ACE7128LA

High Efficiency 1.2MHz 26V 2A Step-up DC/DC Converter

Description

The ACE7128LA is a constant frequency, current mode step-up converter intended for small, low power applications. The ACE7128LA switches at 1.2MHz and allows the use of tiny, low cost capacitors and inductors 2mm or less in height. Internal soft-start results in small inrush current and extends battery life. The ACE7128LA includes under-voltage lockout, current limiting, thermal shutdown protection and output over voltage protection.

ACE7128LA is available in SOT23-6 package that is PB free.

Features

- 2.5V to 24V input voltage
- Up to 26V output voltage
- Accurate reference: 0.6V
- Integrated 150mΩ power MOSFET
- 1.2MHz switching frequency
- Internal 3A switch current limit
- Internal compensation
- Thermal shutdown
- Available in SOT23-6 package

Application

- ABS set-top boxed
- DVB-S/S2

Absolute Maximum Ratings

Parameter		Value
VIN, EN pin voltage		-0.3V to 26V
SW pin voltage		-0.3V to 26V
All other pin voltage		-0.3V to 6V
Junction temperature (T_J)		150℃
Power dissipation	SOT23-6	600mW
Thermal resistance (θ_{JA})		250℃ /W
Thermal resistance (θ_{JC})		130℃ /W
Storage temperature (Ts)		-65℃ to 150℃
Lead temperature & time		260℃, 10Sec

Recommended Work Conditions

Parameter	Value
Input voltage range	2.5V to 24V
Output voltage range	VIN to 26V
Operating ambient temperature (T_A)	-40℃ –85℃

Ordering information

ACE7128LA XX+ H

- H: Halogen - free
- +: Pb - free
- XX: GM: SOT23-6

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 Technology 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.