



ACE72518Z

18V, 5A, High Efficiency Synchronous Step-Down Converter

Description

ACE72518Z is a wide input range, high efficiency and high frequency DC to DC step-down switching regulator, capable of delivering up to 5A of 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, ACE72518Z goes into a PFM mode that saves switching loss achieving high efficiency. The adaptive COT control also maintains a constant switching frequency across line and load. An OVP function protects the IC itself and its downstream system against input voltage surges.

Features

- Wide Input Range: 4.5V-18V
- Adaptive COT Control
- Ultra-Fast Load Transient Response
- High Efficiency PFM Mode at Light Load
- Low Rdson Internal Power FETs
- Capable of Delivering up to 5A
- Thermal Shutdown and UVLO
- Available in DFN2x2-6L
- Pb Free, RoHS and REACH Compliant
- Halogen Free and “Green” Device

Application

- 5G CPE
- Set Top Box
- LCD TV

Absolute Maximum Ratings

Parameter		Value
IN, SW, EN Voltage		–0.3V to 19V
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}	57.2 °C/W
	θ_{JC}	20.4 °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

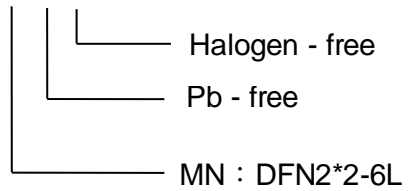


ACE72518Z

18V, 5A, High Efficiency Synchronous Step-Down Converter

Ordering Information

ACE72518Z XX + H





ACE72518Z

18V, 5A, High Efficiency Synchronous Step-Down Converter

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.

ACE Technology Co., LTD.
<http://www.ace-ele.com/>