

300mA Low-Dropout Linear Regulators

Features

- Low, 100 μ 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 μ A
- Stable with Low Cost Ceramic Capacitors

Applications

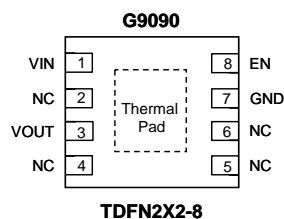
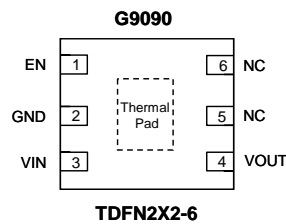
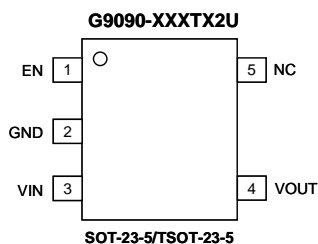
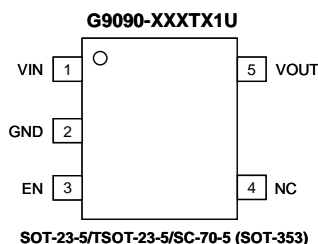
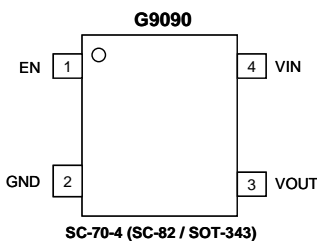
- Notebook Computers
- Cellular Phones
- PDAs
- Digital still Camera and Video Recorders
- Hand-Held Devices
- Bar Code Scanners

General Description

The G9090 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), TDFN2X2-6 and TDFN2X2-8 package. The supply current at no-load is 100 μ A. In the shutdown mode, the maximum supply current is less than 1 μ A. The over-current protection limit is set at 430mA typical. An overtemperature protection circuit is built-in in the G9090 to prevent thermal overload. These power saving features make the G9090 ideal for use in the battery-powered applications such as notebook computers, cellular phones, and PDA's.

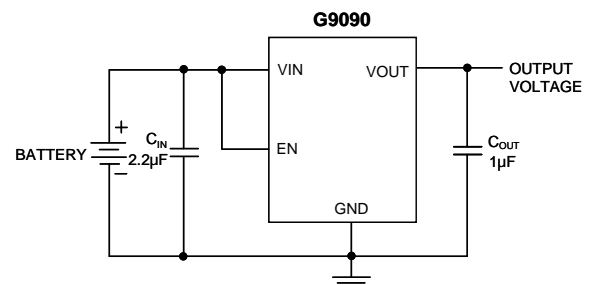
These devices feature a shutdown function and are offered in active low with auto discharge. The G9090 is specifically designed to employ ceramic output capacitors. The G9090 comes in a space saving SOT-23-5, TSOT-23-5, SC-70-4(SC-82/SOT-343), SC-70-5 (SOT-353), TDFN2X2-6 and TDFN2X2-8 package.

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)
G9090-120T11U	990Ax	1.20V	-40°C~ +85°C	SOT-23-5
G9090-150T11U	990Dx	1.50V	-40°C~ +85°C	SOT-23-5
G9090-180T11U	990Fx	1.80V	-40°C~ +85°C	SOT-23-5
G9090-250T11U	990Ix	2.50V	-40°C~ +85°C	SOT-23-5
G9090-280T11U	990Lx	2.80V	-40°C~ +85°C	SOT-23-5
G9090-285T11U	990Qx	2.85V	-40°C~ +85°C	SOT-23-5
G9090-300T11U	990Mx	3.00V	-40°C~ +85°C	SOT-23-5
G9090-330T11U	990Ox	3.30V	-40°C~ +85°C	SOT-23-5
G9090-500T11U	990Sx	5.00V	-40°C~ +85°C	SOT-23-5
G9090-120T12U	99BAx	1.20V	-40°C~ +85°C	SOT-23-5
G9090-150T12U	99BDx	1.50V	-40°C~ +85°C	SOT-23-5
G9090-330T12U	99BOx	3.30V	-40°C~ +85°C	SOT-23-5
G9090-475T12U	99BPx	4.75V	-40°C~ +85°C	SOT-23-5
G9090-500T12U	99BSx	5.00V	-40°C~ +85°C	SOT-23-5
G9090-120TO1U	990Ax	1.20V	-40°C~ +85°C	TSOT-23-5
G9090-180TO1U	990Fx	1.80V	-40°C~ +85°C	TSOT-23-5
G9090-250TO1U	990Ix	2.50V	-40°C~ +85°C	TSOT-23-5
G9090-310TO1U	990Rx	3.10V	-40°C~ +85°C	TSOT-23-5
G9090-500TO1U	990Sx	5.00V	-40°C~ +85°C	TSOT-23-5
G9090-250TV1U	99Ix	2.50V	-40°C~ +85°C	SC-70-4 (SC-82/ SOT-343)
G9090-280TV1U	99Lx	2.80V	-40°C~ +85°C	SC-70-4 (SC-82/ SOT-343)
G9090-330TV1U	99Ox	3.30V	-40°C~ +85°C	SC-70-4 (SC-82/ SOT-343)
G9090-500TV1U	99Sx	5.00V	-40°C~ +85°C	SC-70-4 (SC-82/ SOT-343)
G9090-250TA1U	99Ix	2.50V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9090-280TA1U	99Lx	2.80V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9090-300TA1U	99Mx	3.00V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9090-310TA1U	99Rx	3.10V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9090-330TA1U	99Ox	3.30V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9090-500TA1U	99Sx	5.00V	-40°C~ +85°C	SC-70-5 (SOT-353)
G9090-250RB1U	9090I	2.50V	-40°C~ +85°C	TDFN2X2-6
G9090-280RB1U	9090L	2.80V	-40°C~ +85°C	TDFN2X2-6
G9090-330RB1U	9090O	3.30V	-40°C~ +85°C	TDFN2X2-6
G9090-500RB1U	9090S	5.00V	-40°C~ +85°C	TDFN2X2-6
G9090-250RC1U	9090I	2.50V	-40°C~ +85°C	TDFN2X2-8
G9090-280RC1U	9090L	2.80V	-40°C~ +85°C	TDFN2X2-8
G9090-330RC1U	9090O	3.30V	-40°C~ +85°C	TDFN2X2-8
G9090-500RC1U	9090S	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)

RB: TDFN2X2-6 RC: TDFN2X2-8

1& 2: Bonding Code

U: Tape & Reel