

MIC5203

50mA Low-Dropout Voltage Regulator

Summary Information*

General Description

The MIC5203 is a family of efficient linear voltage regulators with very low dropout voltage (typically 50mV at light loads and 300mV at 50mA), and very low ground current (750 μ A at 50mA output), offering better than 3% initial accuracy with a logic compatible ON/OFF switching input. Designed especially for hand-held battery powered devices, the MIC5203 is switched by a CMOS or TTL compatible logic signal and when disabled, power consumption drops nearly to zero. If logic control is not required, the Enable pin may be tied to the Input for 3-terminal operation. The ground current of the MIC5203 increases only slightly in dropout, further prolonging battery life. Key MIC5203 features include protection against reversed battery, current limiting, and overtemperature shutdown

The MIC5203 is available in 3.0V, 3.3V, 4.75V, and 5.0V fixed voltage configurations. Other voltages are available; contact Micrel for details.

Features

- · Tiny four lead surface mount package
- Choice of output voltage: 3.0V, 3.3V, 4.75V, or 5.0V
- · Guaranteed 50mA output
- · Low quiescent current
 - Low dropout voltage
- · Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
- Zero OFF mode current
- Logic-controlled electronic shutdown

Applications

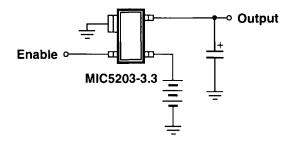
- Cellular Telephones
- · Laptop, Notebook, and Palmtop Computers
- Battery Powered Equipment
- Bar Code Scanners
- SMPS Post-Regulator/ DC to DC Modules
- · High Efficiency Linear Power Supplies

Ordering Information

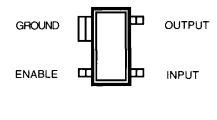
Part Number	Marking	Volts	Junction Temperature Range	Package
MIC5203-3.0CM4	LA30	3.0	0°C to +125°C	SOT-143
MIC5203-3.3CM4	LA33	3.3	_0°C to +125°C	SOT-143
MIC5203-4.7CM4	LA47	4.75	0°C to +125°C	SOT-143
MIC5203-5.0CM4	LA50	5.0	0°C to +125°C	SOT-143

Other voltages are available; contact Micrel for details.

Typical Application



Pin Configuration



^{*} See the Micrel Databook for full details.