650mA Miniature, Adjustable, Step-Down DC-DC Converter for RF Power Amplifiers

Features

- 2 MHz PWM Switching Frequency.
- 2.7V ~ 5.5V Input Voltage Operation.
- 0.8V ~ 3.6V Adjustable Output Voltage.
- 25µs Output Voltage Transient from 0.8V to 3.4V.
- 650mA Maximum load capability.
- 95% Efficiency DC/DC Converter.
- Cycle-by-Cycle current limit for DC/DC Converter
- Built-In Thermal Shutdown Function.
- Built-In Input Voltage UVP Function.
- 9-pin micro SMD Package.

Applications

- Cellular Phones
- Hand-Held Radios
- RF PC Cards
- Battery Powered RF Devices

General Description

The G5302 is a Synchronous Buck Converter, steps down an input voltage in the range from 2.7V to 5.5V to an adjustable output voltage of 0.8V to 3.6V. Output voltage is set by using VCON analog input to control power levels and efficiency of the RF PA.

2MHz Fixed-frequency PWM operation minimized RF interference. A shutdown function turns the device off and reduces battery consumption to $0.01\mu A(typ.)$.

G5302 is abailabe in a 9-pin WLCSP Package.

Ordering Information

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Green)
G5302B91U	5302	-30°C to +85°C	WLCSP3X3-9

Note: B9: WLCSP3X3-9 1: Bonding Code U: Tape & Reel

Pin Configuration

PGND A3 A2 A1 PVIN SW SW NC FB C3 C2 C1 EN VCON Bottom View WLCSP3X3-9

Typical Application

