

COMMITMENT

SGC67020\_01\_GF\_22FDSOI
PRODUCTION SGC67020\_01\_GF\_22FDSOI
LUDICROUS MODE

## **Features**

- Ultra-fast response high power DC/DC
- Ludicrous Low Power Mode
- Output current up to 200mA
- · Low quiescent
- Low ripple
- · Power good comparator and flag
- · Soft start and over current protection
- Large input voltage range, from 1.80V to 5.50V
- Programmable output range, from 0.50V to 1.28V

## General **Description**

SGC67020\_01\_GF\_22FDSOI is an ultra-fast response, high output current, step down switched DC/DC regulator. Making use of advanced control techniques, to achieve soft start-up, superb transient response and instantaneous over current protection, it is the best solution for high power digital cores with fast activity variation (where most DC/DC converters fail). Additionally, it provides an innovative Ludicrous Ultra Low Power Mode that guarantees a quiescent reduction to virtually "0" quiescent. The SGC67020\_01\_GF\_22FDSOI operates with output coils as low as  $2.2\mu H$  and any type of output capacitor. Specified from TJ = -40 °C to +125 °C, it is designed to achieve 3% overall accuracy (over Load / Line / Temp).

## **Applications**

- · Wireless communications
- · Video applications
- · Portable Media Players

## **Quick Reference**

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
V <sub>IN</sub>	Input Sup.	1.80	-	5.50	V
V <sub>DVDD</sub>	Digital Sup.	0.50	-	1.20	V
Vo	Out Voltage	0.50	-	1.28	V
Io	Out Current	0	-	200	mA