

Low power consumption, Low ESR Cap. Compatible

General Description

ME6216 series are highly precise, low power consumption, positive voltage regulators manufactured using CMOS technologies. The series provides large currents with a significantly small dropout voltage.

The series is compatible with low ESR ceramic capacitors. The current limiter's foldback circuit also operates as a short protect for the output current limiter and the output pin.

Features

- Output voltage range: 1.0V~5.0V
- Input voltage: up to 6 V
- Dropout Voltage: 110mV@ $I_{OUT}=100mA$
240mV@ $I_{OUT}=200mA$
- Highly Accuracy: $\pm 1\%$
- Low power consumption: 6uA(TYP.)
- Large output current: 300mA ($V_{IN}=4.3V, V_{OUT}=3.3V$)
- Excellent Input Stability
- Be available to regulator and reference voltage

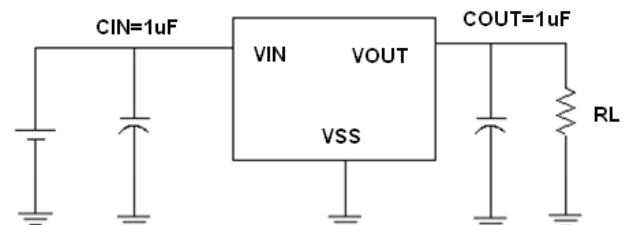
Typical Application

- Communication tools
- Mobile phones
- Portable games
- Portable AV systems
- Cameras, Video systems
- Reference voltage sources

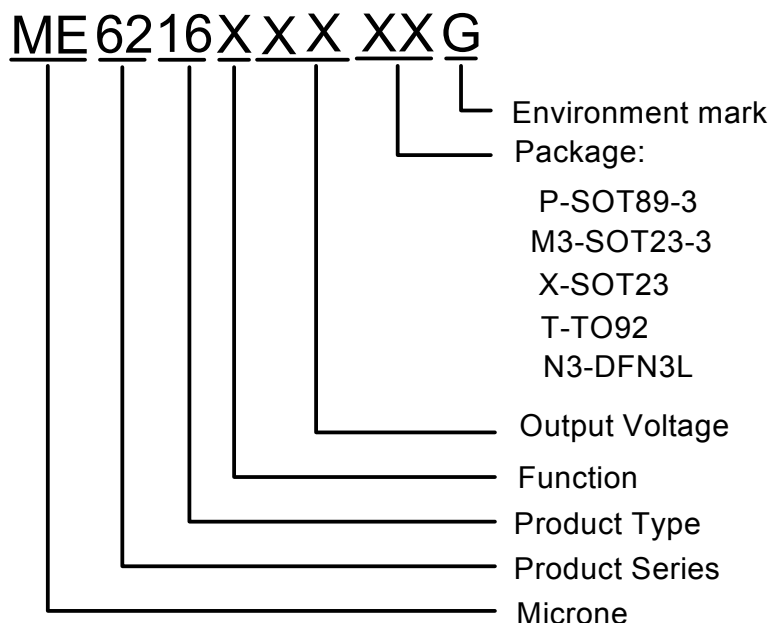
Package

- 3-pin SOT89-3, SOT23-3, SOT23, TO92, DFN3L

Typical Application Circuit



Selection Guide



product series	product description
ME6216A10PG	$V_{OUT} = 1.0V$; Package: SOT89-3
ME6216A28M3G	$V_{OUT} = 2.8V$; Package: SOT23-3
ME6216A30XG	$V_{OUT} = 3.0V$; Package: SOT23
ME6216A18TG	$V_{OUT} = 1.8V$; Package: TO92
ME6216A18N3AG	$V_{OUT} = 1.8V$; Package: DFN3L(2.0*2.0*0.55-1.30)

NOTE:

- At present ,there are five kinds of voltage value: 1.0V、1.2V、1.3V、1.5V、1.8V、2.0V、2.5V、2.7V、2.8V、3.0V、3.3V、3.6V、5.0V。
- If you need other voltage and package, please contact our sales staff。

ME6216(Vout=3.3V)

($V_{IN}=V_{OUT}+1V$, $C_{IN}=C_{OUT}=1\mu F$, $T_a=25^{\circ}C$ Unless otherwise stated)

PARAMETER	SYMBOL	CONDITION	MIX	TYP	MAX	UNIT
Output Voltage	$V_{OUT}(E)$ (Note 2)	$I_{OUT}=10mA$, $V_{IN}=V_{OUT}+1V$	X 0.99	$V_{OUT}(T)$ (Note 1)	X 1.01	V
Input Voltage	V_{IN}				6	V
Maximum Output Current	$I_{OUT} (max)$	$V_{IN}= V_{OUT} +1V$		300	350	mA
Load Regulation	ΔV_{OUT}	$V_{IN}= V_{OUT} +1V$ $1mA \leq I_{OUT} \leq 100mA$		14	18	mV
Dropout Voltage (Note 3)	V_{dif1}	$I_{OUT} =100mA$		100	120	mV
	V_{dif2}	$I_{OUT} =200mA$		210	260	mV
Supply Current	I_{SS}	$V_{IN}= V_{OUT} +1V$		4	8	μA
Line Regulations	$\frac{\Delta V_{OUT}}{\Delta V_{IN} \cdot V_{OUT}}$	$I_{OUT} =10mA$ $V_{out}+1V \leq V_{IN} \leq 6V$		0.07	0.2	%/V
Power Supply Ripple Rejection Ratio	PSRR	$V_{in}= [V_{OUT} +1]V$ $+1Vp-pAC$ $I_{OUT} =10mA, f=1kHz$		65		dB
Short Circuit Current	I_{short}	$V_{in}= V_{OUT} (T)+1V$ $V_{OUT} =VSS$		50	70	mA
Over Current Protection	I_{limit}	$V_{IN}= V_{OUT} +1V$		380	420	mA

可提供技术支持 完整规格书 欢迎试样

V: runzexin-18

ME6216(Vout=5.0V)

($V_{IN}=V_{OUT}+1V$, $C_{IN}=C_{OUT}=1\mu F$, $T_a=25^{\circ}C$ Unless otherwise stated)

PARAMETER	SYMBOL	CONDITION	MIX	TYP	MAX	UNIT
Output Voltage	$V_{OUT}(E)$ (Note 2)	$I_{OUT}=10mA$, $V_{IN}=V_{OUT}+1V$	X 0.99	$V_{OUT}(T)$ (Note 1)	X 1.01	V
Input Voltage	V_{IN}				6	V
Maximum Output Current	$I_{OUT} (max)$	$V_{IN}= V_{OUT} +1V$		500	550	mA
Load Regulation	ΔV_{OUT}	$V_{IN}= V_{OUT} +1V$ $1mA \leq I_{OUT} \leq 100mA$		8	14	mV
Dropout Voltage (Note 3)	V_{dif1}	$I_{OUT} =100mA$		90	110	mV
	V_{dif2}	$I_{OUT} =200mA$		170	200	mV
Supply Current	I_{SS}	$V_{IN}= V_{OUT} +1V$		7	8	μA
Power Supply Ripple Rejection Ratio	PSRR	$V_{in}= [V_{OUT} +1]V$ $+1Vp-pAC$ $I_{OUT} =10mA, f=1kHz$		65		dB
Short Circuit Current	I_{short}	$V_{in}= V_{OUT} (T)+1V$ $V_{OUT} =VSS$		50	70	mA
Over Current Protection	I_{limit}	$V_{IN}= V_{OUT} +1V$		550	600	mA