LDO Regulator Pos 5 V 0.5 A Automotive 8-Pin SOIC N Tube

| Manufacturers | Analog Devices, Inc |
| :--- | :--- |
| Package/Case | SOP8 |
| Product Type | Power Management ICs |
| RoHS | Pb-free Halide free |



Images are for reference only

## Lifecycle

## General Description

The LT1763 series are micropower, low noise, low dropout regulators. The devices are capable of supplying 500 mA of output current with a dropout voltage of 300 mV . Designed for use in battery-powered systems, the low $30 \mu \mathrm{~A}$ quiescent current makes them an ideal choice. Quiescent current is well controlled; it does not rise in dropout as it does with many other regulators.

A key feature of the LT1763 regulators is low output noise. With the addition of an external $0.01 \mu \mathrm{~F}$ bypass capacitor, output noise drops to $20 \mu \mathrm{VRMS}$ over a 10 Hz to 100 kHz bandwidth. The LT1763 regulators are stable with output capacitors as low as $3.3 \mu \mathrm{~F}$. Small ceramic capacitors can be used without the series resistance required by other regulators.

Internal protection circuitry includes reverse battery protection, current limiting, thermal limiting and reverse current protection. The parts come in fixed output voltages of $1.5 \mathrm{~V}, 1.8 \mathrm{~V}, 2.5 \mathrm{~V}, 3 \mathrm{~V}, 3.3 \mathrm{~V}$ and 5 V , and as an adjustable device with a 1.22 V reference voltage. The LT1763 regulators are available in 8 -lead SO and 12-lead, low profile ( $4 \mathrm{~mm} \times 3 \mathrm{~mm} \times 0.75 \mathrm{~mm}$ ) DFN packages.

## Features

Low Noise: $20 \mu$ VRMS ( 10 Hz to 100 kHz )

Output Current: 500 mA

Low Quiescent Current: $30 \mu \mathrm{~A}$

Wide Input Voltage Range: 1.8 V to 20 V

Low Dropout Voltage: 300mV

Very Low Shutdown Current: $<1 \mu \mathrm{~A}$

No Protection Diodes Needed

Fixed Output Voltages: $1.5 \mathrm{~V}, 1.8 \mathrm{~V}, 2.5 \mathrm{~V}, 3 \mathrm{~V}, 3.3 \mathrm{~V}, 5 \mathrm{~V}$

Adjustable Output from 1.22 V to 20 V

Stable with $3.3 \mu \mathrm{~F}$ Output Capacitor

Stable with Aluminum, Tantalum or Ceramic Capacitors

Reverse Battery Protection

No Reverse Current

Overcurrent and Overtemperature Protected

8-Lead SO and 12-Lead ( $4 \mathrm{~mm} \times 3 \mathrm{~mm}$ ) DFN Packages

## Application

Cellular Phones

Battery-Powered Systems

Noise-Sensitive Instrumentation Systems


## LT1038CK

Analog Devices, Inc
TO-3

LTC3440EMS
Analog Devices, Inc
MSOP10

LTC2990IMS\#PBF
Analog Devices, Inc
10MSOP


LTM8045EY\#PBF
Analog Devices, Inc
BGA40

LT4295IUFD\#PBF
Analog Devices, Inc
28-WFQFN

