

High Output Current LDO Regulator , High PSRR , Low Dropout, ME6207 Series

General Description

The ME6207 Series is a positive voltage regulator with a low dropout voltage, high output voltage accuracy, and low current consumption developed based on CMOS technology.

A built-in low on-resistance transistor provides a low dropout voltage and large output current, a built-in overcurrent protector prevents the load current from exceeding the current capacitance of the output transistor. An ON/OFF circuit ensures a long battery life. Compared with the voltage regulators using the conventional CMOS process, a larger variety of capacitors are available, including small ceramic capacitors.

Features

- Maximum Output Current: 800 mA
($V_{IN} \geq V_{OUT(T)} + 1.0V$)
- Dropout Voltage:
100mV@ $I_{OUT} = 300mA, V_{OUT} = 5.0V$
- Operating Voltage Range: 2V~6.5V
- Highly Accuracy: $\pm 1\%$
- Low Current Consumption:
During Operation: 82uA (TYP.)
During Shutdown: 0.1uA (TYP.)
- High Ripple Rejection: 65dB@1KHz (ME6207C50)
- Line Regulation: 0.05% (TYP.)

Typical Application

- Power supply for DVD and CD-ROM drives
- Power supply for personal communication device
- Power supply for battery-powered devices
- Power supply for note PCs

Package

- 3-pin SOT89-3
- 5-pin SOT89-5, SOT23-5, TO252-5

Typical Application Circuit

