



ACE5013T

300mA, Low Consumption Low Dropout, CMOS LDO

Description

The ACE5013T series are low dropout linear regulators and optimized to provide a high performance solution for battery power system to delivery low quiescent current. The device offer a new level of cost effective performance in cellular phones, laptop and notebook computers, and other portable devices.

ACE5013T can provide output value in the range of 1.0V~3.6V by every 0.1V step.

The ACE5013T series are designed to make use of low cost ceramic capacitors which ensure the stability of the output current, and enhance the efficiency in order to prolong the battery life of those portable devices.

Features

- Input voltage: 2.5V~7V
- Output range: 1.0V~3.6V (customized by every 0.1V step)
- Output current: 300mA @ $V_{IN}-V_{OUT}=1V$
- Dropout voltage: 190mV @ $I_{OUT}=100mA$
- Quiescent current : 1.5 μ A Typ.
- PSRR: 50dB @ 100Hz
- Recommend capacitor: 1 μ F

Application

- Reference voltage source
- Toys
- Bluetooth, wireless handsets
- Low Consumption Device
- Others portable electronics device

Absolute Maximum Ratings ^(Note)

Symbol	Items	Value	Unit
V_{IN}	Input Voltage	-0.3~8	V
I_{OUT}	Output Current	370	mA
P_{DMAX}	Power Dissipation	SOT-23-3 0.25	W
$R_{\theta JA}$	Thermal Resistance	SOT-23-3 220	$^{\circ}C/W$
T_J	Junction Temperature	-40~125	$^{\circ}C$
T_A	Ambient Temperature	-40~85	$^{\circ}C$
T_{STG}	Storage Temperature	-55~150	$^{\circ}C$
T_{SOLDER}	Package Lead Soldering Temperature (10s)	260	$^{\circ}C$

Note: Exceed these limits to damage to the device. Exposure to absolute maximum rating conditions may affect device reliability.

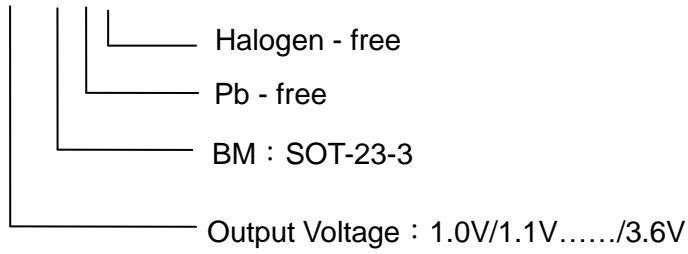


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Ordering information

ACE5013T 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.

ACE Technology Co., LTD.
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