

45V VIN, 500mA Low Noise, Linear Regulator with Programmable Current Limit and Power Good

Manufacturers	Analog Devices, Inc
Package/Case	10-Lead DFN (3mm x 3mm w/ EP)
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LT3065MPDD#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT3065 Series are micropower, low noise, low dropout voltage (LDO) linear regulators that operate over a 1.6V to 45V input voltage range. The devices supply 500mA of output current with a typical dropout voltage of 300mV. A single external capacitor provides programmable low noise reference performance and output soft-start functionality.

A single external resistor programs the LT3065's current limit, accurate to $\pm 10\%$ over a wide input voltage and temperature range. A PWRGD flag indicates output regulation.

The LT3065 optimizes stability and transient response with low ESR ceramic capacitors, requiring a minimum of 3.3 μ F. Internal protection circuitry includes current limiting with foldback, thermal limiting, reverse battery protection, reverse current protection and reverse output protection.

The LT3065 is available in fixed output voltages of 1.2V, 1.5V, 1.8V, 2.5V, 3.3V, and 5V, and as an adjustable device with an output voltage range from 0.6V to 40V. The LT3065 is available in the thermally-enhanced 10-lead 3mm \times 3mm DFN and 12-lead MSOP packages.

Features

Input Voltage Range: 1.6V to 45V

Output Current: 500mA

Dropout Voltage: 300mV

Programmable Precision Current Limit: $\pm 10\%$

Power Good Flag

Low Noise: $25\mu\text{VRMS}$ (10Hz to 100kHz)

Adjustable Output = 600mV)

Output Tolerance: $\pm 2\%$ Over Line, Load and Temperature

Stable with Low ESR, Ceramic Output Capacitors (3.3 μF Minimum)

Single Capacitor Soft-Starts Reference and Lowers Output Noise

Current Limit Foldback Protection

Shutdown Current: $< 1\mu\text{A}$

Reverse Battery and Thermal Limit Protection

10-Lead 3mm \times 3mm DFN and 12-lead MSOP Packages

Application

Battery-Powered Systems

Automotive Power Supplies

Industrial Power Supplies

Avionic Power Supplies

Portable Instruments

Related Products



[LT3763EFE](#)

Analog Devices, Inc
TSSOP28



[LT1038CK](#)

Analog Devices, Inc
TO-3



[LTC4417IUF](#)

Analog Devices, Inc
QFN-24



[LTC3440EMS](#)

Analog Devices, Inc
MSOP10



[LTC1966CMS8#PBF](#)

Analog Devices, Inc
MSOP-8P



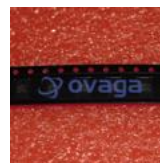
[LTC2990IMS#PBF](#)

Analog Devices, Inc
10MSOP



[LTM8045EV#PBF](#)

Analog Devices, Inc
BGA40



[LT4295IUFD#PBF](#)

Analog Devices, Inc
28-WFQFN