

LT3080EMS8E#PBF

Data Sheet

LDO Regulator Pos 0V to 30V 1.1A Automotive 8-Pin MSOP EP Tube

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

Package/Case MSOP-8

Product Type Power Management ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LT3080EMS8E#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LT3080 is a 1.1A low dropout linear regulator that can be paralleled to increase output current or spread heat in surface mounted boards. Architected as a precision current source and voltage follower allows this new regulator to be used in many applications requiring high current, adjustability to zero, and no heat sink. Also the device brings out the collector of the pass transistor to allow low dropout operation—down to 350 millivolts—when used with multiple supplies.

A key feature of the LT3080 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 36V. The LT3080 is stable with $2.2\mu F$ of capacitance on the output, and the IC uses 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 LT3080 regulator is offered in the 8-lead MSOP (with an exposed pad for better thermal characteristics), a 3mm × 3mm DFN, 5-lead DD-Pak, TO-220 and a simple-to-use 3-lead SOT-223 version.

Features LT3080-LT3080-1Can parallel without additional external resistance

Features

Outputs May be Paralleled for Higher Current and Heat Spreading

Output Current: 1.1A

Single Resistor Programs Output Voltage

1% Initial Accuracy of SET Pin Current

Output Adjustable to 0V

Low Output Noise: 40µVRMS (10Hz to 100kHz)

Wide Input Voltage Range: 1.2V to 36V

Low Dropout Voltage: 350mV (Except SOT-223 Package)

Minimum Load Current: 0.5mA

Stable with 2.2µF Minimum Ceramic Output Capacitor

Current Limit with Foldback and Overtemperature Protected

Available in 8-Lead MSOP, 3mm × 3mm DFN, 5-Lead DD-Pak, TO-220 and 3-Lead SOT-223

Related Products



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P



LTM8045EY#PBF
Analog Devices, Inc
BGA40

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



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS
Analog Devices, Inc
MSOP10



LTC2990IMS#PBF
Analog Devices, Inc
10MSOP



LT4295IUFD#PBF
Analog Devices, Inc
28-WFQFN