

300mA, Low I_Q , High PSRR LDO Regulators in SOT23

FEATURES

- 2.5V to 5.5V Input Voltage Range
- 320mV @300mA Dropout Voltage
- Excellent Transient Response
- Stable with 1 μ F Ceramic Output Capacitor
- 70dB PSRR at 1kHz
- Low 37 μ A Quiescent Current
- Output Accuracy: $\pm 2\%$
- Fixed Output Voltage: 1.2V~3.3V
- Current Limit Protection
- Thermal Shutdown
- RoHS Compliant and 100% Lead (Pb)-Free Halogen-Free

GENERAL DESCRIPTION

The TMI6030C is a 300mA, low-dropout (LDO) linear regulator with fast transient response and high PSRR. It offers high output accuracy, low dropout voltage and low quiescent current as well as fast start-up time. This regulator is based on a CMOS process.

The TMI6030C is designed to work with low-ESR ceramic capacitors, reducing the amount of the PCB area necessary for power applications. Only a 1 μ F ceramic output capacitor can make the device stable over the whole load range current (0mA to 300mA). Other key features include over-current protection and thermal shutdown. The TMI6030C is packaged in SOT23 packages.

APPLICATIONS

- Cellular Phones
- Bluetooth portable radios and Accessories
- Battery-Powered Equipment
- Laptop, Palmtops, Notebook Computer
- PDAs
- Digital still Camera and Video Recorders

TYPICAL APPLICATION

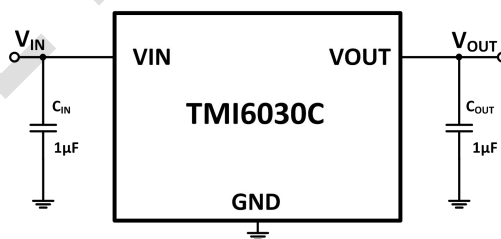


Figure 1. TMI6030C Application Circuits