



ACE3018A

Ultra-Small High-Precision Voltage Detector

Description

The ACE3018A Series is a series of high-precision voltage detectors developed using CMOS process. The detection voltage is fixed internally, with an accuracy of 2.0%. Two output forms, NMOS open-drain and CMOS output, are available.

Features

- Ultra-low current consumption: 0.9 μ A@3.5V(Typ.)
- High-precision detection voltage: \pm 2.0%
- Operating voltage range:0.95 V~ 7.0V
- Hysteresis characteristics: $-V_{DET}\times 5\%$ (Typ.)
- Detection voltage: 1.5V ~ 6.0V(10mV step)
- Output forms:
NMOS open-drain output (Active Low)
CMOS output (Active Low)

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 Ratings

| Parameter | | Symbol | Ratings | Unit |
|-------------------------------|-------------------------|--------------|----------------------------|------|
| Power supply voltage | | V_{DD} | $V_{SS}-0.3 \sim V_{SS}+8$ | V |
| Output voltage | | V_{OUT} | $V_{SS}-0.3 \sim V_{SS}+8$ | V |
| Power dissipation | SOT-23-3 | PD | 400 | mW |
| | SOT-23-5 | | 400 | |
| | SOT-89-3 | | 600 | |
| | TO-92 | | 500 | |
| | SOT-343 (SC-82) | | 250 | |
| Operating ambient temperature | | T_{opr} | -40 ~85 | °C |
| Storage temperature | | T_{stg} | -40 ~125 | °C |
| Soldering Temperature & Time | | T_{solder} | 260°C, 10s | °C |
| ESD rating | Human Body Model -(HBM) | | 4 | KV |
| | Machine Model- (MM) | | 200 | V |

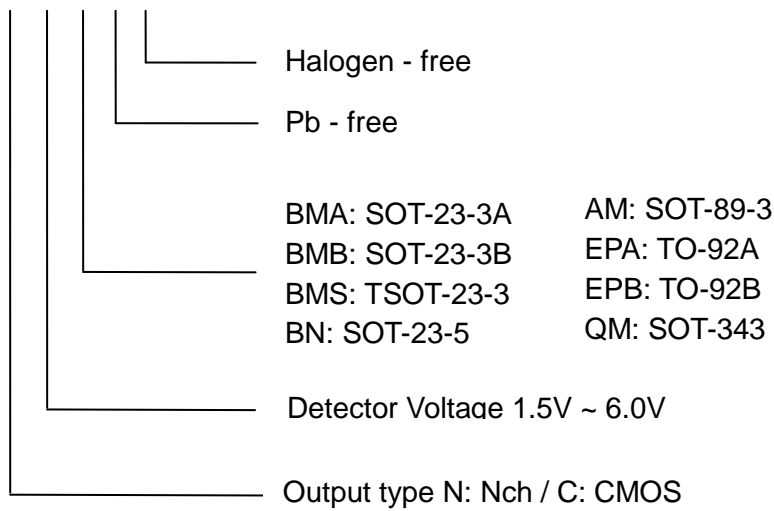


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Ordering Information

ACE3018A X 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 Electronics 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.