

LDO Regulator Pos 0V to 23V 3A Automotive 12-Pin DFN EP Tube

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	DFN12
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LT3083EDF#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT3083 is a 3A low dropout linear regulator that can be paralleled to increase output current or spread heat on surface mounted boards. Architected as a precision current source and voltage follower, this new regulator finds use in many applications requiring high current, adjustability to zero, and no heat sink. The device also brings out the collector of the pass transistor to allow low dropout operation—down to 310mV—when used with multiple supplies.

A key feature of the LT3083 is the capability to supply a wide output voltage range. By using a reference current through a single resistor, the output voltage is programmed to any level between zero and 23V (DD-PAK and TO-220 packages). The LT3083 is stable with 10 $\mu$ F of capacitance on the output, and the IC is stable with small ceramic capacitors that do not require additional ESR as is common with other regulators.

Internal protection circuitry includes current limiting and thermal limiting. The LT3083 is offered in the 16-lead TSSOP (with an exposed pad for better thermal characteristics), 12-lead 4mm  $\times$  4mm DFN (also with an exposed pad), 5-lead TO-220, and 5-lead surface mount DD-PAK packages.

## Features

Outputs May be Paralleled for Higher Current and Heat Spreading

Output Current: 3A

Single Resistor Programs Output Voltage

50 $\mu$ A Set Pin Current: 1% Initial Accuracy

Output Adjustable to 0V

Low Output Noise: 40 $\mu$ VRMS (10Hz to 100kHz)

Wide Input Voltage Range: 1.2V to 23V (DD-Pak and TO-220 Packages)

Low Dropout Voltage: 310mV

Minimum Load Current: 1mA

Stable with Minimum 10 $\mu$ F Ceramic Capacitor

Current Limit with Foldback and Overtemperature Protection

Available in 16-Lead TSSOP, 12-Lead 4mm  $\times$  4mm DFN, 5-Lead TO-220 and 5-Lead Surface Mount DD-PAK Packages

## Application

High Current All Surface Mount Supply

High Efficiency Linear Regulator

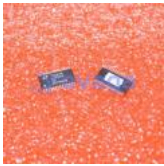
Post Regulator for Switching Supplies

Low Parts Count Variable Voltage Supply

Low Output Voltage Power Supplies



## Related Products



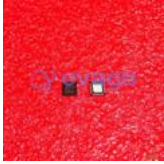
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Analog Devices, Inc  
TSSOP28



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TO-3



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