

MIC5317

6V High Performance Single 150mA LDO



Benefits

Longer Battery Life

Small Form Factor

USB Interface
Compatible

Proven Quality

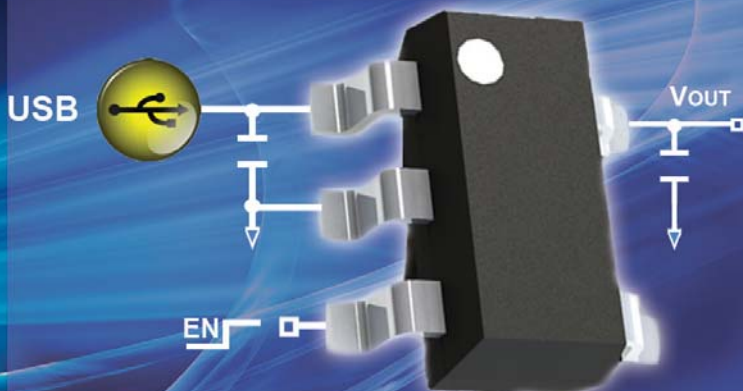
Ease of Use

Features

- Low quiescent current (29 μ A) enables longer battery usage
- Reduces overall system power consumption
- Small package solution enables more usable board space, ideal for space-constrained PCB solutions
- Offered in standard SOT23-5/TSOT23-5 pin-out configurations
- 6V operation; 7V absolute max. for loosely regulated 5V power supplies (such as USB dongles) or systems that may be exposed to an input transient during hot plug situations
- Backed by Micrel's long history of LDO products
- Independent enable control for power sequencing

MIC5317

High Performance Single 150mA LDO
For Applications Requiring 6V Operation



MICREL
Innovation Through Technology

Applications

- USB dongles/devices
- Mobile banking solutions
- Handheld instruments
- Battery powered equipment
- Smart Metering
- 5V general purpose

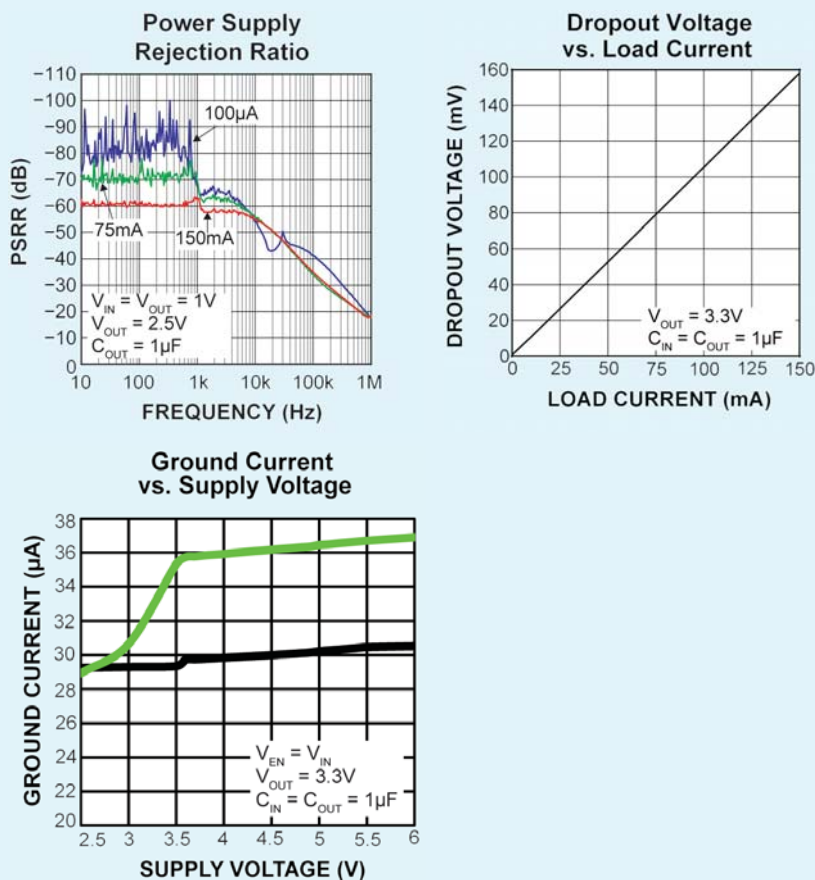
Description

The MIC5317 is an advanced general purpose low dropout linear regulator offering high power supply rejection (PSRR) typically 70dB, excellent line and load regulation and can source up to 150mA of output current. In addition it features an extensive output voltage range down to 1.0V and only requires a 1 μ F ceramic output capacitor for stability.

The MIC5317 operates up to 6V, offers 2% initial accuracy, low dropout voltage (155mV @ 150mA), and low ground current (typically 29 μ A). The MIC5317 can also be put into a zero-off-mode current state, drawing virtually no current when disabled.

The MIC5317 is available in several advanced packages including a lead-free (RoHS-compliant) 1mm x 1mm Thin DFN occupying only 1mm² of PCB area, a 75% reduction in board area compared to SC-70 and 2mm x 2mm DFN packages. It is also available in a SOT23-5 package for applications requiring a pin to pin pitch of 0.95mm. The MIC5317 has an operating junction temperature range of -40°C to 125°C.

Typical Performance



Ordering Information

Part	Output Voltage Range	Junction Temp. Range	Package	Lead Finish
MIC5317-X.XYM5	1.0V to 3.3V	-40°C to +125°C	5-Pin SOT23	Pb-Free
MIC5317-X.XYD5	1.0V to 3.3V	-40°C to +125°C	5-Pin TSOT23	Pb-Free
MIC5317-X.XYMT	1.0V to 3.3V	-40°C to +125°C	1mm x 1mm TDFN	Pb-Free

About Micrel

Micrel, Inc. is a leading global manufacturer of High Performance Linear and Power, Timing and Communications, and LAN Solutions. The Company's products include advanced mixed-signal, analog, and power semiconductors; high performance communication, clock management, Ethernet switch, and physical layer transceiver ICs. Company customers include leading manufacturers of enterprise, consumer, industrial, mobile, telecommunications, automotive, and computer products. Corporation headquarters and state-of-the-art wafer fabrication facilities are located in San Jose, CA, with regional sales and support offices and advanced technology design centers situated throughout the Americas, Europe, and Asia. In addition, the Company maintains an extensive network of distributors and reps worldwide.

For more information, contact your local Micrel sales representative, or visit Micrel at www.micrel.com

Mouser Electronics

Authorized Distributor

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Micrel:

<u>MIC5317-1.5YM5 T5</u>	<u>MIC5317-1.8YM5 T5</u>	<u>MIC5317-2.8YD5 T5</u>	<u>MIC5317-3.0YD5 T5</u>	<u>MIC5317-2.5YMT T5</u>
<u>MIC5317-3.3YMT T5</u>	<u>MIC5317-1.5YMT T5</u>	<u>MIC5317-1.2YMT T5</u>	<u>MIC5317-1.2YM5-T5</u>	<u>MIC5317-1.0YMT-T5</u>
<u>MIC5317-2.8YMT-T5</u>	<u>MIC5317-2.5YD5-T5</u>	<u>MIC5317-2.8YM5-T5</u>	<u>MIC5317-1.0YM5-T5</u>	<u>MIC5317-1.8YD5-T5</u>
<u>MIC5317-2.8YD5-T5</u>	<u>MIC5317-1.8YMT-T5</u>	<u>MIC5317-2.5YMT-T5</u>	<u>MIC5317-1.5YM5-T5</u>	<u>MIC5317-3.3YM5-T5</u>
<u>MIC5317-3.3YD5-T5</u>	<u>MIC5317-3.0YMT-T5</u>	<u>MIC5317-1.2YMT-T5</u>	<u>MIC5317-1.8YM5-T5</u>	<u>MIC5317-3.0YD5-T5</u>
<u>MIC5317-1.0YD5-T5</u>	<u>MIC5317-1.2YD5-T5</u>	<u>MIC5317-3.0YM5-T5</u>	<u>MIC5317-3.3YMT-T5</u>	<u>MIC5317-1.5YMT-T5</u>
<u>MIC5317-1.5YD5-T5</u>	<u>MIC5317-2.5YM5-T5</u>			