

LTC4365ITS8#TRMPBF

Data Sheet

Surge Suppressors UV, OV and Reverse Supply Protection Controller with 36ms Fault Recovery

Manufacturers <u>Analog Devices, Inc</u>

Package/Case SOT23-8

Product Type Power Management - Specialized

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC4365ITS8#TRMPBF or <u>Emailto:science-aconag</u>

RFO

General Description

The LTC4365 protects applications where power supply input voltages may be too high, too low or even negative. It does this by controlling the gate voltages of a pair of external N-channel MOSFETs to ensure that the output stays within a safe operating range. The LTC4365 can withstand voltages between -40V and 60V and has an operating range of 2.5V to 34V, while consuming only 125μ A in normal operation.

Two comparator inputs allow configuration of the overvoltage (OV) and undervoltage (UV) set points using an external resistive divider. A shutdown pin provides external control for enabling and disabling the MOSFETs as well as placing the device in a low current shutdown state. A fault output provides status of the gate pin pulling low. A fault is indicated when the part is in shutdown or the input voltage is outside the UV and OV set points.

The LTC4365 has a 36ms turn-on delay that debounces live connections and blocks 50Hz to 60Hz AC power. For fast recovery after faults, the LTC4365-1 has a reduced 1ms turn-on delay.

Features

Wide Operating Voltage Range: 2.5V to 34V

Overvoltage Protection to 60V

Reverse Supply Protection to -40V

LTC4365: Blocks 50Hz and 60Hz AC Power

LTC4365-1: Fast (1ms) Recovery from Fault

No Input Capacitor or TVS Required for Most Applications

Adjustable Undervoltage and Overvoltage Protection Range

Charge Pump Enhances External N-Channel MOSFET

Low Operating Current: $125\mu A$

Low Shutdown Current: 10µA

Compact 8-Lead, $3mm \times 2mm$ DFN and TSOT-23 (ThinSOT $\!\!\!^{TM}\!\!\!$) Packages

AEC-Q100 Qualified for Automotive Applications



Related Products

Application

Portable Instrumentation

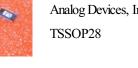
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