



ACE5016A

Ultra Low Current Consumption 300mA CMOS Voltage Regulator

Description

The ACE5016A series are a group of positive voltage regulators manufactured by CMOS technologies with ultra low power consumption and low dropout voltage, which can prolong battery life in portable electronics. The ACE5016A series work with low-ESR ceramic capacitors, reducing the amount of board space necessary for power applications. The series are very suitable for the battery-powered equipments, such as RF applications and other systems requiring a quiet voltage source.

Features

- Low Quiescent Current: 0.8 μ A
- Operating Voltage: 1.8V~7V
- Output Current: 300mA
- Low Dropout Voltage: 300mV@100mA
- Excellent Line and Load Transient Response
- Output Voltage: 0.9~5.0V
- High Accuracy: $\pm 2\%$ (Typ.)
- Built-in Current Limiter, Short-Circuit Protection
- Ceramic Capacitor Compatible

Application

- Portable consumer equipments
- Laptop, Palmtops and PDA
- Digital Still and Video Cameras
- MP3, MP4 Player
- Radio control systems
- Battery-Powered Equipment

Absolute Maximum Ratings

 Unless otherwise specified, $T_A=25^{\circ}\text{C}$

Parameter	Symbol	Max	Unit
Input Voltage	V_{IN}	$V_{SS} - 0.3 \sim V_{SS} + 8$	V
Output Current	I_{OUT}	500	mA
Output Voltage	V_{OUT}	$V_{SS} - 0.3 \sim V_{IN} + 0.3$	V
Power Dissipation	SOT-23-3	250	mW
	SOT-23-5	250	
	SOT-89-3	500	
	DFN1*1-4	400	
Operating Temperature	T_{opr}	-40~85	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-40~125	$^{\circ}\text{C}$
Soldering Temperature & Time	T_{solder}	260 $^{\circ}\text{C}$, 10s	

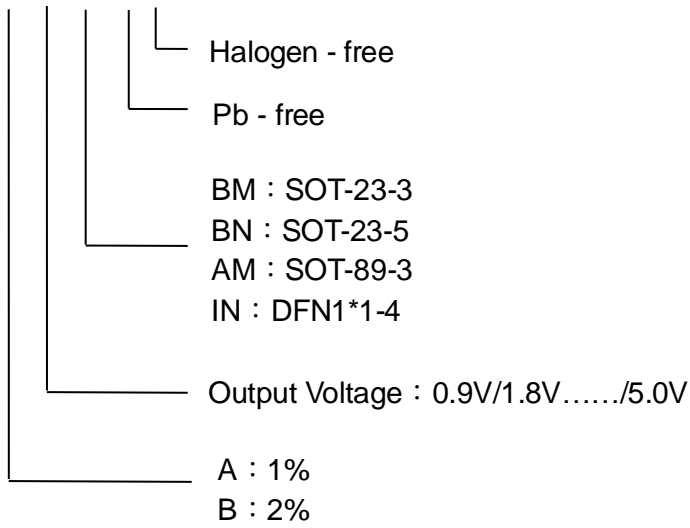


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Ordering information

ACE5016A X 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 Technology 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.

ACE Technology Co., LTD.
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