

## LT1962EMS8#TRPBF

Data Sheet

LDO Voltage Regulators 300mA Low Noise LDO

Manufacturers Analog Devices, Inc

Package/Case 8MSOP

Product Type Power Management ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LT1962EMS8#TRPBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

Lifecycle

The LT1962 series are micropower, low noise, low dropout regulators. The devices are capable of supplying 300mA of output current with a dropout voltage of 270mV. Designed for use in battery-powered systems, the low 30µA 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 LT1962 regulators is low output noise. With the addition of an external  $0.01\mu F$  bypass capacitor, output noise drops to  $20\mu VRMS$  over a 10Hz to 100kHz bandwidth. The LT1962 regulators are stable with output capacitors as low as  $3.3\mu F$ . 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 1.5V, 1.8V, 2.5V, 3V, 3.3V and 5V, and as an adjustable device with a 1.22V reference voltage. The LT1962 regulators are available in the 8-lead MSOP package.

**Features** 

Low Noise: 20µVRMS (10Hz to 100kHz)

Output Current: 300mA

Low Quiescent Current: 30µA

Wide Input Voltage Range: 1.8V to 20V

Low Dropout Voltage: 270mV

Very Low Shutdown Current:  $< 1 \mu A$ 

No Protection Diodes Needed

Fixed Output Voltages: 1.5V, 1.8V, 2.5V, 3V, 3.3V, 5V

Adjustable Output from 1.22V to 20V

Stable with 3.3µF Output Capacitor

Stable with Aluminum, Tantalum or Ceramic Capacitors

Reverse Battery Protection

No Reverse Current

Overcurrent and Overtemperature Protected

8-Lead MSOP Package

## **Application**

Cellular Phones

Battery-Powered Systems

Noise-Sensitive Instrumentation Systems

## **Related Products**



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc

QFN-24



LTC1966CMS8#PBF

Analog Devices, Inc

MSOP-8P



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