

## LTC4368HDD-1#PBF

Data Sheet

100V UV/OV and Reverse Protection Controller with Bidirectional Circuit Breaker

Manufacturers Analog Devices, Inc

Package/Case 10-Lead DFN (3mm x 3mm w/ EP)

Product Type Power Supplies

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for LTC4368HDD-1#PBF or <a href="mailto:Emai

**RFO** 

## **General Description**

The LTC4368 protects applications from power supply voltages that may be too high, too low, or even negative and from overcurrent faults in both forward and reverse directions. The LTC4368 controls the gate voltage of a pair of external N-channel MOSFETs to ensure that the load is connected to the input supply only when there are no voltage or current faults.

Two comparator inputs allow configuration of the overvoltage (OV) and undervoltage (UV) set points using an external resistive divider. A current sense resistor sets the forward and reverse circuit breaker current thresholds. After a forward current fault, the LTC4368 will either latchoff power, or retry after a user adjustable delay. After a reverse current fault, the LTC4368 waits for the output to fall 100mV below the input to reconnect power to the load.

The LTC4368 has a 32ms turn-on delay that debounces live supply input connections and blocks 50Hz and 60Hz AC power. UV/OV faults also trigger the 32ms recovery delay before the external MOSFETs are turned back on.

**Features** 

Wide Operating Voltage Range: 2.5V to 60V

Overvoltage Protection to 100V

Reverse Supply Protection to -40V

Bidirectional Electronic Circuit Breaker:

Adjustable  $\pm 1.5\%$  Undervoltage and Overvoltage Thresholds

Low Operating Current: 80µA

Low Shutdown Current: 5µA

Controls Back-to-Back N-Channel MOSFETs

Blocks 50Hz and 60Hz AC Power

Hot Swappable Supply Input

Pin-Selectable Overcurrent Auto-Retry Timer or Latchoff

10-Pin MSOP and 3mm × 3mm DFN Packages

AEC-Q100 Qualified for Automotive Applications

## **Application**

Reverse Battery Protection

Portable Instrumentation

Automotive and Industrial Surge Protection

Energy Storage Systems

## **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



LTC2208CUP

Analog Devices, Inc

QFN64



**LTC1606IG** 

Analog Devices, Inc

SSOP-28



**LT3463EDD** 

Analog Devices, Inc

QFN10