



# ACE527A

## Low Dropout Voltage 300mA CMOS LDO Regulator

### Description

The ACE527A Series are a group of positive voltage regulators manufactured by CMOS technologies with high ripple rejection, extremely low power consumption and low dropout voltage, which provide large output currents even when the difference of the input-output voltage is small. Thus the ACE527A series are very suitable for the battery-powered equipments, such as portable/palm computers, portable consumer equipments, industry equipments and so on, which want to prolong the using life of the battery.

### Features

- Output Current: 300mA
- Output Voltage Range: 0.9V ~5.0V,  
(selectable in 0.1V steps)
- High Accuracy:  $\pm 2\%$  (Typ.)
- Low Dropout Voltage: 150mV@100mA (3.0V Typ.)
- Excellent Line Regulation: 0.1%/V
- Built-in Current Limiter
- Built-in Short Circuit Protection
- Static safety: 2KV@HBM  
TC: 100ppm/°C
- Ceramic Capacitor Compatible

### Application

- Battery powered systems
- Portable instrumentations
- Radio control systems
- Portable consumer equipments
- Portable/Palm computers
- Reference Voltage Sources



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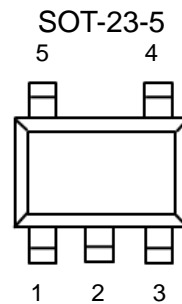
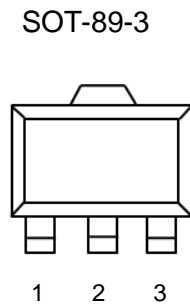
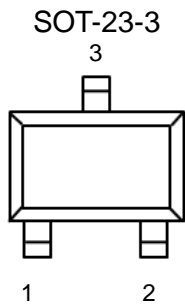
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### Absolute Maximum Ratings

Unless otherwise specified, Ta=25°C

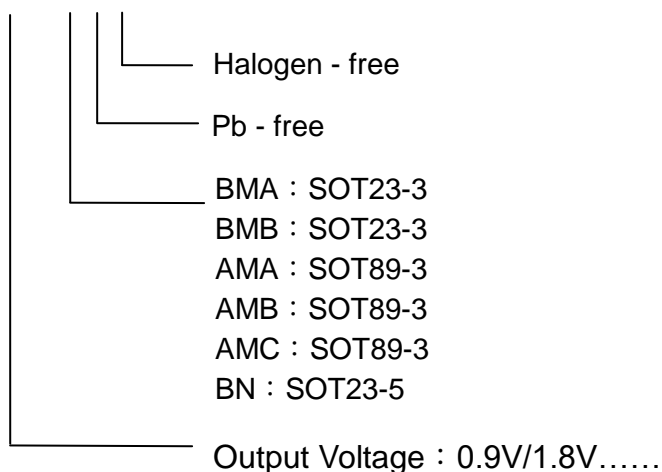
Parameter	Symbol	Max	Unit	
Input Voltage	$V_{IN}$	$V_{SS}-0.3 \sim V_{SS}+8$	V	
Output Current	$I_{OUT}$	600	mA	
Output Voltage	$V_{OUT}$	$V_{SS}-0.3 \sim V_{IN}+0.3$	V	
Power Dissipation	SOT-23-3	Pd	250	mW
	SOT-23-5	Pd	250	mW
	SOT-89-3	Pd	500	mW
	TO-92	Pd	500	mW
Operating Temperature	$T_{opr}$	-40~+85	°C	
Storage Temperature	$T_{stg}$	-40~+125	°C	
Soldering Temperature & Time	$T_{solder}$	260°C, 10s		

### Packaging Type



### Ordering information

ACE527A XX XX + H





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### Notes

ACE does not assume any responsibility for use as critical components in life support devices or systems without the express written approval of the president and general counsel of ACE Electronics Co., LTD. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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