

**WIDE INPUT VOLTAGE RANGE, 150mA ULDO REGULATOR****AP2204****Description**

AP2204 series are positive voltage regulator IC fabricated by high voltage EPNP process.

The AP2204 has features of wide input voltage range and high accuracy, high ripple rejection, low dropout voltage, low noise, current limit and ultra-low quiescent current which make them ideal for use in various USB and portable device.

The IC consists of a voltage reference, an error amplifier, a resistor network for setting output voltage, a current limit circuit for current protection, and a chip enable circuit.

AP2204 has adjustable, 1.8V, 3.3V, 5.0V fixed voltage versions.

**Features**

- Wide Input Voltage Range: 2.3V to 24V
- Wide Output Voltage Range: 1.24V to 22V
- Excellent Ripple Rejection: 60dB@ f=1kHz
- Low Dropout Voltage:  $V_{DROP}=50mV@$   
 $I_{OUT}=100\mu A$
- Low Ground Current
- High Output Voltage Accuracy
- Compatible with Low ESR Ceramic Capacitor
- Excellent Line/Load Regulation
- Thermal Shutdown Function

**Benefits**

- Low Noise
- Low Dropout
- Very Low Standby Current
- High PSRR
- Lower Price
- Easy to Use in Mobile Phone

**Parametric Table**

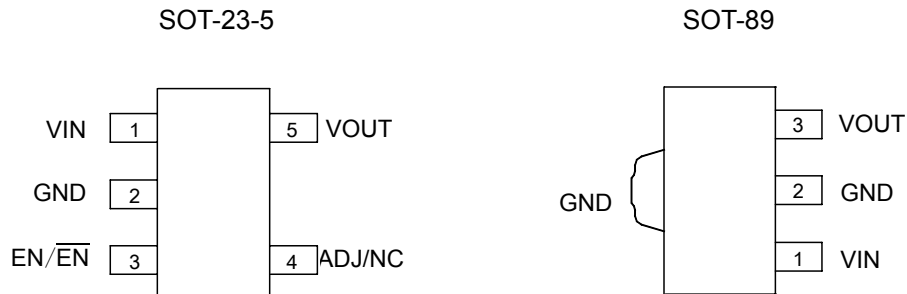
Maximum Output Current (Min.) (A)	0.15
Standby Current (Max) ( $\mu A$ )	1
$V_{DROP}$ at 100 $\mu A$ (Typ) (mV)	50
$V_{IN}$ (Min) (V)	2.3
$V_{IN}$ (Max) (V)	24
$V_{OUT}$ (V)	1.8, 3.3, 5.0, ADJ.
PSRR (dB)	60
Accuracy (%)	$\pm 2$
Load Regulation (Typ) (mV)	15 (3.3V)
Line Regulation (Typ) (mV)	10 (3.3V)
On/Off Pin	Yes
Error Flag	No

**Applications**

- Battery-powered Equipment
- Laptop, Palmtops, Notebook Computers
- Portable Information Appliances

**Additional Available Materials**

- Samples
- Preliminary Datasheet
- ESD Report

**WIDE INPUT VOLTAGE RANGE, 150mA ULDO REGULATOR****AP2204****Pin Configuration****Ordering Information Example**

Package	Temperature Range	Part Number	Marking ID	Packing Type
		Green	Green	
SOT-23-5	-40 to 125°C	AP2204K-ADJTRG1	GAF	Tape & Reel
		AP2204K-1.8TRG1	GAG	Tape & Reel
		AP2204K-3.3TRG1	GAH	Tape & Reel
		AP2204K-5.0TRG1	GAI	Tape & Reel
SOT-89	-40 to 125°C	AP2204R-1.8TRG1	G31C	Tape & Reel
		AP2204R-3.3TRG1	G31D	Tape & Reel
		AP2204R-5.0TRG1	G31E	Tape & Reel

Detailed information please refer to the relevant datasheet.

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