



ACE7217Z

17V/6A High Efficiency Synchronous Step-Down Converter

Description

ACE7217Z is a wide input range, high efficiency and high frequency DC to DC step-down switching regulator, capable of delivering up to 6A output current. It adopts an adaptive COT control scheme that enables very fast transient response and provides a very smooth transition when the output varies from light load to heavy load. During light load, ACE7217Z goes into a PFM mode that saves switching loss achieving high efficiency. An OVP function protects the IC itself and its downstream system against input voltage surges.

Features

- Wide Input Range: 4.5V-17V
- Adaptive COT Control
- Ultra-fast Load Transient Response
- High Efficiency PFM Mode at Light Load
- Low RDS(ON) Internal Power FETs
- Capable of Delivering Up to 6A
- No External Compensation Needed
- Thermal Shutdown and UVLO
- Output Auto-discharge Function
- Available in SOT-23-6 Package
- RoHS compliant

Application

- LCD TV
- Set Top Box
- DSL Modem



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Absolute Maximum Ratings

Parameter		Value
IN, EN Voltage		-0.3V to 18V
SW Voltage		-0.3V to 18V
BST Voltage		-0.3V to SW+6V
FB Voltage		-0.3V to 6V
Operating Temperature Range		-40°C to 85°C
Storage Temperature Range		-55°C to 150°C
Thermal Resistance	θ_{JA}	56 °C/W
	θ_{JC}	6.3 °C/W
Lead Temperature (Soldering 10sec)		260°C

Note: Exceeding these limits may damage the device. Exposure to absolute maximum rating conditions for long periods may affect device reliability

Ordering Information

ACE7217Z XX + H

└──┐	Halogen - free
└──┐	Pb - free
└──┐	GM : SOT-23-6



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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.

ACE Technology Co., LTD.
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