



ACE306A

Low Voltage Detector with Built-in Delay Circuit

Description

The ACE306A Series is a series of high-precision voltage detectors with a built-in delay time generator of fixed time. developed using CMOS process.

The detection voltage is fixed internally, with an accuracy of $\pm 2.0\%$. Internal oscillator and counter timer can delay the release signal without external parts, delay times 210 ms Two output forms, N-CH open-drain and CMOS output are available.

Features

- High-precision detection Voltage : $\pm 2\%$
- Detection Voltage : 1.5V~6.0V (10mV steps)
- Operating Voltage range : 0.95V~7.0V
- Ultra-low current consumption : $0.9\mu\text{A}@3.5\text{V}(\text{Typ.})$
- Two Output forms: CMOS and N-channel open-drain (Active Low)
- Hysteresis characteristics: $-V_{\text{DET}}*5\%(\text{Typ.})$
- Delay time:210 ms(Typ.)

Application

- Memory battery back-up circuits
- Power-on reset circuits
- Power failure detection
- Power monitor for portable equipment such as notebook computers, digital cameras, PDA, and cellular phones
- Constant voltage power monitors for cameras, video equipment and communication devices
- Power monitor for microcomputers and reset for CPUs

Absolute Maximum Rating

($T_a=25^\circ\text{C}$, unless otherwise specified)

Parameter		Max	Unit
Power supply voltage(VDD)		$V_{\text{SS}} - 0.3 \sim V_{\text{SS}} + 8$	V
Output voltage(VOUT)		$V_{\text{SS}} - 0.3 \sim V_{\text{SS}} + 8$	V
Power dissipation(PD)	250	250	mW
	500	500	mW
	500	500	mW
	250	250	mW
Operating ambient temperature(T_{opr})		$-40 \sim +85$	$^\circ\text{C}$
Storage temperature(T_{stg})		$-40 \sim +125$	$^\circ\text{C}$
Soldering Temperature & Time(T_{solder})		$260^\circ\text{C}, 10\text{s}$	



ACE306A

Low Voltage Detector with Built-in Delay Circuit

Ordering information

ACE306A X XXX XXX + H

Halogen -free

Pb -free

BMA: SOT-23-3A

BMB: SOT-23-3B

Detector Voltage:

090...0.9V / 100...1.0V / 263...2.63V / 300...3.0V /
465...4.65V.....600...6.0V (In 0.1V step)

Output type:

N: N-ch

C: CMOS



ACE306A

Low Voltage Detector with Built-in Delay Circuit

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.

ACE Technology Co., LTD.
<http://www.ace-ele.com/>