

AT5231

300mA Low Dropout Voltage Linear Regulators



Immense Advance Tech.

FEATURES

- V_{IN} Range : 2.0V to 6.0V
- Low Dropout Voltage : 0.22V (Typ)
($V_{OUT}=3.3V, I_{OUT}=150mA$)
- Output Current : 300mA
- High Ripple Rejection: 65dB (Typ) ($f=10kHz$)
- Excellent Line Regulation : 0.01% / V(Typ)
- Output Voltage Accuracy : $\pm 2.0\%$
- Low Supply Current : 70 μA (Typ)
- Standby Mode : 0.01 μA (Typ)
- Over Current Protection
- Fixed Output Voltage : 1.0V~4.8V
- Ceramic capacitors are recommend to be used with this IC : $C_{IN}=C_{OUT}=1\mu F$
- Built-In Over Shoot Protection Circuit
- Ultra Fast Transient Response

DESCRIPTION

The AT5231 Series are CMOS-based voltage regulator ICs with high output voltage accuracy, low supply current, low ON-resistance. Each of these ICs consists of a voltage reference unit, an error amplifier, resistor-net for voltage setting, a current limit circuit, and a chip enable circuit.

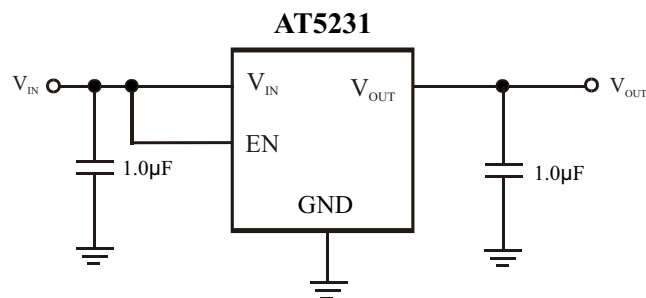
These ICs perform with low dropout voltage and a chip enable function(SOT-25 and SOT-353 packages only). The line transient response and load transient response of the AT5231 Series are excellent, thus these ICs are very suitable for the power supply for hand-held communication equipment.

AT5231 is available in the SOT-23, SOT-25, SOT-353 package and the SOT-89 package.

APPLICATION

- Power source for portable communication equipment.
- Power source for battery-powered equipment.

TYPICAL APPLICATION CIRCUITS



BLOCK DIAGRAM

