



## MP2013A

40V, 150mA, Low-Quiescent Current Linear Regulator

### DESCRIPTION

The MP2013A is a low-power, linear regulator that supplies power to systems with high-voltage batteries. It includes a wide 2.5V to 40V input range, low-dropout voltage and low-quiescent-supply current. The low-quiescent current and low-dropout voltage allow operation at extremely low-power levels. The MP2013A is ideal for low-power microcontrollers and battery-powered equipment.

The MP2013A provides a wide variety of fixed, output-voltage options: 1.8V, 1.9V, 2.3V, 2.5V, 3.0V, 3.3V, 3.45V, and 5.0V, and it provides an adjustable output option (from 1.215V to 15V).

The regulator output current is internally limited; the device is protected against over-load and over-temperature conditions. The MP2013A includes thermal shutdown (TSD) and current-limiting fault protection. It is available in QFN6 (2x2mm), and QFN8 (3x3mm) packages.

### FEATURES

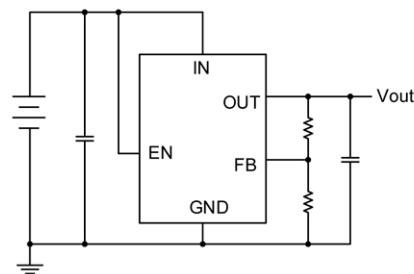
- 2.5V to 40V Input Range
- 3.2 $\mu$ A Quiescent-Supply Current
- Stable with Low-Value Output Ceramic Capacitor (> 0.47  $\mu$ F)
- 150mA Specified Current
- 620mV Dropout at 150mA Load
- Available in Fixed and Adjustable Output (1.215 V to 15 V) Versions
- $\pm$ 2% Output Accuracy
- Specified Current Limit
- Thermal Shutdown
- -40°C to +125°C Specified Junction- Temperature Range
- Available in QFN6 (2x2mm), and QFN8 (3x3mm) Packages

### APPLICATIONS

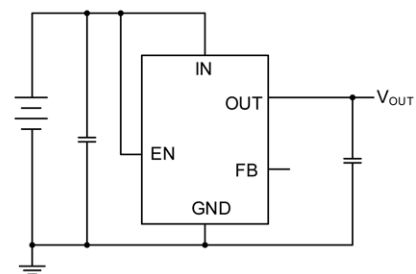
- Industrial/Automotive Applications
- Portable/Battery-Powered Equipment
- Ultra Low-Power Microcontrollers
- Cellular Handsets
- Medical Imaging

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### TYPICAL APPLICATION



Output Adjustable Version



Output Fixed Version