



# ACE51117C

## 800mA Bipolar Linear Regulator

### Description

ACE51117C is a series of low dropout three-terminal regulators with a dropout of 1.3V at 800mA load current. ACE51117C features a low standby current 2mA.

Other than a fixed version ( $V_{out} = 1.2V, 1.8V, 2.5V, 3.3V$  and  $5V$ ), ACE51117C has an adjustable version, which can provide an output voltage from 1.25 to 5V with only two external resistors.

ACE51117C offers thermal shut down and current limit functions, to assure stability of chip and power system. Trimming technique is used to guarantee output voltage accuracy within  $\pm 2\%$ . Other output voltage accuracy such as  $\pm 1\%$  can be customized on demand.

ACE51117C is available in SOT89-3 power packages.

### Features

- Other than a fixed version and an adjustable version, output value can be customized on demand.
- Maximum output current is 800mA
- Range of operation input voltage: 12V
- Standby current: 2mA (typ.)
- Line regulation: 0.1%/V (typ.)
- Load regulation: 10mV (typ.)
- Environment Temperature:  $-40^{\circ}C \sim 85^{\circ}C$
- Compatible with tantalum capacitor, electrolytic capacitor and MLCC.

### Application

- Power Management for Computer Mother Board, Graphic Card
- LCD Monitor and LCD TV
- DVD Decode Board
- ADSL Modem
- Post Regulators for Switching Supplies

### Absolute Maximum Ratings

Parameter		Value
Max Input Voltage		15V <sup>(1)</sup>
Max Operating Junction Temperature (Tj)		150°C
Ambient Temperature (Ta)		$-40^{\circ}C - 85^{\circ}C$
Power Dissipation	SOT89-3	500mW
Storage Temperature (Ts)		$-40^{\circ}C - 150^{\circ}C$
Lead Temperature & Time		260°C, 10S

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



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### Recommended Work Conditions

Parameter	Value
Input Voltage Range	Max. 12V
Operating Junction Temperature (Tj)	125°C



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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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