

AS1360

Product Brief

1.5µA Low-Power, Positive Voltage Regulator

1 General Description

The AS1360 low-power, positive voltage regulator was designed to deliver up to 250mA while consuming only 1.5µA of quiescent current. The device is available in fixed output voltages of 1.8, 2.5, 3.0, 3.3, and 5.0V.

The device features integrated short-circuit and overcurrent protection.

The wide input voltage range, low-dropout voltage, and high-accuracy output voltage makes the device perfectly suited for 2- and 3-cell battery-powered and portable applications.

The low dropout voltage (650mV) prolongs battery life and allows high current in small applications when operated with minimum input-to-output voltage differentials.

The device features very stable output voltage (using only 1µF tantalum or aluminum-electrolytic capacitors), strict output voltage regulation tolerances ($\pm 0.5\%$), and excellent line-regulation.

The AS1360 is available in a 3-pin SOT23 package.

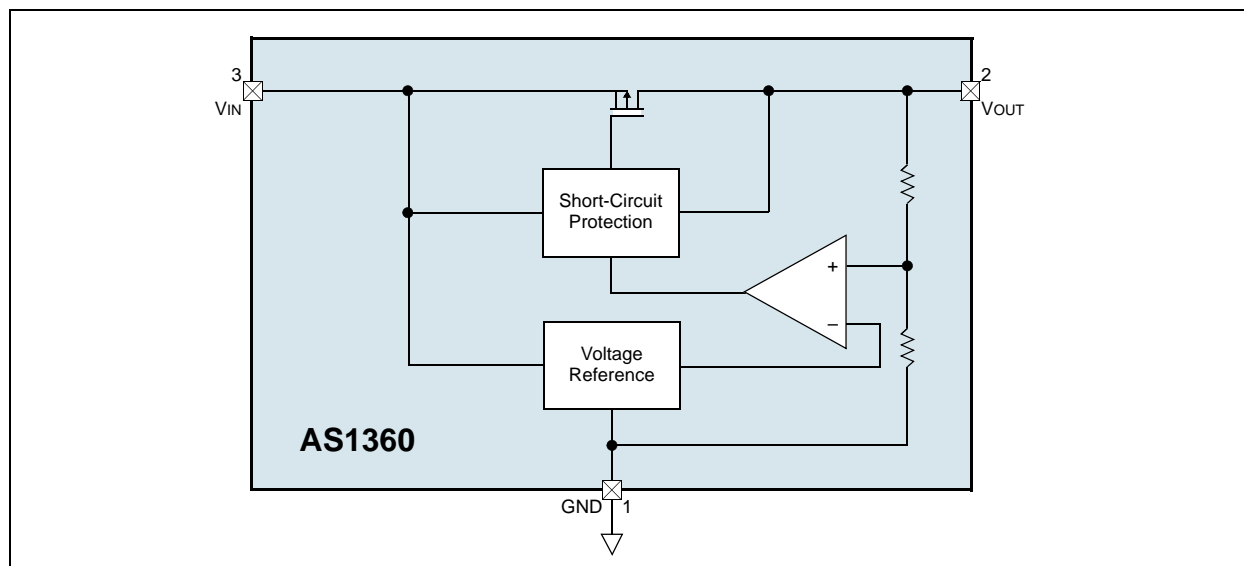
2 Key Features

- Low Quiescent Current: 1.5µA
- Input Voltage Range: Up to 20V
- Low Dropout Voltage
 - 250mV @ 100mA
 - 400mV @ 200mA
- Fixed Output Voltages: 1.8, 2.5, 3.0, 3.3, 5.0V
- High Output Current: 250mA ($V_{OUT} = 5.0V$)
- High-Accuracy Output Voltage: $\pm 1.5\%$
- Exceptional Line Regulation: 0.1%/V
- Low Temperature Drift: $\pm 100\text{ppm}/^\circ\text{C}$
- Integrated Short-Circuit and Overcurrent Protection
- 3-pin SOT23 Package

3 Applications

The device is ideal for mobile phones, PDAs, digital cameras, smart battery packs, battery-powered alarms, solar-powered instruments, intelligent instruments, CO₂ and smoke detectors, CPU power supplies, and any battery-powered application.

Figure 1. Block Diagram



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