



JW5361/JW5361M JW5361F/JW5361FM

18V/3A

Sync. Step-Down Converter

DESCRIPTION

The JW[®]5361, JW[®]5361M, JW[®]5361F and JW[®]5361FM are monolithic buck switching regulators based on I2 architecture for fast transient response. Operating with an input range of 4.5V~18V, JW5361, JW5361M, JW5361F and JW5361FM 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 load, JW5361 and JW5361M operate in low frequency to maintain high efficiency.

JW5361, JW5361M, JW5361F and JW5361FM guarantee robustness with output short protection, thermal protection, current run-away protection and input under voltage lockout.

JW5361, JW5361M, JW5361F and JW5361FM are available in SOT23-6 package, which provides a compact solution with minimal external components.

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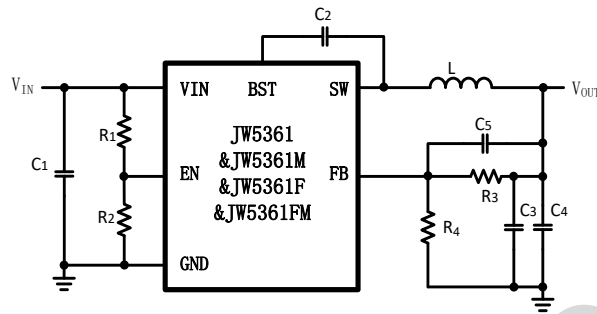
FEATURES

- 4.5V to 18V operating input range
- 3A output current
- Up to 95% efficiency
- FCCM at light load (JW5361F / JW5361FM)
- PFM at light load (JW5361 / JW5361M)
- 600kHz switching frequency
- Internal soft-start
- Input under-voltage lockout
- Current run-away protection
- Output short protection
- Thermal protection
- Available in SOT23-6 package

APPLICATIONS

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

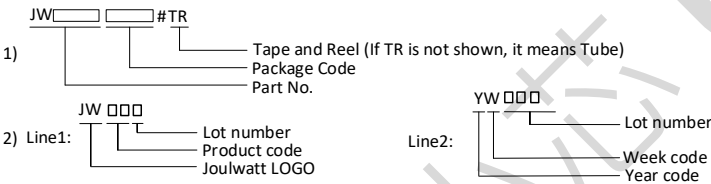
TYPICAL APPLICATION



ORDER INFORMATION

DEVICE ¹⁾	PACKAGE	TOP MARKING ²⁾	ENVIRONMENTAL ³⁾
JW5361SOTB#TR	SOT23-6	JWN9□ YW□□□	Green
JW5361MSOTB#TR	SOT23-6	JWPC□ YW□□□	Green
JW5361FSOTB#TR	SOT23-6	JWPA□ YW□□□	Green
JW5361FMSOTB#TR	SOT23-6	JWPD□ YW□□□	Green

Notes:



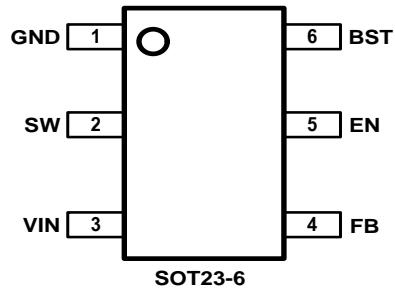
3) All Joulwatt products are packaged with Pb-free and Halogen-free materials and compliant to RoHS standards.

DEVICE INFORMATION

DEVICE	OPERATION MODE AT LIGHT LOAD	FUNCTION	PACKAGE	MSL
JW5361SOTB#TR	PFM	-	SOT23-6	MSL1
JW5361MSOTB#TR	PFM	-	SOT23-6	MSL3
JW5361FSOTB#TR	FCCM	-	SOT23-6	MSL1
JW5361FMSOTB#TR	FCCM	-	SOT23-6	MSL3

PIN CONFIGURATION

TOP VIEW



PIN DESCRIPTION

PIN 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 μ F capacitor between BST and SW pin to supply voltage for the top switch driver.

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