



# ACE506C

## 300mA Low Consumption Linear Regulator

### Description

ACE506C series are a group of positive voltage output, high precise and high PSRR and low power consumption voltage regulator. Voltages are selectable in 100mV steps within a range of 1.2V to 3.6V. It also can be customized on command.

ACE506C series have excellent load and line transient response and good temperature characteristics, which can assure the stability of chip and power system. And it uses trimming technique to guarantee output voltage accuracy within  $\pm 2\%$ .

### Features

- Low Quiescent Current: 1uA at 5V
- 60dB PSRR at 100Hz
- Low Output Noise: 44uV<sub>RMS</sub>
- Low Dropout: 280mV at 150mA load
- Low Temperature Coefficient:  $\pm 100\text{ppm}/^\circ\text{C}$
- Excellent Line Regulation: 0.05%/V
- Highly Accurate:  $\pm 2\%$

### Application

- Reference Voltage Source
- Battery Powered Equipment
- Hand-Hold Equipment
- Wireless LAN
- GPS Receivers

### Absolute Maximum Ratings

| Parameter                           |                     | Value         |
|-------------------------------------|---------------------|---------------|
| Max Input Voltage                   |                     | 7V            |
| Operating Junction Temperature (TJ) |                     | 125°C         |
| Ambient Temperature (TA)            |                     | -40°C ~85°C   |
| Power Dissipation                   | TSOT-23-3, SOT-23-5 | 250mW         |
|                                     | SOT-89-3            | 500mW         |
| Storage Temperature (TS)            |                     | -40°C~150°C   |
| Lead Temperature & Time             |                     | 260°C, 10 Sec |

Note: Exceed these limits to damage to the device.

Exposure to absolute maximum rating conditions may affect device reliability.

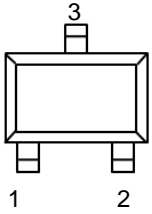


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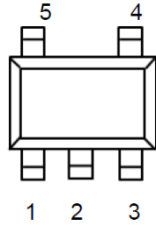
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### Packaging Type

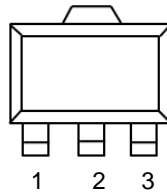
TSOT-23-3



SOT-23-5

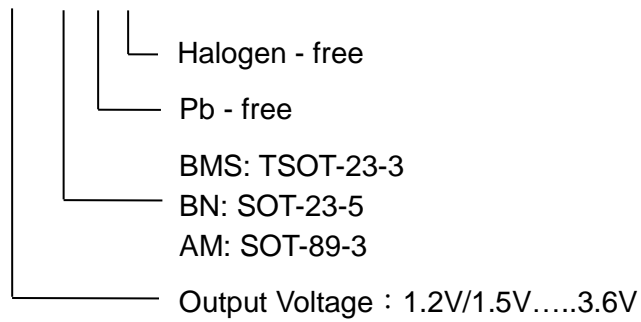


SOT-89-3



### Ordering information

ACE506C 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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