

JW5250A

1A, 6V, 1.5MHz, 40uA I_q

Synchronous Step-Down Converter

Preliminary Specifications Subject to Change without Notice

DESCRIPTION

The JW[®]5250A is a monolithic buck switching regulator based on constant on-time (COT) control for fast transient response. Operating with an input range of 2.7V-6.0V, the JW5250A 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 JW5250A 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 JW5250A is available in a 5-pin SOT23-5 package, which provides a compact solution with minimal external components.

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FEATURES

- 2.7V to 6.0V operating input range
- Up to 1A output current
- Up to 92% peak efficiency
- Internal soft-start
- 1.5MHz switching frequency
- Input under voltage lockout
- Hot-plug in protection
- Short circuit protection
- Thermal protection
- Available in a 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

