



# ACE3573N

## Ultra-Low Loss Switch

### Description

ACE3573N are ultra-low  $R_{DS(ON)}$  load switch with reverse current blocking function. The controlled ramp up speed avoids the inrush current during turn on. The device works under a wide input voltage range from 1.2V to 5.5V.

### Features

- 1.2V to 5.5V input voltage range
- Low  $R_{DS(ON)}$  for internal pass switch: 22m $\Omega$  at  $V_{IN}=5V$
- 3A continuous load current capability
- Reverse blocking (no body diode)
- On/off control input
- Controlled turn on slew rate
- Auto output cap discharge function
- RoHS Compliant and Halogen Free
- Ultra small CSP-6 package 1.0mmx1.5mm, 0.5mm pitch, 0.5mm height

### Applications

- Smart Phone
- MID
- E-Book
- Storage, DSLR, and Portable Device

### Absolute Maximum Ratings (Note1)

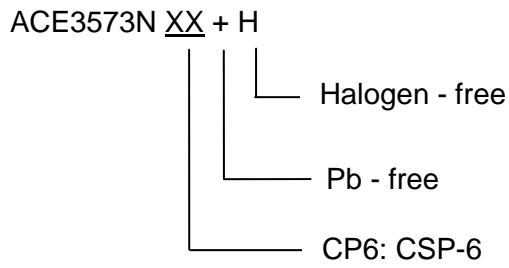
Parameter		Value
All pins		6V
Power Dissipation, $P_D @ T_A = 25^\circ\text{C}$		1.0W
Package Thermal Resistance (Note 2)	$\theta_{JA}$	123 $^\circ\text{C/W}$
	$\theta_{JC}$	17 $^\circ\text{C/W}$
Junction Temperature Range		150 $^\circ\text{C}$
Lead Temperature (Soldering, 10sec.)		260 $^\circ\text{C}$
Storage Temperature Range		-65 $^\circ\text{C}$ to 150 $^\circ\text{C}$
ESD Susceptibility	HBM (Human Body Mode)	8kV
	CDM (Charged Device Mode)	1.5kV



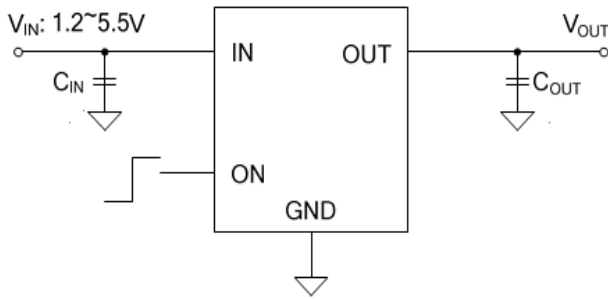
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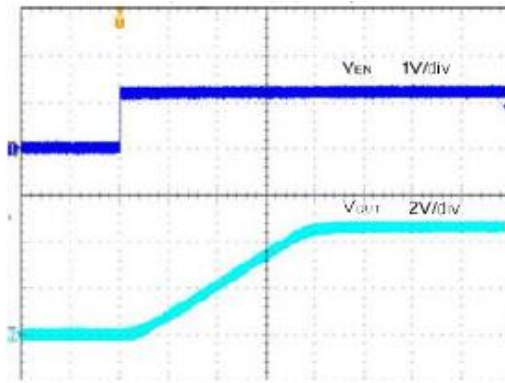
## Ordering information



## Typical Applications



Startup from Enable  
( $V_{IN}=5.0V$ ,  $I_{LOAD}=3.0A$ )



Time(2ms/div)



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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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