

LS0505EVD22 Series, Protection IC

5V, 5A eFuse with Over-voltage & Over-current Protection in DFN 2 x 2 Package

Problem/Solution

The LS0505EVD22 integrated load switch provides a robust input over-current protection for downstream circuits. The device comes with built-in over-voltage protection and an internal soft-start. The switch's low RDS(ON) minimizes the system's power loss. In the event of input over-voltage, LS0505EVD22 immediately turns off the switch to prevent the downstream system from excessive, high voltage stress. Set the current limit level with an external resistor. Internal soft-start ensures a smooth output voltage ramp-up and limits the input inrush current.

Technical resources *(Click on below icons to learn more)*



Series Page



Datasheet

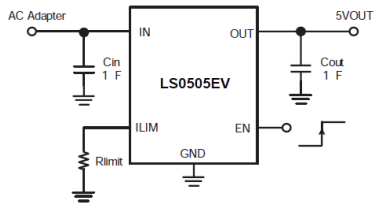


Product Introduction

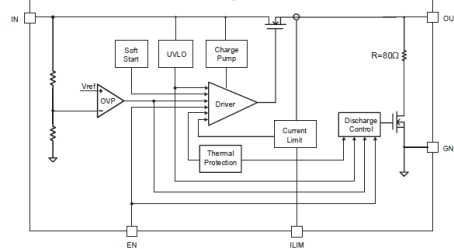


Marketing Flyer

Typical Applications



Functional Block Diagram



Features

- Maximum input/output voltage: 30 V
- 50 mΩ low RDS(ON) protection switch
- Fast response over-voltage protection @ 6.2 V
- Programmable current limit peak current up to 5 A
- DFN2X2_8L package



Benefits

- Integrated over-voltage, over-current, and over-temperature protection features, and inrush current in small package
- Supports up to 30V DC input with fast over-voltage protection when the wrong adapter is plugged in

Markets/Applications

- Bluetooth headsets
- Wearable devices
- Tablet PCs
- Charging cables
- Battery devices
- Adapter powered devices



LS0504EVT233 Series, Protection IC

5V, 4A eFuse with Over-voltage & Over-current Protection in SOT23-3 Package

Problem/Solution

The LS0504EVT233 integrated load switch provides a robust input over-current protection for downstream circuits. The device comes with built-in over-voltage protection and an internal soft-start. The switch's low RDS(ON) minimizes the system's power loss. In the event of input over-voltage, LS0504EVT233 immediately turns off the switch to protect the downstream system from excessive, high voltage stress. Internal soft-start ensures a smooth output voltage ramp-up and limits the input inrush current.

Technical resources *(Click on below icons to learn more)*



Series Page



Datasheet

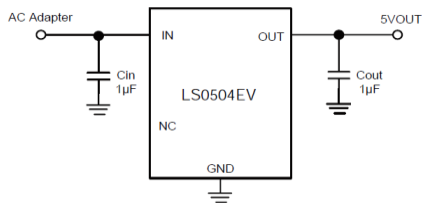


Product
Introduction

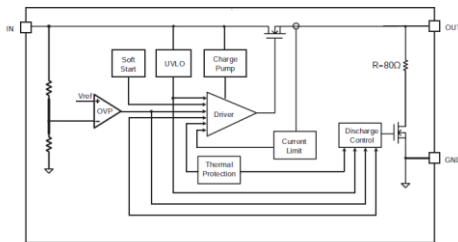


Marketing
Flyer

Typical Applications



Functional Block Diagram



Features

- Maximum input/output voltage: 30 V
- 50mΩ low RDS(ON) protection switch
- Fast response over-voltage protection @ 6.2 V
- Continuous current 3 A; peak current 4 A
- SOT23_3L package



Benefits

- Integrated over-voltage, over-current, and over-temperature protection features, and inrush current in very small package
- Supports up to 30V DC input with fast over-voltage protection when the wrong adapter is plugged in

Markets/Applications

- Bluetooth headsets
- Wearable devices
- Tablet PCs
- Charging cables
- Battery devices
- Adapter powered devices



LS1205ExD33 Series, Protection IC

18V, 5A eFuse with Programmable Current Limit & Output Voltage Clamp

Problem/Solution

The LS1205ExD33 integrated load switch provides easy circuit protection for a power system. The devices use few external components and provide multiple protection modes against overload, short circuit, input voltage surge, and excessive inrush current. The switch's low RDS(ON) helps to reduce power loss during normal operation. Set the current limit level with an external resistor. A programmable soft-start controls the slew rate of the output voltage to limit inrush current during plug-in. It integrates thermal fold-back function and over-temperature shutdown protection.

Technical resources *(Click on below icons to learn more)*



Series Page



Datasheet

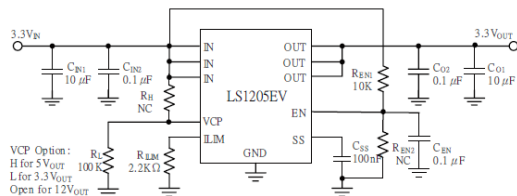


Product Introduction

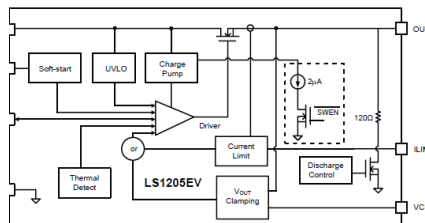


Marketing Flyer

Typical Applications

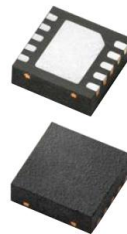


Functional Block Diagram



Features

- Over-voltage clamp: 3.8 V / 5.7 V / 14.4 V
- Low RDS(ON): 25 mΩ
- Programmable soft-start time
- Programmable current limit: 1 A ~ 5 A
- Thermal foldback & thermal shutdown protection
- DFN3x3_10L Package



Benefits

- Integrated over-voltage, over-current, and over-temperature protection features, and inrush current in very small package
- Programmable current limit and over-voltage clamping threshold

Markets/Applications

- HDD and SSD drives
- Adapter powered devices
- PC / Notebooks
- FAN controls
- Networking



Expertise Applied | Answers Delivered

LS2406ERQ23 Series, Protection IC

28V, 6A eFuse with True Reverse Blocking & Fast Rule Swap

Problem/Solution

The LS2406ERQ23 is an advanced 28 V, 6 A current limit switch that provides overload, short circuit, input voltage surge, excessive inrush current, over-temperature, and reverse current protections to a power system. The built-in 24 mΩ ultra low RDS(ON) power switch helps reduce power loss during normal operation. Set the current limit level with an external resistor. The LS2406ERQ23 has an all-time reverse current blocking function regardless of the enable signal EN logic states. A fast role swap function is also available to comply with the timing requirement defined in the USB Power Delivery Specification.

Technical resources *(Click on below icons to learn more)*



Series Page



Datasheet

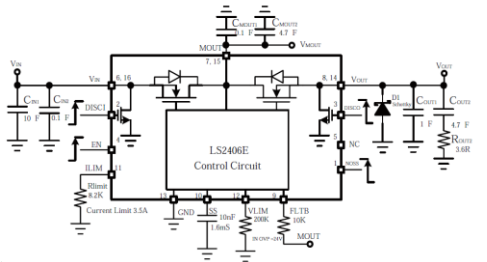


Product Introduction

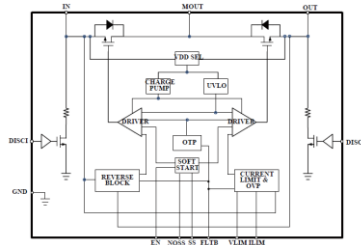


Marketing Flyer

Typical Application

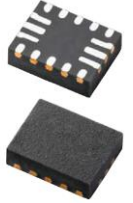


Functional Block Diagram



Features

- Wide operation voltage range: 3 V to 24 V
- Maximum input/output voltage: 30 V
- Integrate a 24mΩ ultra-low ON protection switch
- All-time true reverse current blocking
- External adjustable current limit: 1 A to 6 A
- External adjustable input over-voltage protection threshold
- QFN2.5 x 3.2_16L package
- UL/IEC 62368-1 certification



Benefits

- Integrated over-voltage, over-current, and over-temperature protection features, and inrush current in very small package
- Coverage with wide range operation voltage and current for variant applications

Markets/Applications

- USB Type-C 20V PI
- Networking
- DC fans
- Industry
- Storage (SSD/HDD)

