

Hot Swap Controller 1CH 80V N-Channel Positive High Voltage Automotive 12Pin MSOP T/R

Manufacturers	Analog Devices, Inc
Package/Case	MSOP
Product Type	Power Supplies
RoHS	Green
Lifecycle	



Images are for reference only

Please submit RFQ for LT4363HMS-1#TRPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

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 μ 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 5 μ s

Reverse Input Protection to -60V

Adjustable UV/OV Comparator Thresholds

Low 7 μ A Shutdown Current

Shutdown Pin Withstands -60V to 100V

Adjustable Fault Timer

Controls N-Channel MOSFET

Less Than 1% Retry Duty Cycle During Faults, LT4363-2

Available in 12-Pin (4mm \times 3mm) DFN, 12-Pin MSOP or 16-Pin SO Packages

Application

Automotive/Avionic Surge Protection

Hot Swap™/Live Insertion

High Side Switch for Battery Powered Systems

Intrinsic Safety Applications



Related Products



[LTC1966CMS8](#)

Analog Devices, Inc
MSOP-8



[LT1054ISW](#)

Analog Devices, Inc
SOP-16



[LTC2600IGN](#)

Analog Devices, Inc
SSOP-16



[LTC2208CUP](#)

Analog Devices, Inc
QFN64



[LT1931ES5](#)

Analog Devices, Inc
SOT-23



[LTC1606IG](#)

Analog Devices, Inc
SSOP-28



[LTC1446CS8](#)

Analog Devices, Inc
SOP-8



[LT3463EDD](#)

Analog Devices, Inc
QFN10