



1.5A, 5.5V, 1.5MHz

Synchronous Step-Down Converter

Parameters Subject to Change Without Notice

DESCRIPTION

The JW[®]5231 is a current mode monolithic buck switching regulator. Operating with an input range of 2.5V-5.5V, the JW5231 delivers 1.5A 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 operates in continual conduction mode to maintain low output ripple. Current mode control provides tight load transient response and cycle-by-cycle current limit.

The JW5231 guarantees robustness with hiccup output short-circuit protection, FB short-circuit protection, start-up current run-away protection, input under voltage lockout protection, hot-plug in protection, and thermal protection.

The JW5231 provides output power good indication which is only available in SOT23-6 package.

The JW5231 is available in 5-pin SOT23-5 or 6-pin SOT23-6 package, which provides a compact solution with minimal external components.

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FEATURES

- 2.5V to 5.5V operating input range
- Up to 1.5A output current
- Up to 94% peak efficiency
- Internal Soft-Start
- Fixed 1.5MHz switching frequency
- Input under voltage lockout
- Short circuit protection
- Thermal protection
- Hot-plug in protection
- Output POK indication (available in SOT23-6 package)
- Available in SOT23-5/SOT23-6 package

APPLICATIONS

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

TYPICAL APPLICATION

