

LTC3025EDC#TRMPBF

Data Sheet

LDO Regulator, 500mA Adjustable, 0.4 3.6 V, ±2% 6-Pin, DFN

Manufacturers Analog Devices, Inc

Package/Case DFN-6

Product Type Power Management ICs

RoHS Pb-free Halide free

Images are for reference only

Please submit RFQ for LTC3025EDC#TRMPBF or <u>Emailto:sales@ovaga.com</u> We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LTC3025 is a micropower, VLDOTM (very low dropout) linear regulator which operates from input voltages as low as 0.9V. The device is capable of supplying 300mA of output current with a typical dropout voltage of only 45mV. A BIAS supply is required to run the internal reference and LDO circuitry while output current comes directly from the IN supply for high efficiency regulation. The low 0.4V internal reference voltage allows the LTC3025 output to be programmed to much lower voltages than available in common LDOs (range of 0.4V to 3.6V). The output voltage is programmed via two ultrasmall SMD resistors.

The LTC3025's low quiescent current makes it an ideal choice for use in battery-powered systems. For 3-cell NiMH and single cell Li-Ion applications, the BIAS voltage can be supplied directly from the battery while the input can come from a high efficiency buck regulator, providing a high efficiency, low noise output.

Other features include high output voltage accuracy, excellent transient response, stability with ultralow ESR ceramic capacitors as small as 1μ F, short-circuit and thermal overload protection and output current limiting. The LTC3025 is available in a tiny, low profile (0.75mm) 6-lead DFN (2mm × 2mm) package.

Output CurrentOutput VoltageLTC3025300mAAdj (0.4V to 3.6V)LTC3025-1500mAAdj (0.4V to 3.6V)LTC3025-2500mA1.2V Fixed LTC3025-3500mA1.5V FixedLTC3025-4500mA1.8V Fixed

Features

Wide Input Voltage Range: 0.9V to 5.5V

Stable with Ceramic Capacitors

Very Low Dropout: 45mV at 300mA

Adjustable Output Range: 0.4V to 3.6V

Low Noise: 80µVRMS (10Hz to 100kHz)

BIAS Voltage Range: 2.5V to 5.5V

Fast Transient Recovery

Shutdown Disconnects Load from VIN and VBIAS

Low Operating Current: $= 50 \mu A$ Typ

Low Shutdown Current: = $0.01\mu A$ Typ

Output Current Limit

Thermal Overload Protection

Available in 6-Lead (2mm × 2mm) DFN Package

Application

Low Power Handheld Devices

Low Voltage Logic Supplies

DSP Power Supplies

Cellular Phones

Portable Electronic Equipment

Handheld Medical Instruments

Post Regulator for Switching Supply Noise Rejection

Related Products



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc



LTC1966CMS8#PBF
Analog Devices, Inc

MSOP-8P

QFN-24



LTM8045EY#PBF
Analog Devices, Inc
BGA40



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS

Analog Devices, Inc
MSOP10



LTC2990IMS#PBF
Analog Devices, Inc
10MSOP



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