

Preliminarv

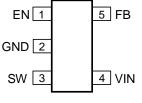
1.5MHz, 1A, High Efficiency PWM Step-Down DC/DC Converter **General Description:**

ANT6006 is a high efficiency step-down DC/DC converter operated with the current mode and the constant frequency. The internal switch and synchronous rectifier are integrated for high efficiency. External Schottky diodes are not required. The supply current is only 200µA during operation and drops to less than 1µA in shutdown. ANT6006 can supply 1A of load current from 2.5V to 5.5V supply voltage. The output voltage can be regulated as low as 0.6V.

The switching frequency is set at 1.5MHz, allowing the use of small surface mount inductors and capacitors. It can run 100% duty cycle for low dropout application. ANT6006 is available in a low profile SOT25 and TSOT25 package.

Pin Configuration:





SOT25 or TSOT25

Ordering Information:

Part Number	Package	Shipment
ANT6006-AAB	SOT23-5	Tape&Reel / 3000

- A : Output Voltage Adjustable
- AB : Package Type SOT23-5

Features:

- 2.5V to 5.5V Input Voltage Range
- Adjustable Output Voltage as Low as 0.6V

AN6006

- High Efficiency: Up to 95%
- 1.5MHz Constant Switching Frequency
- 1A Available Load Current
- 100% Duty Cycle in Dropout
- Current Mode Control
- Short Circuit Protection
- Thermal Fault Protection
- <0.1µA Shutdown Current
- Space Saving 5-Pin SOT25 and TSOT23 • Package

Application:

- Cellular and Smart Phones
- Microprocessors and DSP Core Supplies
- Set Top Box
- USB Dongle
- Digital Still and Video Cameras
- Portable Navigation Device