



1A, 6V, 1.5MHz, 50uA I_Q

Synchronous Step-Down Converter

Parameters Subject to Change Without Notice

DESCRIPTION

The JW[®]5250 is a current mode monolithic buck switching regulator. Operating with an input range of 2.5V-6.0V, the JW5250 delivers 1A of continuous output current with integrated P-Channel and N-Channel MOSFETs. The internal synchronous power switches provide high efficiency. At light loads, the regulator operate in low frequency to maintain high efficiency and low output ripples.

The JW5250 guarantees robustness with hiccup output short-circuit protection, FB short-circuit protection, start-up current run-away protection, input under voltage lockout and hot-plug in, and thermal protection.

The JW5250 is available in 5-pin SOT23 package and 6-pin SOT563 package, which provides a compact solution with minimal external components.

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FEATURES

- 2.5V to 6.0V operating input range
- Up to 1A output current
- Up to 94% peak efficiency
- Internal Soft-Start
- 1.5MHz switching frequency
- Input under voltage lockout
- Hot-plug in protection
- Short circuit protection
- Thermal protection
- Available in SOT563 and SOT23-5 package

APPLICATIONS

- 5V or 3.3V Point of Load Conversion
- Set Top Boxes
- Telecom/Networking Systems
- Storage Equipment
- GPU/DDR Power Supply

TYPICAL APPLICATION

