



ACE505

Low noise 150mA LDO regulator

Description

ACE505 series is a group of positive voltage output, low power consumption, low dropout voltage regulator.

ACE505 can provide output value in the range of 1.2V~5.0V every 0.1V step. It also can be customized on command.

ACE505 includes high accuracy voltage reference, error amplifier, current limit circuit and output driver module.

ACE505 has 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 Power Consumption: 25 μ A (Typ.)
- Low output noise (27 μ V_{RMS})
- Standby Mode: 0.1 μ A
- Low dropout Voltage: 0.2V@100mA (Typ.)
- High Ripple Rejection: 65dB@1kHz (Typ.)
- Low Temperature Coefficient: ± 100 ppm/ $^{\circ}$ C
- Excellent Line regulation: 0.05%/V
- Build-in chip enable circuit
- Output Voltage Range: 1.2V~5.0V (customized on command every 0.1V step)
- Highly Accurate: $\pm 2\%$ ($\pm 1\%$ customized)
- Output Current Limit

Application

- Power source for cellular phones and various kind of PCSs
- Battery Powered equipment
- Power Management of MP3, PDA, DSC, Mouse, PS2 Games
- Reference Voltage Source
- Regulation after Switching Power



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Absolute Maximum Ratings

Parameter	Symbol	Max	Unit
Input Voltage		10	V
Output Current		200	mA
Power Dissipation	SOT-23-5	200	mW
	SC-70-5	200	
Operating Junction temperature	T _J	125	°C
Storage temperature	T _s	- 45 to 150	°C
Lead Temperature and Time		260°C, 10S	

Recommended Work Conditions

Item	Min	Max	Unit
Input Voltage Range		8	V
Ambient Temperature	-40	85	°C

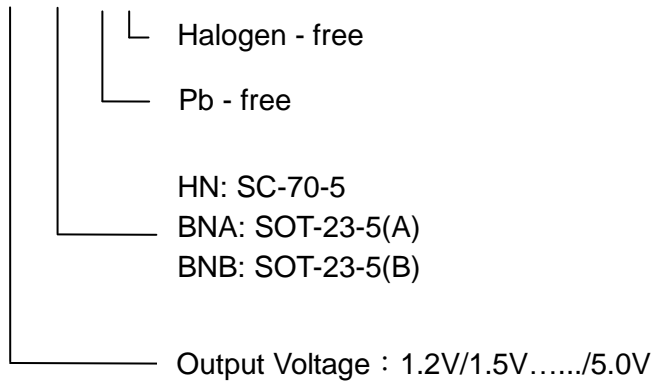


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Ordering information

ACE505 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 sued 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.