Product Overview

NCP4060A: 80V, 6A Synchronous Step Down Converter in a compact 6mm by 6mm package

For complete documentation, see the data sheet.

The NCP4060A is a 6A, 80V synchronous step down converter capable of operating from 16V to 80V and can deliver 6A at 85C at common output voltage such as 5V, 12V, 24V. The device offers a 1%, 1.25V internal reference, which allows for accurate output voltages. Two external resistors are used to set the output voltage. Other adjustable features include soft-start time, current limit, frequency, and UVLO.

This IC is fully protected against overvoltage, undervoltage, overcurrent, and overtemperature conditions.

The NCP4060/NCP4060A offers the same performance with a change in the package outline.

Features

- Wide input voltage range from 16V to 80V
- Adjustable switching frequency from 100kHz to 500kHz
- Lossless low-side FET current sensing for overcurrent protection
- 1.25V 1% accurate internal reference volttage
- External programmable soft-start
- Output Over-voltage Protection and Under-voltage Protection
- Internal thermal protection
- Hiccup Mode Operation for all Faults
- Pre-bias Start-up
- Adjustable Output Voltage

  For more features, see the data sheet

Benefits

- Supports wide range of applications
- Allows for optimization between size, efficiency, and maximum duty cycle
- Improve efficiency while protecting against overcurrent
- Maintain voltage accuracy

Applications

- Base stations power
- Industrial applications
- 48V Applications
- Networking and datacom

End Products

- Cellular Base Stations
- Telecom and Network Equipment

Part Electrical Specifications

Product	Compliance	Status	Topology	Control Mode	V_{CC} Min (V)	V_{CC} Max (V)	V_O Typ (V)	I_O Typ (A)	Efficiency (%)	f_{SW} Typ (kHz)	Package Type
NCP4060AMNTXG	Pb-free Halide free	Active	Step-Down	Voltage Mode	16	80	12	6	96	300	QFN-19

For more information please contact your local sales support at www.onsemi.com.

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