

Programmable High Current Protection Switch with Reverse Blocking

DESCRIPTION

MT7696 is a high voltage and high current protection switch. With programmable current limit and output voltage clamping, this device provides flexibility for different voltage and current applications.

Power loss is reduced with integrated low R_{ds(on)} power N-channel MOSFET. Programmable soft start up time controls output voltage slew rate and limit the inrush current during start-up.

MT7696 integrated many protection mechanisms to protect the device and downstream load connected to its output, including over temperature protection, over current protection, output voltage clamping and reverse blocking.

MT7696 is available in QFN2x2_9L package.

FEATURES

- Wide Input Voltage Range from 2.7V to 5.5V with surge up to 18V
- Low R_{DS(ON)} for the Integrated Protection Switch: 30mΩ @ 3V input condition
- External Programmable Soft-Start Time
- External Programmable Current Limit up to 5A Output Capability
- Selectable Output Clamping Voltage
- Reverse Current Blocking function
- Fault Indicator and Power Good Indicator
- Thermal Shutdown Protection & Auto Recovery
- QFN2x2_9L Compact Packages
- Pb-Free ROHS compliant

APPLICATIONS

- HDD and SSD Drives
- PCIe cards and devices
- Portable device

TYPICAL APPLICATIONS

