



ACE7177D

Adjustable High Output Voltage High Efficiency Step-Up DC/DC Converter

Description

The ACE7177D is a CMOS step-up switching DC/DC converter, which allows the duty ratio to be automatically switched according to the load (light load: 50%, high output current: 75%), enabling products with a low ripple over a wide range, high efficiency, and high output current. With the ACE7177D, a step-up switching DC/DC converter can be configured by using an external coil, capacitor, diode and NMOS. This feature, along with the mini package and low current consumption, makes the ACE7177D ideal for applications such as the power supply unit of portable equipment.

Features

- Low voltage operation: Oscillation start voltage at 0.8V
- Duty ratio: 50/75%, built-in auto switching
- External parts: Coil, capacitor, diode, NMOS
- High efficiency : 85% (typ.)
- Output voltage Adjustable
- Providing Flexibility for Using External Power Switches
- Zero Shutdown Mode Supply Current
- 6 μ A Quiescent (Switch-off) Supply Current
- Small SOT-23-5, SOT-89-5 Package

Applications

- PDA
- DSC
- LCD Panel
- RF-Tags
- Portable Instrument
- Wireless Equipment

Absolute Maximum Ratings (Unless otherwise specified, Ta=25°C)

Parameter	Symbol	Ratings	Units
V _{DD} pin voltage	V _{DD}	V _{SS} -0.3 ~ V _{SS} +8	V
EN pin voltage	EN	V _{SS} -0.3 ~ V _{SS} +8	V
Power dissipation	SOT-23-5	400	mW
	SOT-89-5	600	mW
Operating temperature	T _{opr}	-40 ~85	°C
Storage temperature	T _{stg}	-40 ~125	°C
Soldering Temperature & Time	T _{solder}	260°C, 10s	

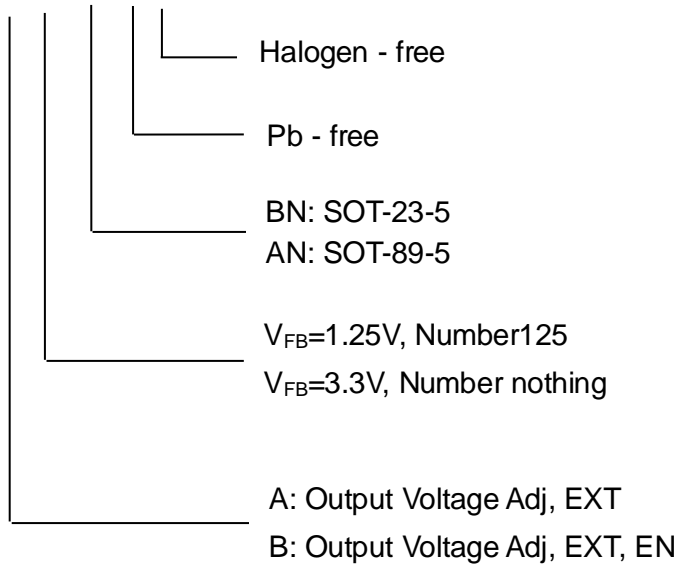


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Ordering information

ACE7177D X XX 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 used 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.