

DESCRIPTION

The JW7265 is a positive voltage ideal diode-OR controller that drives an external N-channel MOSFET. Forming the diode-OR with N-channel MOSFETs instead of Schottky diodes reduces power consumption, heat dissipation and PC board area.

The EN of the JW7265 is available to place the JW7265 in shutdown mode disabling the external N-channel MOSFET and minimizing the quiescent current.

In the forward direction the JW7265 controls the voltage drop across the MOSFET to ensure smooth current transfer from one path to the other without oscillation. If a power source fails or is shorted, fast turnoff minimizes reverse current transients.

JW7265 is available in TSOT23-6 Package

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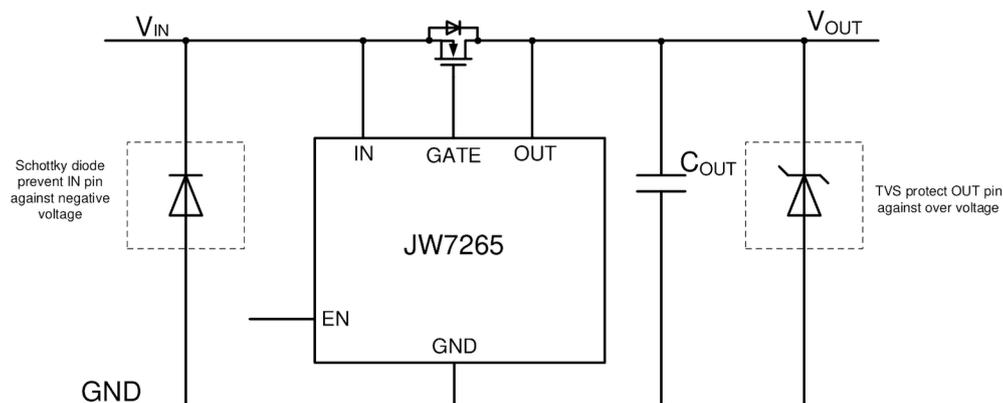
FEATURES

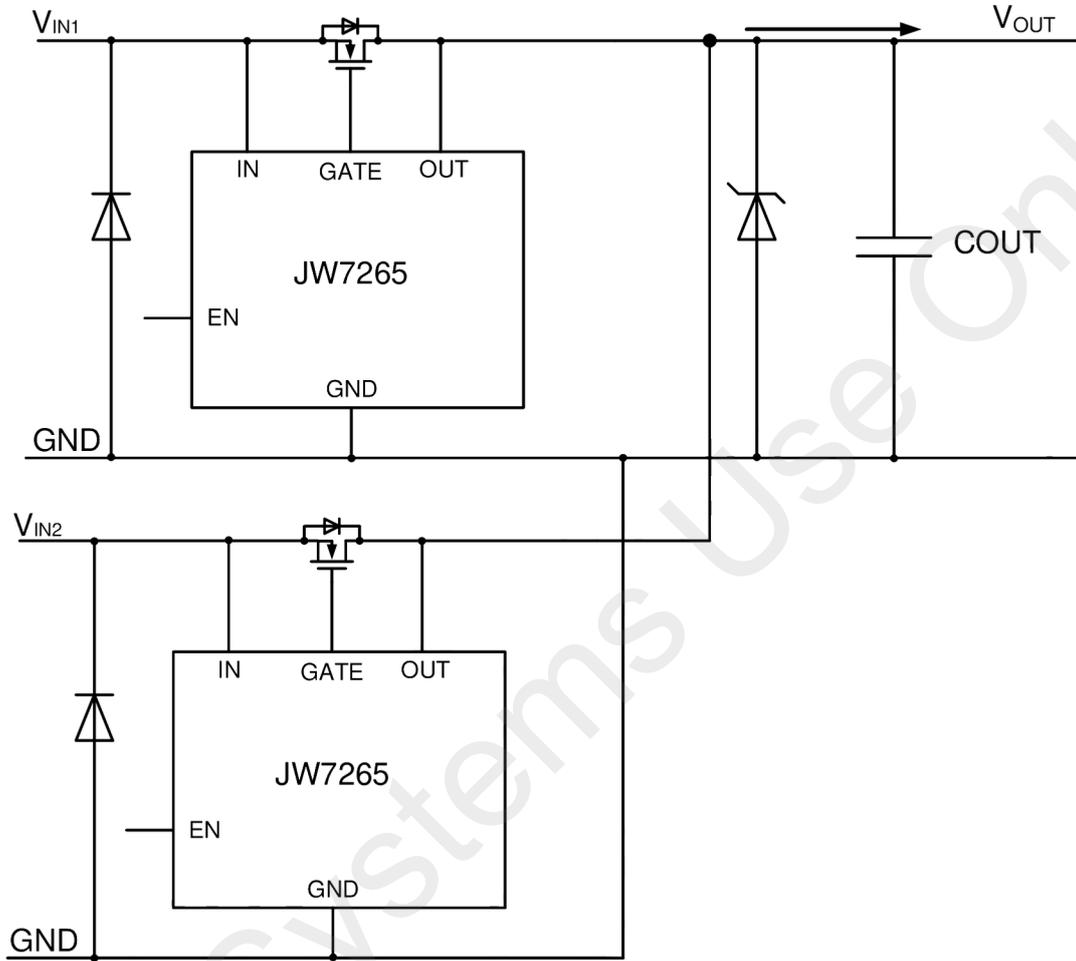
- Replaces Power Schottky Diodes
- Controls External N-Channel MOSFET
- 0.3 μ s Turn-off Time Limits Peak Fault Current
- Wide Operating Voltage Range: 6V to 60V
- 65-V Transient Capability
- Smooth Switchover without Oscillation
- No Reverse DC Current
- Enable Pin Feature
- 0.4- μ A Shutdown Current (EN=Low)
- 295 μ A Operating Quiescent Current (EN=High)
- 1-A Peak Gate Turnoff Current
- Available in TSOT23-6 Package

APPLICATIONS

- Advanced TCA® (ATCA) Systems
- +48V and -48V Distributed Power Systems
- Telecom Infrastructure
- Active ORing of Redundant(N+1) Power Supplies
- Drone

TYPICAL APPLICATION

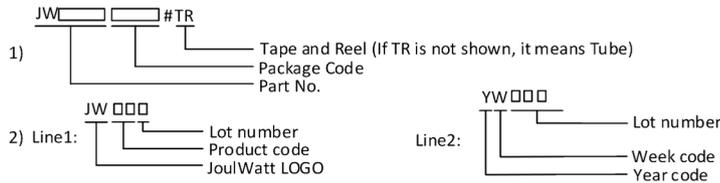




ORDER INFORMATION

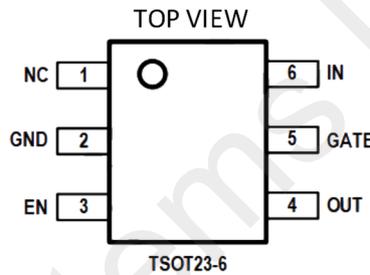
DEVICE ¹⁾	PACKAGE	TOP MARKING ²⁾	ENVIRONMENTAL ³⁾
JW7265TSOTB#TR	TSOT23-6	JWQS□ YW□□□	Green

Note:



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

PIN CONFIGURATION



PIN DESCRIPTION

Pin TSOT23-6	Name	Description
1	NC	Not connected
2	GND	GND
3	EN	A logic low state at the EN pin will pull the GATE pin low, and turn off some internal block to lower the quiescent current. Left EN floating, EN is internally pulled low and disable the device. Note that when the GATE pin is pulled low and the external MOSFET is off, current will still conduct through the FET's body diode.
4	OUT	Drain Voltage Sense and Positive Supply Input
5	GATE	Gate Drive Output. The GATE pin pull high enhancing the N-channel MOSFET when the load current creates more than 30mV. When the load current is small, the gate is actively driven to maintain 30mV. If the reverse current develops more than -25mV of the voltage drop across a MOSFET, a fast pull-down circuit quickly connects the GATE pin to IN pin.
6	IN	Input Voltage and GATE Fast Pull-Down Returns. The IN pin is the anode of the ideal diode and connect to the source of the N-channel MOSFET. The voltage sensed at this pin is used to control the source-drain voltage across the MOSFET.

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