

High Speed Low Dropout 300mA Current Voltage Regulators

General Description

The AP1231 series are highly precise, low noise positive voltage LDO regulators manufactured using CMOS processes. The series achieves high ripple rejection and low dropout and consists of a standard voltage source, an error ampifier, current limiter and a phase compensation circuit plus a driver transistor. Output voltage is selectable in 100mV increments within a range of 1.5V to 5.0V. The series is also compatible with low ESR ceramic capacitors which give added output stability. This stability can be maintained even during load fluctuations due to the excellent transient response of the series.

The current limiter's feedback circuit also operates as a short protector. The CE function enables the output to be turned off, resulting in greatly reduced power consumption.

Features

Output Voltage Range: 1.5V to 5.0V

(selectable in 100mV steps)

Highly Accurate:

Dropout Voltage: 300mV @ 100mA (3.0V)

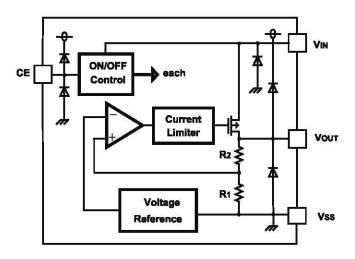
High Ripple Rejection: 70dB (10 kHz) 0 20µA (Typ.) 0 Low Power Consumption: . Maximum Output Current: 300mA

. Standby Current: less than $0.1\mu A$ Internal protector: current limiter and short protector Small packages: SOT-25 and other required

Applications

- Mobile phones
- Cordless phones
- Cameras, Video cameras
- Portable games
- Portable AV equipment 0
- . Reference voltage
- Battery powered equipment

Function Diagram



Pin Configurations

