



ACE7261LA

500KHz, 18V, 2A Synchronous Step-Down Converter

Description

The ACE7261LA is a fully integrated, high-efficiency 2A synchronous rectified step-down converter. The ACE7261LA operates at high efficiency over a wide output current load range.

This device offers two operation modes, PWM control and PFM Mode switching control, which allows a high efficiency over the wider range of the load.

The ACE7261LA requires a minimum number of readily available standard external components and is available in a 6-pin SOT23 ROHS compliant package.

Features

- High efficiency: up to 96%
- 500KHz frequency operation
- 2A output current
- No schottky diode required
- 4.2V to 18V input voltage range
- 0.8V reference
- Slope compensated current mode control for excellent line and load transient response
- Integrated internal compensation
- Stable with low ESR ceramic output capacitors
- Over current protection with hiccup-mode
- Thermal shutdown
- Inrush current limit and soft start
- Available in SOT23-6
- -40°C to 85°C temperature range

Application

- Distributed Power Systems
- Digital Set Top Boxes
- Flat Panel Television and Monitors
- Wireless and DSL Modems
- Notebook Computer



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Absolute Maximum Ratings

Parameter	Value
Supply voltage VIN	-0.3V to 19V
Switch node voltage VSW	-0.3V to (VIN+0.5V)
Boost voltage VBST	VSW-0.3V to VSW+5V
Enable voltage VEN	-0.3V to 19V
All other pins	-0.3V to 6V
Package thermal resistance (θ_{JA})	150°C/W
Package thermal resistance (θ_{JC})	70°C/W
Max operating junction temperature (T_J)	125°C
Storage temperature range	-65°C to 150°C
Lead temperature (Soldering, 10s)	300°C

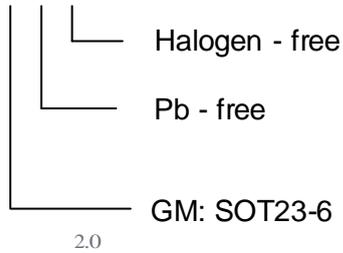


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Ordering information

ACE7261LA 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 stated 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.