

RS31312 4.5V to 16V, 15A eFuse with Hot Swap Protection and Current Monitoring

Features

- Wide input voltage range: 4.5V to 16V
- Integrated 2.7mΩ Pass MOSFET
- Adjustable current limit
- Adjustable hog-plug insertion time delay and fault delay time
- Accurate current monitor
- Fast trip short-circuit protection: <200ns typical
- Adjustable output soft start time
- Configurable input over-voltage protection
- Load enable function and programmable LOADEN blanking time
- Integrated over-temperature protection
- Input to output short circuit detection
- 3x5mm QFN package
- RoHS compliant and Green

Applications

- Server and AUX supplies
- PCI and PCIe cards
- Router and switch optical module
- Digital TV

Description

The RS31312 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 ISET and ground. Also, the device provides current monitor signal.

The device has input over voltage protection feature to protect output load in the event of input over voltage fault.

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

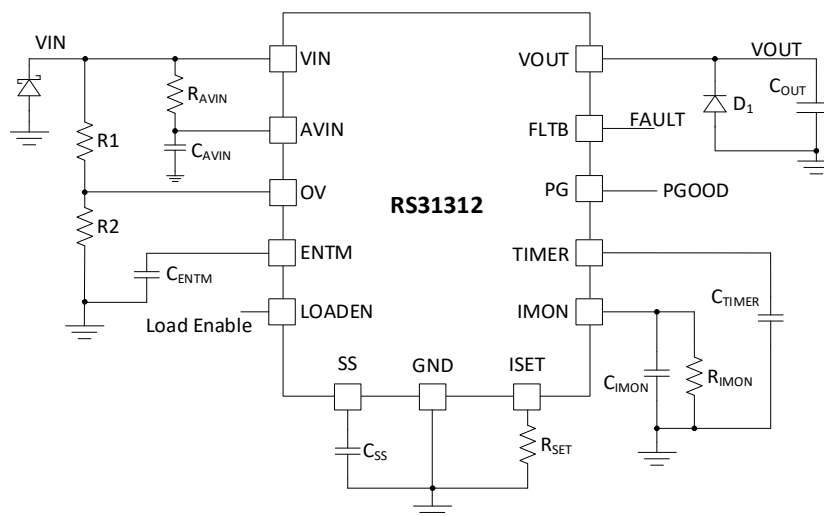
In addition, the device has adjustable fault blanking timer to avoid over-current tripping during output load transient.

The device also has load enable function and programmable LOADEN blanking time.

The device is available in QFN-22, 3x5 mm package.

PART NUMBER	PACKAGE	BODY SIZE
RS31312	QFN-22	3x5 mm

Typical Application Circuit



Ordering Information

Part Number	Package	Size	Shipping Method	Package Marking
RS31312T	QFN-22	3x5 mm	250u Tape & Reel	R31312
RS31312R	QFN-22	3x5 mm	5000u Tape & Reel	R31312