

JWH5141/JWH5141F

100V/1A Synchronous Step-Down Converter

DESCRIPTION

The JWH5141 and JWH5141F are monolithic buck switching regulators based on constant ontime control (COT) for fast transient response. Operating with a wide input voltage range of 6V~100V, the JWH5141 and JWH5141F deliver 1A of continuous output current with two integrated MOSFETs. Constant on-time control mode control provides tight load transient response and cycle-by-cycle current limit. At light loads, JWH5141 operates in low frequency to maintain high efficiency, while JWH5141F operates in continuous current mode for frequency sensitive application.

The JWH5141 and JWH5141F guarantee robustness with short-circuit protection, thermal protection, current run-away protection, and input under voltage lockout.

The JWH5141 and JWH5141F are available in ESOP8 package, which provides a compact solution with minimal external components.

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FEATURES

- 6V to 100V Operating Input Range
 1A Output Current
- Internal Soft-start
- Adjustable Switch Frequency
- FCCM at Light Load (JWH5141F)
- PFM at Light Load (JWH5141)
- Input under Voltage Lockout
- Current Run-away Protection
- Short Circuit Protection
- Thermal Protection
- Available in ESOP8 Package

APPLICATIONS

- Distributed Power Systems
- Smart Meter
- Automotive Systems
- High Voltage Power Conversion
- Industrial Power Systems
- Battery Powered Systems

TYPICAL APPLICATION



