

High Speed LDO Regulators, High PSRR, Low noise, ME6211 Series

General Description

The ME6211 series are highly accurate, low noise, CMOS LDO Voltage Regulators. Offering low output noise, high ripple rejection ratio, low dropout and very fast turn-on times, the ME6211 series is ideal for today's cutting edge mobile phone. Internally the ME6211 includes a reference voltage source, error amplifiers, driver transistors, current limiters and phase compensators. The ME6211's current limiters' foldback circuit also operates as a short protect for the output current limiter and the output pin. The ME6211 series is also fully compatible with low ESR ceramic capacitors, reducing cost and improving output stability. This high level of output stability is maintained even during frequent load fluctuations, due to the excellent transient response performance and high PSRR achieved across a broad range of frequencies. The CE function allows the output of regulator to be turned off, resulting in greatly reduced power consumption.

Package

- 3-pin SOT89-3, SOT23-3
- 4-pin SOT343R, FBP1*1-4L
- 5-pin SOT23-5, SOT353
- 6-pin DFN2*2-6L

Features

- Maximum Output Current: 500mA
($V_{IN}=4.3V, V_{OUT}=3.3V$)
- Dropout Voltage: 100mV@ $I_{OUT}=100mA$
- Operating Voltage Range: 2V~6.0V
- Highly Accuracy: $\pm 1\%$
- Low Power Consumption: 30uA (TYP.)
- Standby Current: 0.1uA (TPY.)
- High Ripple Rejection: 70dB@1KHz
(ME6211C33)
- Low output noise: 50uVrms
- Line Regulation: 0.05% (TYP.)

Typical Application

- Mobile phones
- Cordless phones, radio communication equipment
- Portable games
- Cameras, Video cameras
- Reference voltage sources
- Battery powered equipment