

300mA, Ultra-Low Noise, Ultra-Fast CMOS LDO Regulator

General Description

The TP2087 is designed for portable RF and wireless applications with demanding performance and space requirements. The TP2087 performance is optimized for battery-powered systems to deliver ultra low noise and low quiescent current. A noise bypass pin is available for further reduction of output noise. Regulator ground current increases only slightly in dropout, further prolonging the battery life. The TP2087 also works with low-ESR ceramic capacitors, reducing the amount of board space necessary for power applications, critical in hand-held wireless devices. The TP2087 consumes less than 0.01 μ A in shutdown mode and has fast turn-on time less than 50 μ s. The other features include ultra low dropout voltage, high output accuracy, current limiting protection, and high ripple rejection ratio. Available in the SOT-23-5 packages.

Ordering Information

TP2087-□□□□	
	F : Pb Free
	Package Type
	B : SOT-23-5
	Output Voltage
	15 : 1.5V
	16 : 1.6V
	:
	49 : 4.9V
	50 : 5.0V
	1H : 1.85V
	2H : 2.85V
	4G : 4.75V

Marking Information

For marking information, contact our sales representative directly or through a TPmicro distributor located in your area.

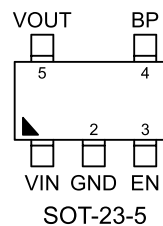
Features

- Ultra Low Noise for RF Application
- Ultra Fast Response in Line/Load Transient
- Quick Start-Up (Typically 50 μ s)
- <0.01 μ A Standby Current When Shutdown
- Low Dropout : 220mV @ 300mA
- Wide Operating Voltage Ranges : 2.5V to 5.5V
- TTL-Logic-Controlled Shutdown Input
- Low Temperature Coefficient
- Current Limiting Protection
- Thermal Shutdown Protection
- Only 1 μ F Output Capacitor Required for Stability
- High Power Supply Rejection Ratio
- Custom Voltage Available
- RoHS Compliant and 100% Lead (Pb)-Free

Applications

- CDMA/GSM Cellular Handsets
- Battery-Powered Equipment
- Laptop, Palmtops, Notebook Computers
- Hand-Held Instruments

Pin Configurations



Typical Application Circuit

