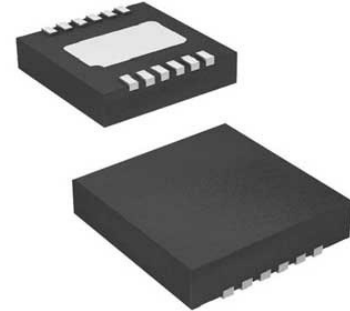


1.5A Single Resistor Rugged Linear Regulator with Monitors

Manufacturers	Analog Devices, Inc
Package/Case	12-Lead DFN (4mm x 4mm w/ EP)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT3081EDF#TRPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT3081 is a 1.5A low dropout linear regulator designed for rugged industrial applications. Key features of the IC are the extended safe operating area (SOA), output current monitor, temperature monitor and programmable current limit. The LT3081 can be paralleled for higher output current or heat spreading. The device withstands reverse input and reverse output-to-input voltages without reverse current flow.

The LT3081's precision 50 μ A reference current source allows a single resistor to program output voltage to any level between zero and 34.5V. The current reference architecture makes load regulation independent of output voltage. The LT3081 is stable with or without input and output capacitors.

The output current monitor (IOUT/5000) and die junction temperature output (1 μ A/ $^{\circ}$ C) provide system monitoring and debug capability. In addition, a single resistor programs current limit.

Internal protection circuitry includes reverse-battery and reverse-current protection, current limiting and thermal limiting. The LT3081 is offered in the 16-lead TSSOP (with exposed pad for improved thermal performance), 7-lead TO-220, 7-lead DD-Pak, and an 12-lead 4mm \times 4mm DFN.

Features

Extended Safe Operating Area

Maximum Output Current: 1.5A

Stable with or without Input/Output Capacitors

Wide Input Voltage Range: 1.2V to 36V

Single Resistor Sets Output Voltage

Output Current Monitor:>

Junction Temperature Monitor: $1\mu\text{A}/^\circ\text{C}$

Output Adjustable to 0V

50 μA SET Pin Current: 1% Initial Accuracy

Output Voltage Noise: 27 μVRMS

Parallel Multiple Devices for Higher Current or Heat Spreading

Programmable Current Limit

Reverse-Battery and Reverse-Current Protection

Available in Thermally-Enhanced 12-Lead 4mm \times 4mm DFN and 16-Lead TSSOP, 7-Lead DD-Pak and 7-Lead TO-220

Application

All Surface Mount Power Supply

Rugged Industrial Power Supply

Post Regulator for Switching Supplies

Low Output Voltage Supply

Intrinsic Safety Applications

Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LT1038CK](#)

Analog Devices, Inc
TO-3



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC1966CMS8#PBF](#)

Analog Devices, Inc
MSOP-8P



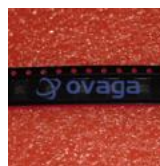
[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LTM8045EX#PBF](#)

Analog Devices, Inc
BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN