

DESCRIPTION

The MT3702 is a high efficiency, 2A current mode synchronous step-down DC/DC converter with a wide input voltage range for 24V application. The device integrates high side and low side MOSFETs to achieve high efficiency conversion. The current mode architecture supports fast transient response and internal compensation. The MT3702 provides complete fault protection including input under-voltage lockout, output short circuit protection, over current protection, and thermal shutdown. The switching frequency is internally set at 1.4MHz. To improve the light load efficiency, MT3702 has proprietary light load power saving mode (PSM) to minimize the switching loss by reducing the switching frequency. MT3702 is available in the SOT23_6L.

FEATURES

- Input Voltage Range from 4.7V to 24V
- Adjustable Output Voltage from 0.6V to 24V
- Support 100% Duty Cycle Operation
- 1.4MHz Switching Frequency
- Built-in 82mΩ/62mΩ Power Switch
- 2A Continuous Output Current for 24Vin application
- High Efficiency up to 92%
- Internal 1msec Soft-Start
- Peak Current Mode Operation
- Over-temperature Protection
- Input Under Voltage Lockout (UVLO)
- Cycle-by-Cycle Current Limit Protection
- Over-Load and Short Circuit Protection
- Thermal Shutdown Protection
- Available in a Small SOT23_6L
- Pb-Free RoHS Compliant

APPLICATIONS

- Wireless Router and DSL Card
- Portable/Handheld Device
- STB, TV Monitor, Sound Bar, MP3 Player
- Microprocessor and DSP Core Supply

TYPICAL APPLICATIONS

