

RS31210/310 Simple 5V/12V eFuse Protection Switches

Features

- 5V eFuse – RS31210
- 12V eFuse – RS31310
- Integrated 25mΩ Pass MOSFET
- Adjustable 2A to 5A current limit
- Adjustable input UVLO threshold
- Fixed over-voltage camp: 6.1V for RS31210 and 15V for RS31310
- Built-in over temperature protection
- UL 2367 Recognized
- Safe during single point failure test (UL60950)
- Small 3x3mm VSON package
- RoHS compliant and Green

Applications

- Server and AUX supplies
- PCI and PCIe cards
- Adapter powered devices
- HDD and SSD drives

Description

The RS31210 and RS31310 are active circuit protection devices with an 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 ILIM and ground, and the typical current limit accuracy is $\pm 15\%$.

The device has over voltage protection feature which limits the output voltage to a fixed level when over voltage fault occurs.

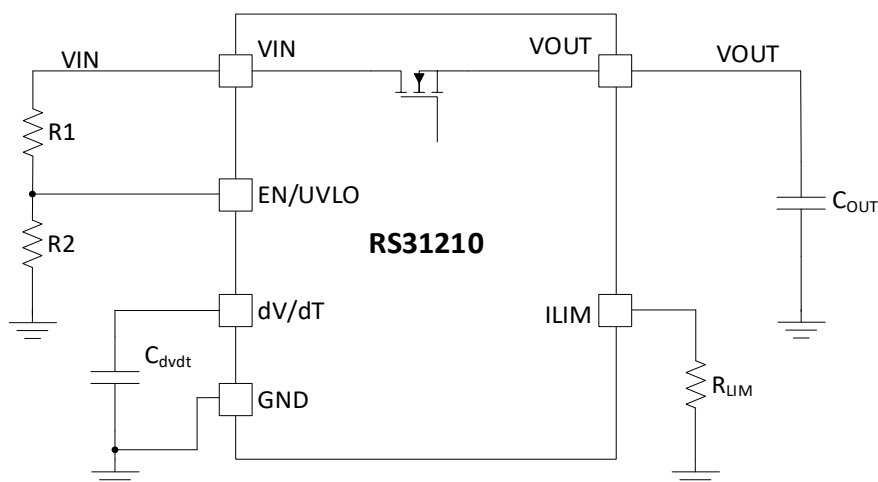
To limit the inrush current during device turn-on, the rising slew rate of output voltage can be set by a capacitor between dV/dT and ground.

The device also offers EN on/off control and input UVLO features.

The device is available in VSON 10 pins, 3x3 mm package.

PART NUMBER	PACKAGE	BODY SIZE
RS31210	VSON-10	3x3 mm
RS31310		

Typical Application Circuit



Device Comparison Table

Part Number	Input UV	Output OV	Fault Response
RS31210A	4.3V	6.1V	Latch
RS31210B	4.3V	6.1V	Auto Retry
RS31310A	4.3V	15V	Latch
RS31310B	4.3V	15V	Auto Retry

Ordering Information

Part Number	Package	Size	Shipping Method	Package Marking
RS31210AT	VSON-10	3x3 mm	250u Tape & Reel	R1210A
RS31210AR	VSON-10	3x3 mm	5000u Tape & Reel	R1210A
RS31210BT	VSON-10	3x3 mm	250u Tape & Reel	R1210B
RS31210BR	VSON-10	3x3 mm	5000u Tape & Reel	R1210B
RS31310AT	VSON-10	3x3 mm	250u Tape & Reel	R1310A
RS31310AR	VSON-10	3x3 mm	5000u Tape & Reel	R1310A
RS31310BT	VSON-10	3x3 mm	250u Tape & Reel	R1310B
RS31310BR	VSON-10	3x3 mm	5000u Tape & Reel	R1310B