ACE7111N

High Efficiency 1MHz, 2A Step Up Regulator

Description

The ACE7111N is a high efficiency boost regulators targeted for general step-up applications.

Features

- Wide input range: 3-25V bias input, 25Vout max
- 1MHz switching frequency
- Minimum on time: 100ns typical
- Minimum off time: 100ns typical
- Low $R_{DS(ON)}$: 150mΩ
- RoHS Compliant and Halogen Free
- Accurate Reference: 0.6V_{REF}
- Compact package: SOT23- 6 pins

Applications

- WLED Drivers
- Networking cards powered from PCI or PCI- express slots

Absolute Maximum Ratings (Note1)

Parameter		Value
SW, IN, EN		26V
All other pins		4V
Power Dissipation, PD@T_A=25°C		0.6 W
Package Thermal Resistance (Note 2)	θ_{JA}	161°C/W
	θ_{JC}	130°C/W
Junction Temperature Range		125°C
Lead Temperature (Soldering, 10sec.)		260°C
Storage Temperature Range		-65°C to 150°C

Note 1: Stresses beyond the “Absolute Maximum Ratings” may cause permanent damage to the device. These are stress ratings only. Functional operation of the device at these or any other conditions beyond those indicated in the operational sections of the specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

Note 2: θ_{JA} is measured in the natural convection at T_A= 25°C on a low effective single layer thermal conductivity test board of JEDEC 51-3 thermal measurement standard. Test condition: Device mounted on 2” x 2” FR-4 substrate PCB, 2oz copper, with minimum recommended pad on top layer and thermal vias to bottom layer ground plane.

Note 3: The device is not guaranteed to function outside its operating conditions.

Note 4: IC could be start up in 2.7V.

Recommended Operating Conditions (Note 3)

Parameter	Value
Supply Input Voltage	3V to 25V
Junction Temperature Range	-40°C to 125°C
Ambient Temperature Range	-40°C to 85°C

Note 3: The device is not guaranteed to function outside its operating conditions.

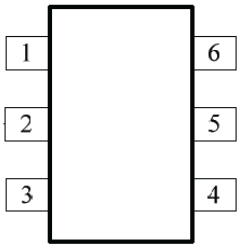
Ordering information

ACE7111N XX + H

- Halogen - free
- Pb - free
- GM: SOT-23-6

Packaging Type

SOP-23-6



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 shoes 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.