

## 1.4MHz 1A Synchronous Buck Converter with 600mA LDO Regulator

### Features

#### Buck Converter

- High Efficiency: Up to 93%
- Low Quiescent Current: Only 50µA During Operation
- Internal Soft Start Function
- 1A Output Current
- 2.5V to 6V Input Voltage Range
- 1.4MHz Switching Frequency
- No Schottky Diode Required
- 100% Duty Cycle in Dropout Operation
- 0.6V Reference Allows Low Output Voltages
- <1µA Shutdown Current
- Current Mode Operation for Excellent Line and Load Transient Response

#### LDO Regulator

- Dropout voltage typically 0.65V @ I<sub>o</sub> = 600mA
- Output current in excess of 600mA
- Output voltage accuracy ±2%
- Quiescent current, typically 0.3mA
- Internal short circuit current limit
- Internal over temperature protection

### Applications

- Digital Still and Video Cameras
- MP3 Players
- Portable Instruments

### General Description

The G5723B consists of a synchronous step-down DC/DC converter and a LDO regulator. The DC/DC converter is operated on current mode architecture. Switching frequency is set at 1.4MHz allowing the use of small surface mount inductor and capacitor. The internal synchronous switches increase efficiency and eliminate the need for external Schottky diode.

### Ordering Information

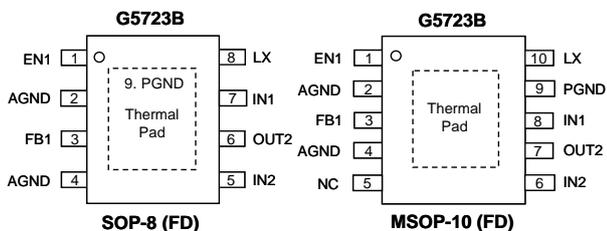
ORDER NUMBER	MARKING	VOLTAGE	TEMP. RANGE	PACKAGE (Green)
G5723B-33F11U	G5723B-33	3.3V	-40°C to +85°C	SOP-8 (FD)
G5723B-33F61U	G5723B-33	3.3V	-40°C to +85°C	MSOP-10 (FD)

Note:F1: SOP-8 (FD) F6: MSOP-10 (FD)

1: Bonding Code

U: Tape & Reel

### Pin Configuration



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

### Typical Application Circuit

