

## DESCRIPTION

The JW<sup>®</sup>5061TC and JW<sup>®</sup>5061TF are monolithic buck switching regulators based on I<sup>2</sup> architecture for fast transient response. Operating with an input range of 4.5V~18V, JW5061TC and JW5061TF deliver 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, JW5061TC operates in low frequency to maintain high efficiency.

JW5061TC and JW5061TF guarantees robustness with output short protection, thermal protection, current run-away protection and input under voltage lockout.

JW5061TC and JW5061TF are available in SOT23-6 package, which provide a compact solution with minimal external components.

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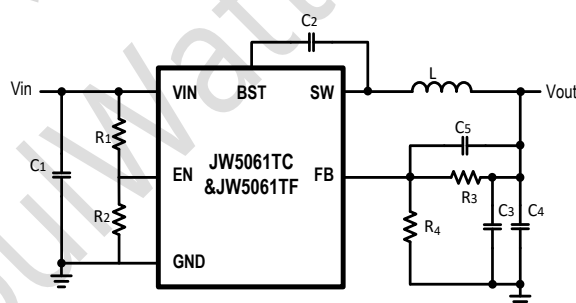
## FEATURES

- 4.5V to 18V operating input range
- 3A output current
- Up to 95% efficiency
- FCCM at light load (JW5061TF)
- PFM at light load (JW5061TC)
- 600kHz switching frequency
- Internal soft-start
- Input under voltage lockout
- Current run-away protection
- Output short protection
- Thermal protection
- Available in SOT23-6 packages

## APPLICATIONS

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

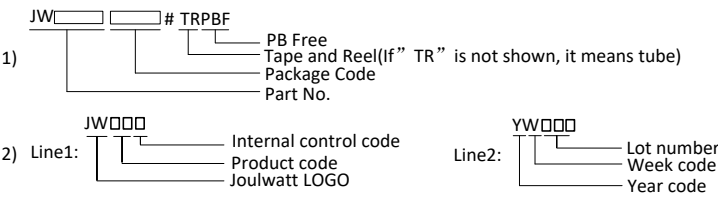
## TYPICAL APPLICATION



ORDER INFORMATION

DEVICE <sup>1)</sup>	PACKAGE	TOP MARKING <sup>2)</sup>
JW5061TCSOTB#TRPBF	SOT23-6	JWKH□ YW□□□
JW5061TFSOTB#TRPBF	SOT23-6	JWDD□ YW□□□

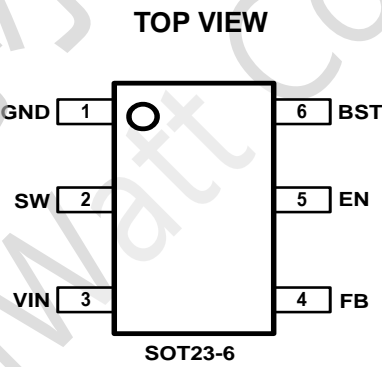
Notes:



DEVICE INFORMATION

DEVICE	Operation Mode at light load	Function	Package
JW5061TCSOTB#TRPBF	PFM	-	SOT23-6
JW5061TFSOTB#TRPBF	FCCM	-	SOT23-6

PIN CONFIGURATION



## PIN DESCRIPTION

SOT23-6	Name	Description
1	GND	Ground pin.
2	SW	SW is the switching node that supplies power to the output. Connect the output LC filter from SW to the output load.
3	VIN	Input voltage pin. VIN supplies power to the IC. Connect a 4.5V to 18V supply to VIN and bypass VIN to GND with a suitably large capacitor to eliminate noise on the input to the IC.
4	FB	Output feedback pin. FB senses the output voltage and is regulated by the control loop to 0.765V. Connect a resistive divider at FB.
5	EN	Drive EN pin high to turn on the regulator and low to turn off the regulator.
6	BST	Connect a 0.1 $\mu$ F capacitor between BST and SW pin to supply current for the top switch driver.

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