



ACE72682LA

60V High Efficiency Synchronous Step-Down DC/DC Converter

Description

ACE72682LA is a high efficiency, monolithic synchronous step-down DC/DC converter utilizing Jitter Function frequency, average current mode control architecture. Capable of delivering up to 2A continuous load with excellent line and load regulation. The device operates from an input voltage range of 7V to 60V and provides an adjustable output voltage from 3V to 40V.

In conclusion, ACE72682LA is a full function and high performance, high reliability buck DC-DC converter.

Features

- Internal high-side and external low-side MOSFET
- Max output current: 2A
- Adjustable output voltage, VFB=1V
- Constant voltage accurate: $\pm 2\%$
- No external compensation needed
- Jitter function
- Efficiency: up to 94%
- Short circuit protection
- Thermal shutdown protection
- Under voltage lock-out
- Available in SOP-8 package

Application

- Distributed power systems
- Networking systems
- POE
- Industry application



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Absolute Maximum Ratings

Parameter	Value
VIN to GND	-0.3 to 65V
SW to GND	-0.3 to VIN
BS to GND	VSW-0.3 to VSW+6V
HG, DV, VFB, EN to GND	-0.3 to 6V
Max operating junction temperature (TJ)	125°C
Ambient temperature (TA)	-40°C – 85°C
Package thermal resistance (θ_{JC})	45°C / W
Storage temperature (TS)	-40°C – 150°C
Lead temperature & time	260°C, 10S
ESD (HBM)	>2000V

Note: Exceed these limits to damage to the device. Exposure to absolute maximum rating conditions may affect device reliability.



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Ordering Information

ACE72682LA XX + H

└─┘	Halogen - free
└─┘	Pb - free
└─┘	FM : SOP-8



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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 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 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.