

# > 12 V, 2 A-13.5 A (17 mΩ) eFuse

for Enterprise, Communications and Storage

Protects electronics systems from input over voltage during live insertion. Efuse also addresses system level challenges such as load damage from input voltage spikes, protects the input power supply from load faults and from over temperature. Provides power sequencing to loads and inrush current control to limit current at start up.



## Design Benefits

- > Lower on-resistance to minimize voltage drop and power loss
- > Higher current capability compared to competition in a 3x3 DFN-10 package
- > Output short protection protects input power supply
- > Built in soft start to reduce inrush current
- > Over temperature protection to protect from over heating
- > Undervoltage lockout prevents high currents during brownouts

## Key applications

- > Server
- > Solid state drive and Hard disk drive
- > White Goods
- > Fan Control
- > Hot-swap/Hot-plug

## Key technical features

Up to 18 V operating range, 21 V absolute maximum

- > Integrated 17 mΩ pass MOSFET
- > 15 V output voltage clamp
- > 2.0 A to 13.5 A adjustable output current clamp
- > 2 μs short circuit protection response time
- > Programmable output rise time control
- > Built-In thermal shutdown with fault alert pin
- > Fault response options: latch-off, auto-retry
- > Leadless plastic package; 10 terminals, 3.0 x 3.0 x 0.75 mm (DFN3030-10/SOT8037-1)
- > ESD protection:
  - HBM ANSI/ESDA/JEDEC JS-001 Class 2 exceeds 2 kV
  - CDM ANSI/ESDA/JEDEC JS-002 Class C3 exceeds 1 kV
  - Specified over junction temperature range of -40 °C to +125 °C

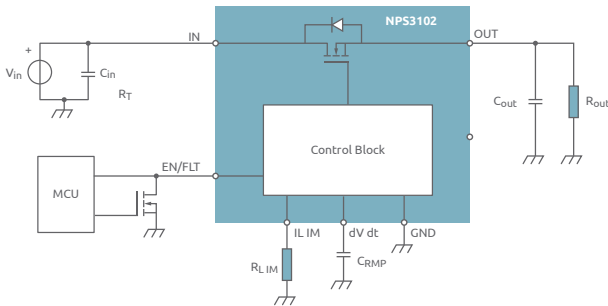
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EFFICIENCY WINS.

## Device parametrics

	VIN	RON	Current Limit Range	Temperature Range	Fault Response
NPS3102A	9 V – 18 V	17 mΩ	2 A – 13.5 A	–40 °C to 125 °C	Latch-Off
NPS3102B					Auto-Retry

## Typical eFuse application



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