



ACE1117P

1A Bipolar Linear Regulator

Description

ACE1117P is a series of low dropout three-terminal regulators with a dropout of 1.3V at 1A load current. ACE1117P features a very low standby current 2mA compared to 5mA of competitor. Other than a fixed version, $V_{out} = 1.2V, 1.5V, 1.8V, 2.5V, 2.85V, 3.3V,$ and 5V, ACE1117P has an adjustable version, which can provide an output voltage from 1.25 to 12V with only two external resistors. ACE1117P offers thermal shut down function, to assure the stability of chip and power system. And it uses trimming technique to guarantee output voltage accuracy within 2%. ACE1117P is available in SOT-223 and TO-252 package.

Features

- Output current is 1A
- Range of operation input voltage: Max 15V
- Line regulation: 0.03%/V (typ.)
- Standby current: 2mA (typ.)
- Load regulation: 0.2%/A (typ.)
- Environment temperature: $-20^{\circ}C \sim 85^{\circ}C$

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

Items	Symbol	Value	Unit	
Max Input Voltage	V_{IN}	16	V	
Max Operating Junction Temperature	T_J	150	$^{\circ}C$	
Ambient Temperature	T_A	-20 to 85	$^{\circ}C$	
Storage Temperature	T_{STG}	-40 to 150	$^{\circ}C$	
Package Lead Soldering Temperature	T_{SOLDER}	260 $^{\circ}C$, 10s		
Power Dissipation	P_D	1.2	W	
Package Thermal Resistance	SOT-223	$R_{\theta JA}$	160	$^{\circ}C/W$
	TO-252		105	$^{\circ}C/W$

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

Items	Symbol	Value	Unit
Recommended Max Input Voltage	V_{IN}	15	V
Operating Junction Temperature	T_j	-20 to 125	°C

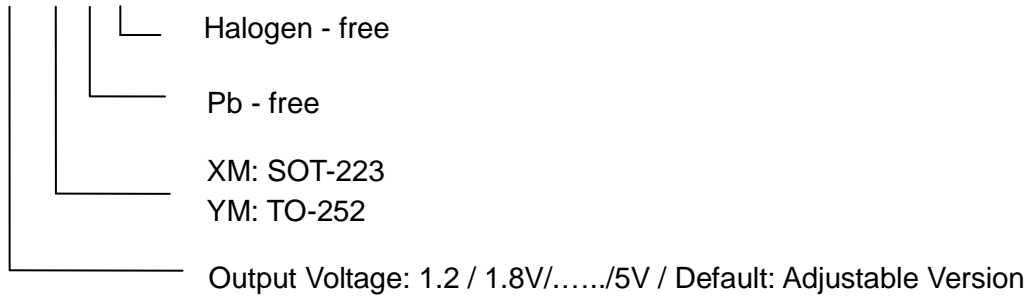


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Ordering information

ACE1117P 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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