

## 150mA Low-Noise LDO in SOT23-5

### DESCRIPTION

The EUP7915 is an efficient, CMOS voltage regulator optimized for ultra-low-noise applications. It offers high output accuracy, extremely low dropout voltage, low ground current and fast start-up time. The EUP7915 provides a very low noise output, ideal for RF applications where a clean voltage source is required. A noise bypass pin is also available for further reduction of output noise.

Designed specifically for handheld and battery-powered devices, the EUP7915 provides a TTL-logic-compatible enable pin. When disabled, power consumption drops nearly to zero.

The EUP7915 also works with low-ESR ceramic capacitors, reducing the amount of board space necessary for power applications, critical in handheld wireless devices.

Available in the SOT23-5 package, the EUP7915 offers a wide range of output voltages. Key features include current limit, thermal shutdown and faster transient response.

### FEATURES

- 5-pin SOT23-5 Package
- 2.5V to 5.5V Input Voltage Range
- 50 $\mu$ V(rms) Output Noise
- 140mV Dropout @ 150mA
- 75dB PSRR at 1kHz
- Low 70 $\mu$ A Ground Current
- 150mA Output Current
- Stability with 1 $\mu$ F Ceramic Output Capacitors
- Excellent Load/Line Transient
- Thermal Shutdown and Current Limit Protection
- Available in 1.2V, 1.5V, 1.8V, 2.5V, 2.8V, 2.85V, 2.9V, 3.0V, 3.3V, 4.8V and Adjustable Voltages
- RoHS Compliant and 100% Lead (Pb)-Free

### APPLICATIONS

- Cellular Phones
- Bluetooth Portable Radios and Accessories
- PDA and Palmtop Computers
- Consumer/Personal Electronics

### Block Diagram

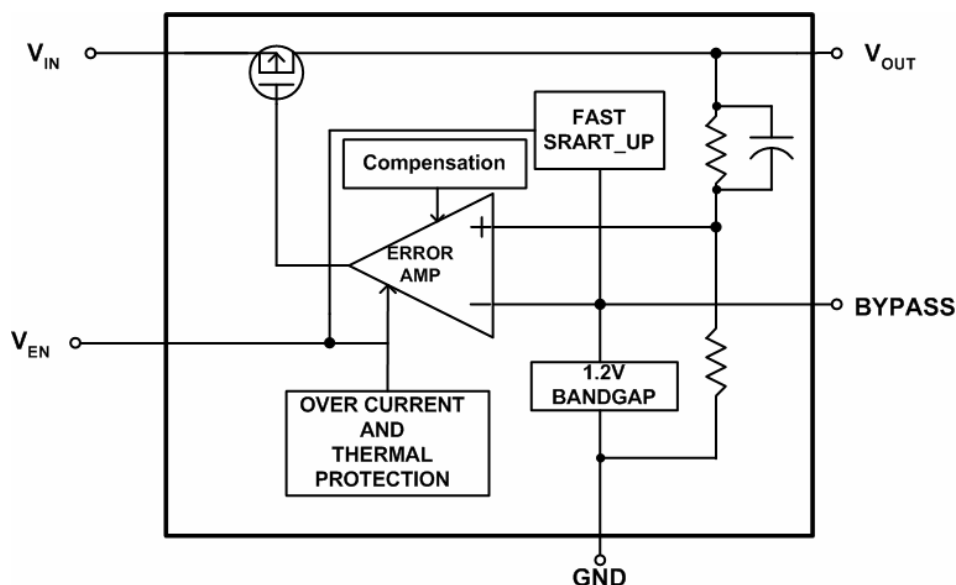


Figure 1. Fixed-Voltage