

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

General Description

The TP2081 is designed for portable RF and wireless applications with demanding performance and space requirements. The TP2081 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 TP2081 also works with low-ESR ceramic capacitors, reducing the amount of board space necessary for power applications, critical in hand-held wireless devices. The TP2081 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

TP2081-	□	□	□	□
	F	:	Pb Free	
			Package Type	
	B5	:	SOT-23-5	
			Output Voltage	
	12	:	1.2V	
	13	:	1.3V	
	15	:	1.5V	
	18	:	1.8V	
	25	:	2.5V	
	28	:	2.8V	
	30	:	3.0V	
	33	:	3.3V	
	50	:	5.0V	

Marking Information

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

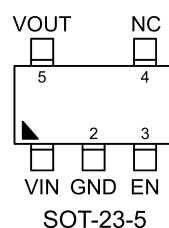
Features

- Ultra Low Noise for RF Application
- 2.0V-6.5V Input Voltage Range
- 300mA Output Current , 500mA Peak Current
- Quick Start-Up (Typically 50 μ s)
- <0.01 μ A Standby Current When Shutdown
- Low Dropout : 220mV @ 300mA
- High PSSR : -76dB at 1KHz
- TTL-Logic-Controlled Shutdown Input
- Low Temperature Coefficient
- Current Limiting Protection
- Thermal Shutdown Protection
- 4.7 μ F to 10 μ F Capacitor Required for Stability
- Ultra-Fast Response in Line/Load transient
- 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

