

RS31211/212/311/318 Simple 3.3V/5V/12V 4A eFuse Protection Switches

Features

- RS31211 - 3.3V eFuse
- RS31212 - 5V eFuse
- RS31309 – 2.97V to 18V input
- RS31311 - 12V eFuse
- Integrated 34mΩ Pass MOSFET
- Adjustable 0.5A to 4A current limit
- Adjustable output slew rate
- Enable with adjustable input UVLO threshold
- Fixed over-voltage camp: 3.8V for RS31211, 5.7V for RS31212 and 13.7V for RS31311
- Built-on over temperature protection
- UL 2367 Recognized
- Safe during single point failure test (IEC 62368-1)
- Small 2x2mm WSON package
- RoHS compliant and Green

Description

The RS31211/212/309/311 devices 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 ILM and ground, and the typical current limit accuracy is $\pm 7.5\%$.

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 dVdt and ground.

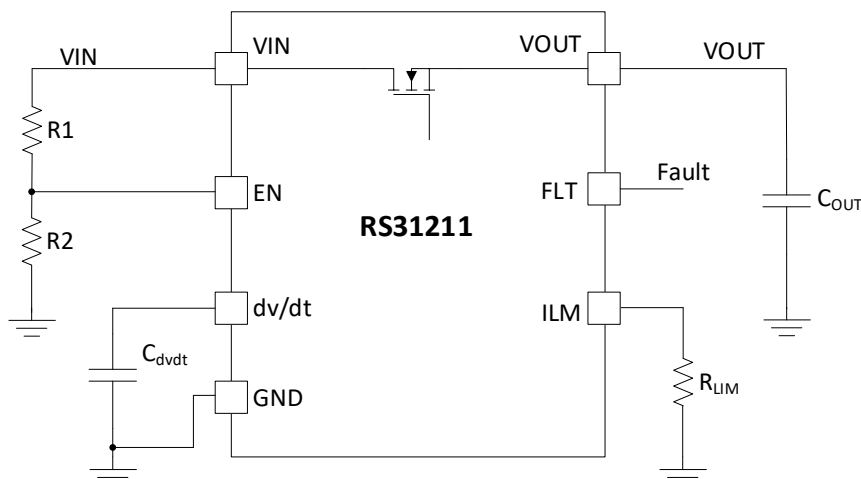
The device also offers EN on/off control and input UVLO features.

The device is available in WSON 8 pins, 2x2 mm package.

Applications

- Hot-swap, hot-plug
- PCI and PCIe cards
- Adapter powered devices
- HDD and SSD drivers
- Industrial system

Typical Application Circuit



Device Comparison Table

Part Number	Output OV	Protection	Enable	QOD (Quick output Discharge)
RS31211A	3.8V	Latch	Active high	No
RS31211B	3.8V	Auto retry	Active high	No
RS31211D	3.8V	Auto retry	Active high	Yes
RS31212A	5.7V	Latch	Active high	No
RS31212B	5.7V	Auto retry	Active high	No
RS31212C	5.7V	Auto retry	Active Low	No
RS31212D	5.7V	Auto retry	Active high	Yes
RS31309A	No OV	Latch	Active high	No
RS31309B	No OV	Auto retry	Active high	No
RS31309C	Programmable	Latch	Active high	No
RS31311A	13.7V	Auto retry	Active high	No
RS31311B	13.7V	Auto retry	Active Low	No

Order Information

Part Number	Package	Size	Shipping Method	Package Marking
RS31211AR	WSON-8	2x2 mm	3000u Tape & Reel	211A
RS31211BR	WSON-8	2x2 mm	3000u Tape & Reel	211B
RS31211DR	WSON-8	2x2 mm	3000u Tape & Reel	211D
RS31212AR	WSON-8	2x2 mm	3000u Tape & Reel	212A
RS31212BR	WSON-8	2x2 mm	3000u Tape & Reel	212B
RS31212CR	WSON-8	2x2 mm	3000u Tape & Reel	212C
RS31212DR	WSON-8	2x2 mm	3000u Tape & Reel	212D
RS31309AR	WSON-8	2x2 mm	3000u Tape & Reel	309A
RS31309BR	WSON-8	2x2 mm	3000u Tape & Reel	309B
RS31309CR	WSON-8	2x2 mm	3000u Tape & Reel	309C
RS31311AR	WSON-8	2x2 mm	3000u Tape & Reel	311A
RS31311BR	WSON-8	2x2 mm	3000u Tape & Reel	311B