



3A, 6V, 1MHz, 50uA  $I_Q$ 

# Synchronous Step-Down Converter

Parameters Subject to Change Without Notice

#### DESCRIPTION

The JW®5213A is a current mode monolithic buck switching regulator. Operating with an input range of 2.5V-6V, the JW5213A delivers 3A 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. Current mode control provides tight load transient response and cycle-by-cycle current limit.

The JW5213A 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 JW5213A provides output power good indication.

The JW5213A is available in 8-pin DFN2X2-8 package, which provides a compact solution with minimal external components.

Company's Logo is Protected, "JW" and "JOULWATT" are Registered Trademarks of JoulWatt technology Inc.

### **FEATURES**

- 2.5V to 6V operating input range
- Up to 3A output current
- Up to 95% peak efficiency
- High efficiency at light load
- Internal Soft-Start
- 1MHz switching frequency
- Input under voltage lockout
- Short circuit protection
- Thermal protection
- Hot-plug in protection
- Output POK indication
- Available in DFN2X2-8 package

## **APPLICATIONS**

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

## TYPICAL APPLICATION

