

RS31385/387 Stackable 50A eFuse with Hot Swap Protection and Current Monitoring

Features

- Wide input voltage range: 4V to 16V
- Integrated 1mΩ Pass MOSFET
- Accurate current monitor: ±1% at 25°C
- · Adjustable output soft start time
- Paralleled operation for higher current applications
- Adjustable current limit
- Fixed 100A Short circuit current limit
- Fast trip short-circuit protection: 200ns typical
- · Fault indication and fault type output
- Input OV, over current, short circuit, overtemperature protections. Latch mode for RS31385, auto-retry mode for RS31387
- · Input to output short circuit detection
- 5x5mm LGA package
- RoHS compliant and Green

Applications

- Disk Drives
- PCI and PCIe cards
- Servers
- Networking
- Hotswap

Typical Application Circuit

Description

The RS31385 is active circuit protection device with integrated MOSFET used to limit current and voltage to safe levels during fault conditions.

The current limit level can be set with a resistor between CLREF and ground. Also, the device has integrated current sense and provides current monitor signal.

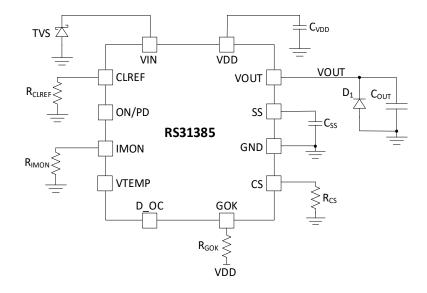
To limit the inrush current during device turn-on, the output soft start time can be set by a capacitor between SS and ground.

In addition, the device provides fault indication (GOK) signal to system for monitoring and control.

RS31385 can be connected in parallel for higher current applications, and current are actively shared among the devices during soft start in parallel applications.

The device is available in LGA-32, 5x5 mm package.

PART NUMBER	PACKAGE BODY SIZE	
RS31385	LGA-32	5x5 mm
RS31387	LGA-32	5x5 mm





Ordering Information

Part Number	Protection Mode	Package/Size	Shipping Method	Package Marking
RS31385T	Latch	LGA-32, 5x5 mm	250u Tape & Reel	R31385
RS31385R	Latch	LGA-32, 5x5 mm	3000u Tape & Reel	R31385
RS31387T	Auto-retry	LGA-32, 5x5 mm	250u Tape & Reel	R31387
RS31387R	Auto-retry	LGA-32, 5x5 mm	3000u Tape & Reel	R31387