



# ACE30536X

## Voltage Monitor with Manual Reset

### Description

The ACE30536X is a general-purpose voltage detector which only consume about 5uA at 3.6V, which can be widely used in all electronic system to either monitor a battery voltage or generate a power-on reset signal. It can work under the voltage ranging from 1V to 6V. ACE30536X also provide a manual reset pin.

ACE30536X employs a low voltage reference, low offset comparator, timer and push-pull output stage. Its push-pull output is pushed high after input voltage is greater than the internal setting level for 240ms.

The ACE30536X is available in SOT-143 package.

### Features

- Wide operation range: 1 – 6V
- Voltage detecting level setting range: 2.3 – 5V
- Detection delay time: 240ms
- Reset pin output kept low when input voltage < 1V
- 4KV ESD
- SOT-143 package

### Application

- Battery voltage monitor
- Power-on reset
- Set-top-box
- Voltage level trigger
- Press button debouncing
- Portable devices



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### Absolute Maximum Ratings

Parameter	Value	
V <sub>IN</sub> <sup>(1)</sup>	-0.3V to 7V	
V <sub>RESET</sub> , MR <sup>(1)</sup>	-0.3V to V <sub>IN</sub> +0.3V	
Continuous Power Dissipation (T <sub>A</sub> = 25°C) <sup>(2)</sup>	0.3W	
Junction Temperature	-40°C to 125°C	
Lead Temperature	260°C	
Storage Temperature	-65°C to 150°C	
Thermal Resistance <sup>(3)</sup>	$\theta_{JA}$	280°C/W
	$\theta_{JC}$	90°C/W

#### Notes:

1. Exceeding these ratings may damage the device.
2. The maximum allowable power dissipation is a function of the maximum junction temperature T<sub>J</sub>(MAX), the junction-to-ambient thermal resistance  $\theta_{JA}$ , and the ambient temperature T<sub>A</sub>. The maximum allowable continuous power dissipation at any ambient temperature is calculated by  $P_D(MAX)=(T_J(MAX)-T_A)/\theta_{JA}$ . Exceeding the maximum allowable power dissipation will cause excessive die temperature, and the regulator will go into thermal shutdown. Internal thermal shutdown circuitry protects the device from permanent damage.
3. Measured on JESD51-7, 4-layer PCB.

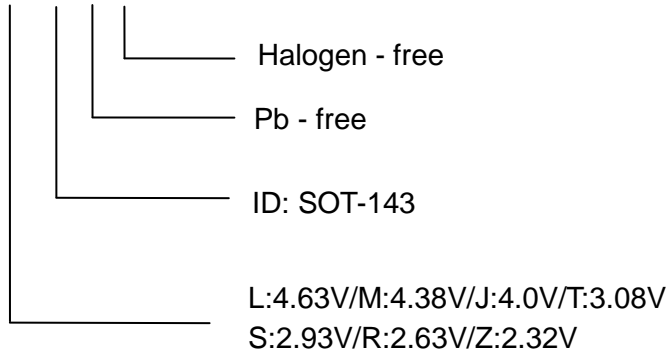


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## Ordering Information

ACE30536X 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.

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