

JW3510

42V_{IN} Micropower No-Opto

Isolated Flyback Converter with 65V/1.4A Switch

Parameters Subject to Change Without Notice

DESCRIPTION

The JW[®]3510 is a micropower isolated Flyback converter. By sampling the isolated output voltage directly from the primary-side flyback waveform, the part requires no third winding or opto-isolator for regulation. The output voltage can be programmed with a single external resistor. Besides, internal compensation and soft-start further reduce external component count.

The JW3510 operates with an input voltage range of 3.0V to 42V and can deliver up to 6W of isolated output power. The primary-side can deliver 1.4A peak current with an internal integrated 65V N-Channel DMOS power switch. The JW3510 is designed with boundary mode, discontinuous mode and burst mode operation at different load to improve load regulation and maintain high efficiency while minimizing the output voltage ripple.

JW3510 is available in the SOT23-5 package. The high level of integration results in a simple to use, low component count, and high efficiency application solution for isolated power delivery.

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FEATURES

- 3.0V to 42V Operating Input Range
- 1.4A, 65V Internal DMOS Power Switch
- Up to 430KHz Operating Frequency
- Low Quiescent Current
- Boundary Mode Operation at Heavy Load
- Burst Mode Operation at Light Load
- V_{OUT} Set with a Single External Resistor
- Minimum Load<0.5% (Typ) of Full Output
- No Transformer Third Winding or Opto-Isolator Required for Regulation
- Internal Compensation and Soft-Start
- Input under voltage lockout
- Output Short-Circuit Protection
- Thermal Protection
- SOT23-5 Package

APPLICATIONS

- Isolated Telecom, Automotive, Industrial, Housekeeping Power Supplies
- Isolated Auxiliary Power Supplies
- Wide Input Voltage Range Micropower system.

TYPICAK APPLICATION

