

28V, 5A Current Limit Switch with True Reverse Blocking and Fast Role Swap

Description

The MT7281 is an advanced 28V 5A rated current limit switch which provides overload, short circuit, input voltage surge, excessive inrush current, over-temperature and reverse current protections to power the system. The built-in 35mΩ ultra low R_{DS(ON)} power switch helps reducing power loss during normal operation. Current limit level can be set 1A to 5A with an external resistor. The MT7281 integrates thermal fold-back function and over temperature shutdown protection. The MT7281 has all time reverse current blocking function regardless of the enable signal EN logic states. A fast role swap function is also implemented to comply the timing requirement defined in the USB Power Delivery Specification. The integrated input and output discharge function which allows the voltage levels at the input and output ports to be discharged to meet the requirement of the USB Power Delivery Specification. The MT7281 is available in low profile 20 leads QFN 4mm x 4mm package.

Features

- Wide Input Voltage Range from 3V to 24V with Surge Up to 28V
- Integrate a 35mΩ Ultra Low On Protection Switch
- External Adjustable Current Limit 1A~5Amp
- External Adjustable Input Over-Voltage Protection (OVP) Threshold
- External Adjustable Soft-start (SS) Time
- Support Fast Role Swap Function through a logic signal to bypass Soft-start Time
- All Time True Reverse Current Blocking
- Short-circuit Protection
- Fault Indicator
- Input and Output Discharge Function
- Thermal Shutdown Protection and Auto Recovery
- QFN4x4_20L Packages
- Pb-Free ROHS compliant

Application

- Notebook, Desktop, Servers and Tablets
- Dongle and Docking Stations
- Power Accessories
- Thunderbolt/USB Type-C PD power switch

Typical Application (For USB Type-C PD Application)

