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## LT4363IDE-2#PBF

Data Sheet

Hot Swap Controller 1CH 80V N-Channel Positive High Voltage Automotive 12Pin DFN EP

Manufacturers	Analog Devices, Inc	
Package/Case	DFN12	
Product Type	Power Supplies	
RoHS	Green	
Lifecycle	Images are for reference only	
Please submit RFQ for	LT4363IDE-2#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.	2

## **General Description**

The LT4363 surge stopper protects loads from high voltage transients. It regulates the output during an overvoltage event, such as load dump in vehicles, by controlling the gate of an external N-channel MOSFET. The output is limited to a safe value allowing the loads to continue functioning. The LT4363 also monitors the voltage drop between the SNS and OUT pins to protect against overcurrent faults. An internal amplifier limits the voltage across the current sense resistor to 50mV. In either fault condition, a timer is started inversely proportional to MOSFET stress. Before the timer expires, the FLT pin pulls low to warn of an impending power down. If the condition persists, the MOSFET is turned off. The LT4363-1 remains off until reset whereas the LT4363-2 restarts after a cool down period.

Two precision comparators can monitor the input supply for overvoltage (OV) and undervoltage (UV) conditions. When the potential is below the UV threshold, the external MOSFET is kept off. If the input supply voltage is above the OV threshold, the MOSFET is not allowed to turn back on. Back-to-back MOSFETs can be used in lieu of a Schottky diode for reverse input protection, reducing voltage drop and power loss. A shutdown pin reduces the quiescent current to less than  $7\mu$ A during shutdown.

### Features

- Withstands Surges Over 80V with VCC Clamp
- Wide Operating Voltage Range: 4V to 80V
- Adjustable Output Clamp Voltage
- Fast Overcurrent Limit: Less Than 5µs
- Reverse Input Protection to -60V
- Adjustable UV/OV Comparator Thresholds
- Low 7µA Shutdown Current
- Shutdown Pin Withstands –60V to  $100\mathrm{V}$
- Adjustable Fault Timer
- Controls N-Channel MOSFET
- Less Than 1% Retry Duty Cycle During Faults, LT4363-2
- Available in 12-Pin (4mm × 3mm) DFN, 12-Pin MSOP or 16-Pin SO Packages

#### **Related Products**



LTC1966CMS8 Analog Devices, Inc

MSOP-8



LT1054ISW Analog Devices, Inc SOP-16



LT1931ES5 Analog Devices, Inc SOT-23



LTC1446CS8 Analog Devices, Inc SOP-8



### LTC2600IGN

Analog Devices, Inc SSOP-16

## Analog Devices, Inc QFN64





<u>LT3463EDD</u>

**LTC1606IG** 

SSOP-28

Analog Devices, Inc QFN10

Analog Devices, Inc

## Application

Automotive/Avionic Surge Protection

Hot Swap<sup>TM</sup>/Live Insertion

High Side Switch for Battery Powered Systems

Intrinsic Safety Applications