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

General Description

The ME6217 Series is a positive voltage regulator with a low dropout voltage,high output voltage accuracy,and low crrent 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.

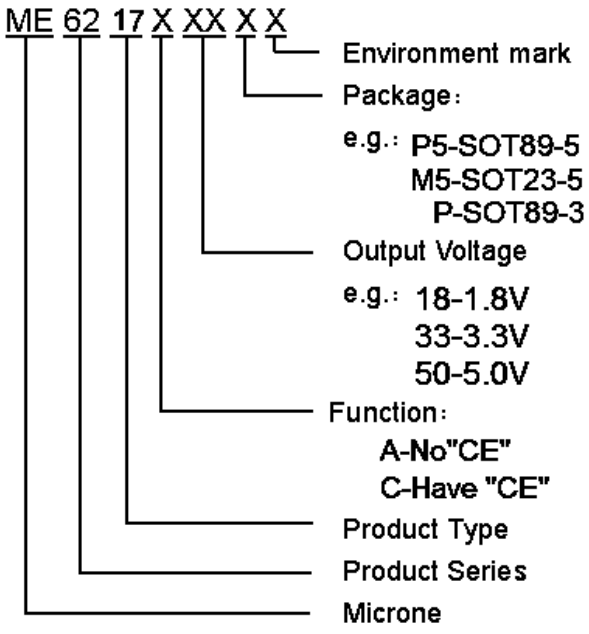
Features

- Maximum Output Current: 800 mA
  （V_{IN}≥V_{OUT}(T)+1.0V）
- Dropout Voltage:
  100mV@ I_{OUT} =300mA, V_{OUT} =5.0V
- Operating Voltage Range: 2V～6.5V
- Output Voltage：1.5V~5.6V ，selectable in 0.1V steps
- Highly Accuracy: ±1％
- Low Current Consumption:
  During Operation: 100uA（TYP.）
  During Shutdown:0.1uA（TYP.）
- High Ripple Rejection: 65dB@1KHz (ME6217C50)
- Line Regulation: 0.05％（TYP.）
- Thermal Shutdown Protection：160℃
- Small Packages: SOT-89-5,SOT23-5，SOT89-3

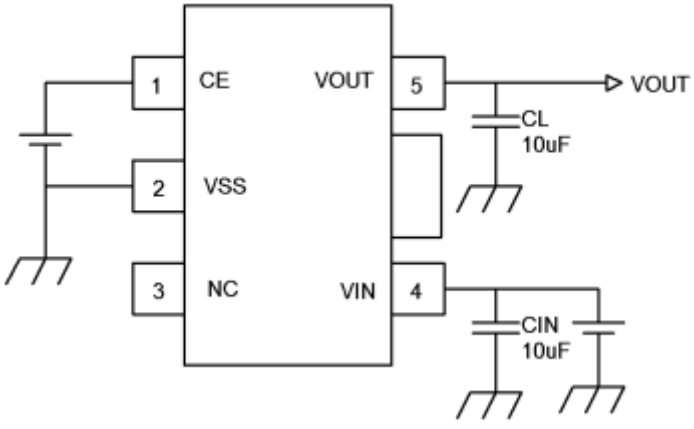
Typical Application

- 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

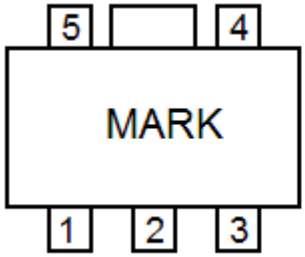
Selection Guide



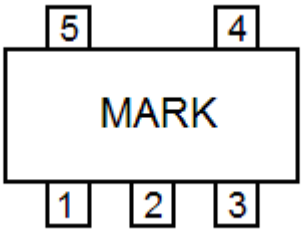
Typical Application Circuit



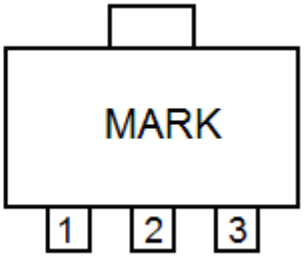
Pin Configuration



SOT-89-5



SOT23-5



SOT89-3

Pin Assignment

ME6217AXX

Pin Number	Pin Name	Functions
SOT89-3		
1	V_{SS}	Ground
2	V_{IN}	Input Voltage
3	V_{OUT}	Output Voltage

ME6217CXX

Pin Number		Pin Name	Functions
SOT89-5	SOT23-5		
1	3	CE	ON / OFF Control
2	2	V_{SS}	Ground
3	4	NC	No Connect
4	1	V_{IN}	Input Voltage
5	5	V_{OUT}	Output Voltage

Absolute Maximum Ratings

Parameter		Symbol	Ratings	Units
Input Voltage		V_{IN}	7.0	V
Output Current		I_{OUT}	800	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	SOT-89-5	P_D	1000	mW
Operating Temperature Range		T_{OPR}	－40～＋85	℃
Storage Temperature Range		T_{STG}	－40～＋125	℃

Block Diagram