

18V Programmable Current Limit Load Switch with Output Voltage Clamp

DESCRIPTION

The MT7201/A integrated load switch provides an easy circuit protection to power the system. The devices use few external components and provide multiple protection modes. They are a robust defense against overload, short circuit, input voltage surge and excessive inrush current. The switch's low $R_{DS(ON)}$ helps to reduce power loss during normal operation. Current limit level can be set with an external resistor. Input over voltage events are protected by internal clamp circuitry to a safe output voltage. Programmable soft-start controls the slew rate of the output voltage to limit inrush current during plug in. It integrates thermal fold-back function and over temperature shutdown protection. MT7201/A is available in low profile 10 leads DFN 3mm x 3mm package.

FEATURES

- Wide Input Voltage Range from 2.7V to 18V
- MT7201: External Selectable Input Range and Clamping Output Voltage Threshold
MT7201A: Open Drain Fault Indicator FAULT \bar{N}
- Output Discharging Function
- Integrate a 25m Ω Low $R_{DS(ON)}$ Protection Switch
- External Programmable Soft-Start Time
- External Programmable Current Limit 1~5Amp
- Short-circuit Protection
- Enable Control Pin
- Thermal Shutdown Protection & Auto Recovery
- DFN3x3_10L Package
- Pb-Free ROHS compliant

APPLICATIONS

- HDD and SSD Drives
- Adapter Powered Devices
- Tablet PC
- PCI, PCIe Cards

TYPICAL APPLICATION

