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.

Features

- Maximum Output Current: 500mA (V_{IN}＝4.3V,V_{OUT}＝3.3V)
- Dropout Voltage: 100mV@ I_{OUT} =100mA
- Operating Voltage Range: 1.2V～6.0V
- Highly Accuracy: ±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

Package

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

Typical Application Circuit

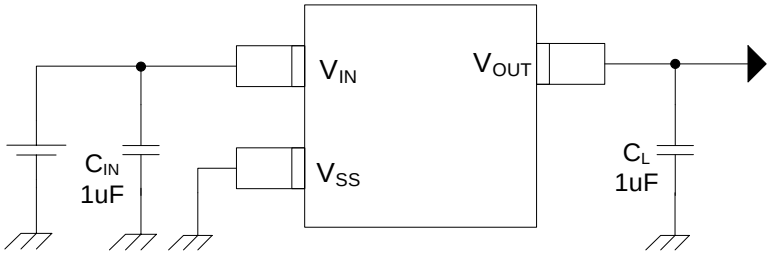


Fig1. ME6211A series

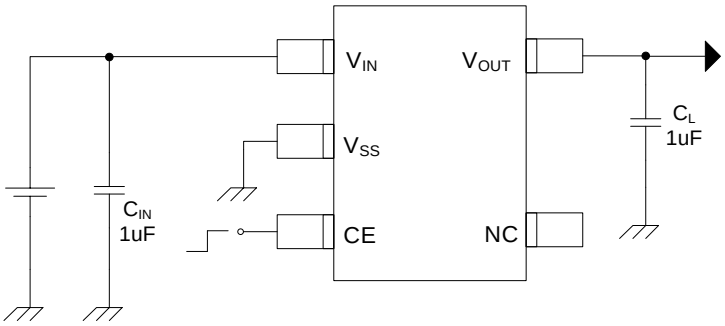


Fig2. ME6211C series

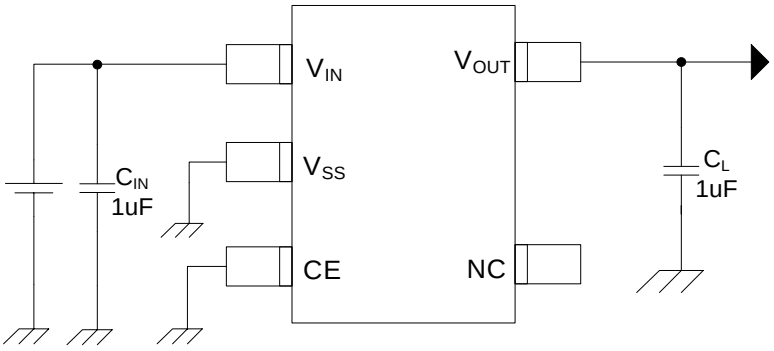
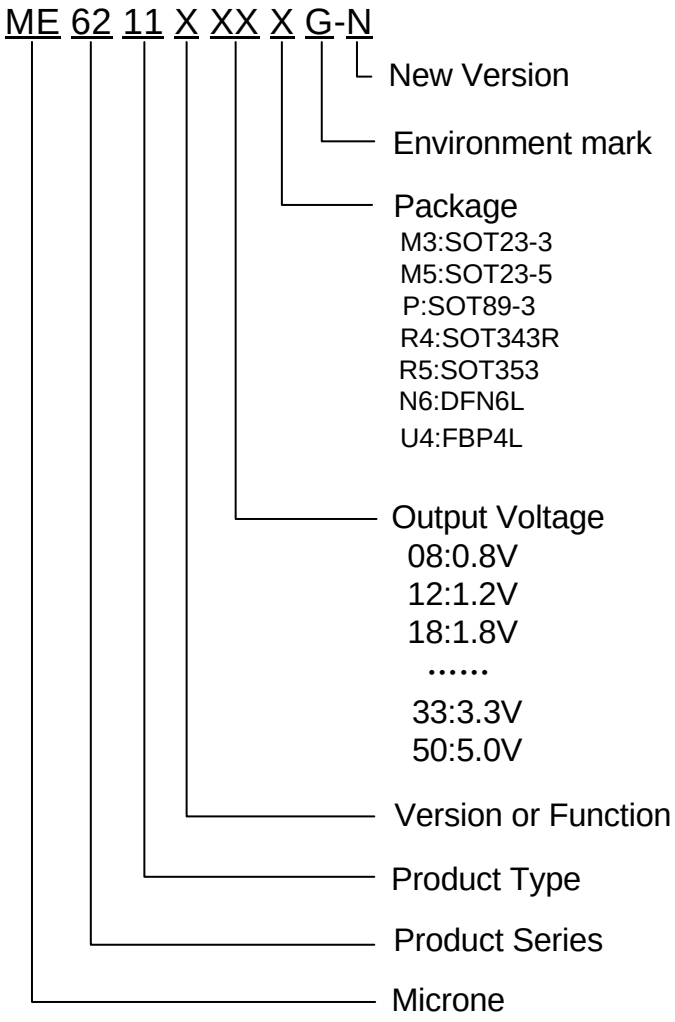


Fig3. ME6211H series

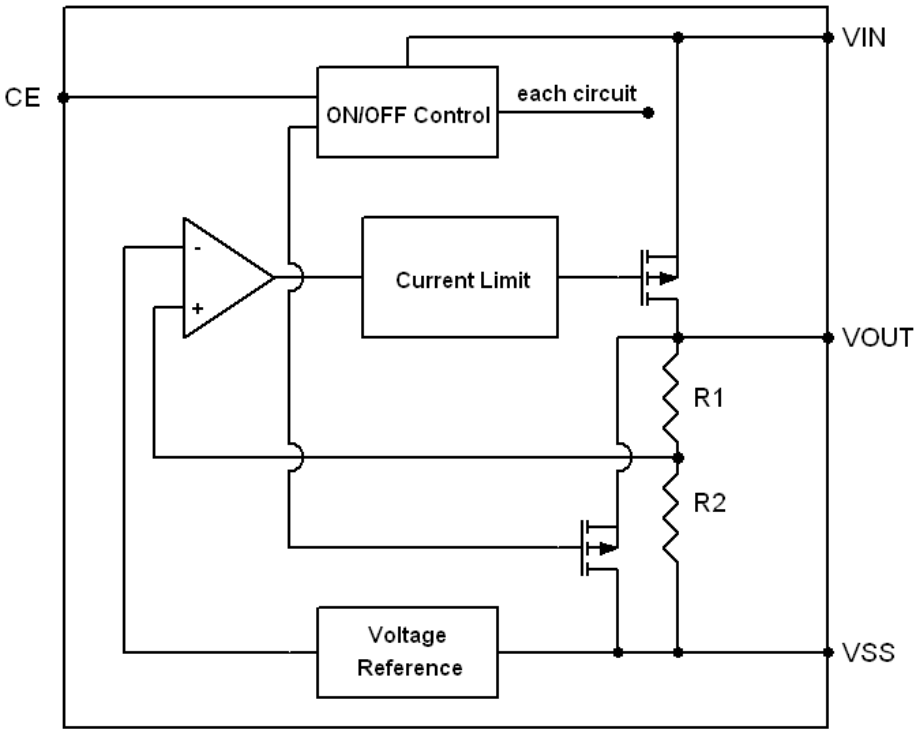
Selection Guide



product series	product function	Output voltage	Package
ME6211A12PG-N	Enable the internal connection of high	1.2V	SOT89-3
ME6211C33M5G-N	Enable can be set	3.3V	SOT23-5
ME6211C33R4G-N	Enable can be set	3.3V	SOT343R
ME6211C33U4AG-N	Enable can be set	3.3V	FBP1*1-4 (0.37)
ME6211C25N6AG-N	Enable can be set	2.5V	DFN2*2-6(0.75)
ME6211H15M5G-N	Enable connected to a low	1.5V	SOT23-5

NOTE: At present ,there are thirteen kinds of voltage value：
0.8V、1.0、1.2V、1.5V、1.8V、2.1V、2.5V、2.7V、2.8V、2.9V、3.0V、3.3V、5.0V。
If you need other voltage and package, please contact our sales staff。

Block Diagram



Absolute Maximum Ratings

Parameter		Symbol	Ratings	Units
Input Voltage		V_{IN}	6.5	V
Output Current		I_{OUT}	600	mA
Output Voltage		V_{OUT}	Vss-0.3 ~ V_{IN} +0.3	V
CE Pin Voltage		V_{CE}	Vss-0.3 ~ V_{IN} +0.3	V
Power Dissipation	SOT23-3	P_D	300	mW
	SOT353		250	
	DFN2*2-6		300	
	SOT89-3		500	
	SOT343R		250	
	FBP1*1-4		250	
Thermal resistance (Junction to air)	SOT23-3	θ_{JA}	410	℃/W
	SOT353		500	
	DFN2*2-6		410	
	SOT89-3		250	
	SOT343R		500	
	FBP1*1-4		500	
Operating Temperature Range		T_{OPR}	-40 ~ +85	℃
Storage Temperature Range		T_{STG}	-55 ~ +150	℃
Maximum junction temperature		T_J	-40 ~ +150	℃