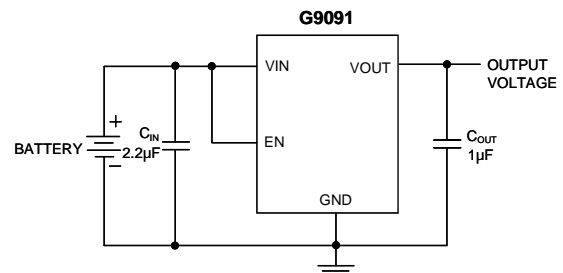
These devices feature a shutdown function and are offered in active low with auto discharge. The G9091 is specifically designed to employ ceramic output capacitors. The G9091 comes in a space saving SOT-23-5, TSOT-23-5, SC-70-4(SC-82/SOT-343), SC-70-5 (SOT-353), TDFN1.6X1.6-6, TDFN2X2-6 and TDFN2X2-8 package.

### Pin Configuration



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

### Typical Application Circuit



## Ordering Information

ORDER NUMBER	MARKING	VOLTAGE	TEMP. RANGE	PACKAGE (Green)
G9091-120T11U	901Ax	1.20V	-40°C~ +85°C	SOT-23-5
G9091-150T11U	901Dx	1.50V	-40°C~ +85°C	SOT-23-5
G9091-180T11U	901Fx	1.80V	-40°C~ +85°C	SOT-23-5
G9091-250T11U	901Ix	2.50V	-40°C~ +85°C	SOT-23-5
G9091-280T11U	901Lx	2.80V	-40°C~ +85°C	SOT-23-5
G9091-285T11U	901Qx	2.85V	-40°C~ +85°C	SOT-23-5
G9091-300T11U	901Mx	3.00V	-40°C~ +85°C	SOT-23-5
G9091-330T11U	901Ox	3.30V	-40°C~ +85°C	SOT-23-5
G9091-500T11U	901Sx	5.00V	-40°C~ +85°C	SOT-23-5
G9091-120T12U	90BAx	1.20V	-40°C~ +85°C	SOT-23-5
G9091-330T12U	90BOx	3.30V	-40°C~ +85°C	SOT-23-5
G9091-475T12U	90BPx	4.75V	-40°C~ +85°C	SOT-23-5
G9091-500T12U	90BSx	5.00V	-40°C~ +85°C	SOT-23-5
G9091-120TO1U	901Ax	1.20V	-40°C~ +85°C	TSOT-23-5
G9091-180TO1U	901Fx	1.80V	-40°C~ +85°C	TSOT-23-5
G9091-250TO1U	901Ix	2.50V	-40°C~ +85°C	TSOT-23-5
G9091-310TO1U	901Rx	3.10V	-40°C~ +85°C	TSOT-23-5
G9091-330TO1U	901Ox	3.30V	-40°C~ +85°C	TSOT-23-5
G9091-500TO1U	901Sx	5.00V	-40°C~ +85°C	TSOT-23-5
G9091-250TV1U	91Ix	2.50V	-40°C~ +85°C	SC-70-4 (SC-82/ SOT-343)
G9091-280TV1U	91Lx	2.80V	-40°C~ +85°C	SC-70-4 (SC-82/ SOT-343)
G9091-330TV1U	91Ox	3.30V	-40°C~ +85°C	SC-70-4 (SC-82/ SOT-343)
G9091-500TV1U	91Sx	5.00V	-40°C~ +85°C	SC-70-4 (SC-82/ SOT-343)
G9091-180TA1U	91Fx	1.80V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9091-250TA1U	91Ix	2.50V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9091-280TA1U	91Lx	2.80V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9091-300TA1U	91Mx	3.00V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9091-310TA1U	91Rx	3.10V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9091-330TA1U	91Ox	3.30V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9091-500TA1U	91Sx	5.00V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9091-280RR1U	91L xx	2.80V	-40°C~ +85°C	TDFN1.6X1.6-6
G9091-250RB1U	9091I	2.50V	-40°C~ +85°C	TDFN2X2-6
G9091-280RB1U	9091L	2.80V	-40°C~ +85°C	TDFN2X2-6
G9091-330RB1U	9091O	3.30V	-40°C~ +85°C	TDFN2X2-6
G9091-500RB1U	9091S	5.00V	-40°C~ +85°C	TDFN2X2-6
G9091-250RC1U	9091I	2.50V	-40°C~ +85°C	TDFN2X2-8
G9091-280RC1U	9091L	2.80V	-40°C~ +85°C	TDFN2X2-8
G9091-330RC1U	9091O	3.30V	-40°C~ +85°C	TDFN2X2-8
G9091-500RC1U	9091S	5.00V	-40°C~ +85°C	TDFN2X2-8

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

Note: T1: SOT23-5 TO: TSOT-23-5 TV: SC-70-4 (SC-82/ SOT-343) TA: SC-70-5 (SOT-353)

RR: TDFN1.6X1.6-6 RB: TDFN2X2-6 RC: TDFN2X2-8

1& 2: Bonding Code

U: Tape & Reel