300mA High PSRR, Low-Noise LDO Regulators

Features

- Ultra Low Output Noise—30µV (rms)
- Ultra Low 55µA No-Load Supply Current
- Ultra Low Dropout 70mV @ 50mA Load
- Guarantee 300mA Output Current
- Over-Temperature and Short-Circuit Protection
- Fixed Mode: 2.70V (G914A), 2.80V (G914B)

3.00V (G914C), 3.30V (G914D) 2.50V (G914E), 2.85V (G914F) 1.50V (G914G), 1.80V (G914H)

- Adjustable Mode: from 1.25V to 5.50V (G914Z)
- PSRR=70dB
- Max. Supply Current in Shutdown Mode < 1µA</p>
- Stable with low cost ceramic capacitors

Applications

- Notebook Computers
- Cellular Phones
- PDA
- **■** Hand-Held Devices
- **■** Battery-Powered Application

General Description

The G914X is a low supply current, high PSRR low dropout linear regulator that comes in a space saving SOT-23-5 package. The supply current at no-load is 55µA. In the shutdown mode, the maximum supply current is less than 1µA. Operating voltage range of the G914X is from 2.5V to 5.5V. The over-current protection limit is set at 500mA typical and 400mA minimum. An over- temperature protection circuit is built-in in the G914X to prevent thermal overload. These power saving features make the G914X ideal for use in the battery-powered applications such as notebook computers, cellular phones, and PDA's.

Ordering Information

ORDER NUMBER (Pb free/Green)	MARKING	VOLTAGE	TEMP. RANGE	PACKAGE
G914Af	4Axx	2.70V	-40°C~ +85°C	SOT-23-5
G914Bf	4Bxx	2.80V	-40°C~ +85°C	SOT-23-5
G914Cf	4Cxx	3.00V	-40°C~ +85°C	SOT-23-5
G914Df	4Dxx	3.30V	-40°C~ +85°C	SOT-23-5
G914Ef	4Exx	2.50V	-40°C~ +85°C	SOT-23-5
G914Ff	4Fxx	2.85V	-40°C~ +85°C	SOT-23-5
G914Gf	4Gxx	1.50V	-40°C~ +85°C	SOT-23-5
G914Hf	4Hxx	1.80V	-40°C~ +85°C	SOT-23-5
G914Zf	4Zxx	Adjustable	-40°C~ +85°C	SOT-23-5

Pin Configuration

G914A-G914H IN 1 5 OUT GND 2 4 BYP SOT-23-5 G914Z IN 1 5 OUT GND 2 5 OUT SHDN 3 4 SET SOT-23-5

Typical Application Circuit

