

LT3065MPMSE#PBF

Data Sheet

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

Manufacturers	Analog Devices, Inc			le.		
Package/Case	12-Lead MSOP w/ EP	J.				
Product Type	Power Management ICs	ŝ	\diamond	ice.		
RoHS						
Lifecycle			Images are for reference or	nly		
Please submit RFO f	lease submit RFO for LT3065MPMSF#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.					

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 µF. 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 × 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: ±10%

Power Good Flag

Low Noise: 25µVRMS (10Hz to 100kHz)

Adjustable Output = 600 mV)

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

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

Single Capacitor Soft-Starts Reference and Lowers Output Noise

Current Limit Foldback Protection

Shutdown Current: <1µA

Reverse Battery and Thermal Limit Protection

10-Lead 3mm × 3mm DFN and 12-lead MSOP Packages

Related Products



LT3763EFE Analog Devices, Inc TSSOP28



LTC4417IUF Analog Devices, Inc QFN-24







LTM8045EY#PBF Analog Devices, Inc

BGA40







Application

Battery-Powered Systems Automotive Power Supplies Industrial Power Supplies Avionic Power Supplies

Portable Instruments

Analog Devices, Inc TO-3

LTC3440EMS

LT1038CK

Analog Devices, Inc MSOP10

LTC2990IMS#PBF

Analog Devices, Inc 10MSOP

LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN