

*Parameters Subject to Change Without Notice*

## DESCRIPTION

The JW<sup>®</sup>5057S is a monolithic buck switching regulator based on I<sup>2</sup> architecture for fast transient response. Operating with an input range of 4V~24V, JW5057S delivers 3A of continuous output current with two integrated N-Channel MOSFETs. The internal synchronous power switches provide high efficiency without the use of an external Schottky diode. At light loads, the regulator operates in low frequency to maintain high efficiency and low output ripples.

JW5057S guarantees robustness with output short protection, thermal protection, current run-away protection, input under voltage lockout.

JW5057S is available in TSOT23-6 packages, which provide a compact solution with minimal external components.

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

## FEATURES

- 4V to 24V operating input range
- 3A output current
- Up to 95% efficiency
- High efficiency (>85%) at light load
- 500kHz switching frequency
- Internal soft-start
- Input under voltage lockout
- Current run-away protection
- Output short protection
- Thermal protection
- Available in TSOT23-6

## APPLICATIONS

- Distributed Power Systems
- Networking Systems
- FPGA, DSP, ASIC Power Supplies
- Green Electronics/ Appliances
- Notebook Computers

## TYPICAL APPLICATION

3.3V/3A Step-down Regulator

