



# ACE51665P

## 500mA, High PSRR, High Speed, Low Dropout CMOS LDO

### Description

The ACE51665P is a high accuracy, high speed, low dropout CMOS Linear regulator with high power supply ripple rejection and fast discharge function. The device offers a new level of cost-effective performance in cellular phones, surveillance system, Bluetooth, wireless and other portable electronic devices. For the fixed voltage version ACE51665P can provide product selections of output value in the range of 0.8V to 3.6V by every 0.1V step. For the adjustable voltage version, the output voltage range is 0.6V to 5.0V. Other features include enable function, shutdown mode output discharge, current limit, and thermal shutdown protection. The ACE51665P regulators are available in standard SOT-23-5 and DFN1\*1-4 packages. Standard products are Pb-free and Halogen-free.

### Features

- Input Voltage: 1.6V~6.5V
- Adjustable Output Voltage from 0.6V to 5.0V
- Feedback Voltage: 0.6V
- Fixed Output Voltage from 0.8V to 3.6V (Customized by every 0.1V step)
- Maximum Output Current: 500mA @  $V_{IN}-V_{OUT}=0.5V$
- PSRR: 70dB @1KHz,  $V_{OUT}=1.8V$
- Dropout Voltage: 145mV @  $V_{OUT}=3.3V$ ,  $I_{OUT}=300mA$
- Quiescent Current: 50 $\mu$ A Typ.
- Shut-down Current: < 1 $\mu$ A
- Recommend Input and Output Capacitor: 1 $\mu$ F

### Applications

- Cellphones
- Bluetooth and wireless handsets
- Other portable electronic devices

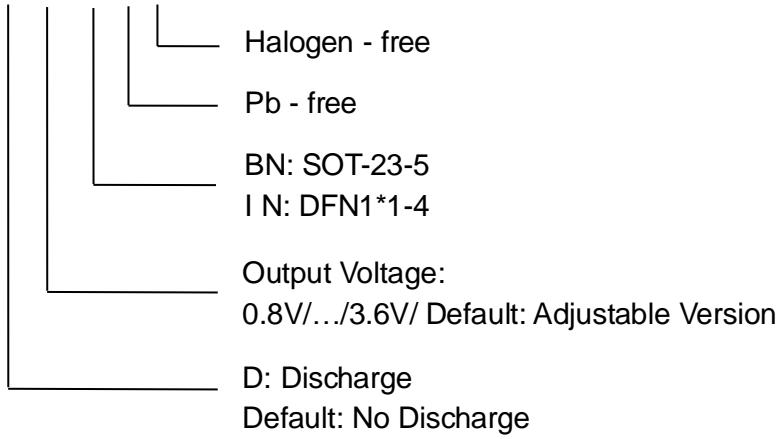


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## Ordering Information

ACE51665P 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.

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