



JW5250A

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

Synchronous Step-Down Converter

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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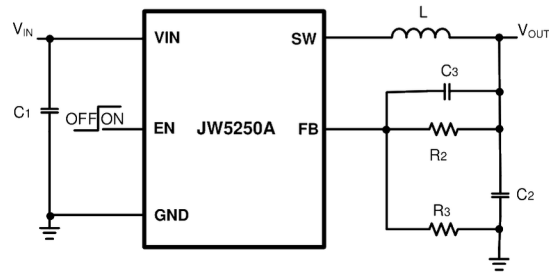
FEATURES

- 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

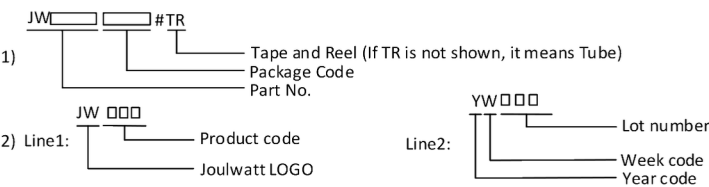
TYPICAL APPLICATION



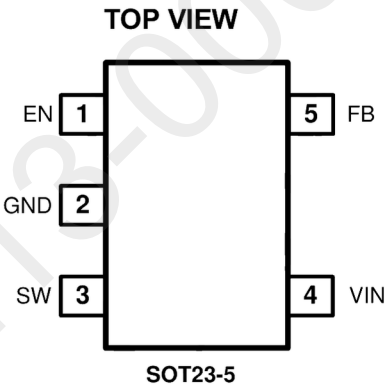
ORDER INFORMATION

DEVICE ¹⁾	PACKAGE	TOP MARKING ²⁾	ENVIRONMENTAL ³⁾
JW5250ASOTA#TR	SOT23-5	JWM3□ YW□□□	Green

Note:



PIN CONFIGURATION



PIN DESCRIPTION

Name		Description
1	EN	Drive EN pin high to turn on the regulator and low to turn off the regulator.
2	GND	Ground pin.
3	SW	SW is the switching node that supplies power to the output. Connect the output LC filter from SW to the output load.
4	VIN	Input voltage pin. VIN supplies power to the IC. Connect a 2.7V to 6.0V supply to VIN and bypass VIN to GND with a suitably large capacitor to eliminate noise on the input to the IC.
5	FB	Output feedback pin. FB senses the output voltage and is regulated by the control loop to 0.6V. Connect a resistive divider at FB.

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