

Unauthorized Photocopy and Duplication Prohibited

Features

- ◆ 9V ~ 40V Supply Voltage Range
- ◆ 45V Input Voltage Surge
- ◆ 42V Input Over Voltage Protection
- ◆ 2% Voltage Reference Accuracy
- ◆ 7% Constant Current Accuracy
- ◆ External Current Limit Setting
- ◆ Programmable Operation Frequency
- ◆ Programmable the current limit point of high side MOS
- ◆ Single Pin to External Compensation and Shutdown Control
- ◆ Built in Adjustable Line-Compensation
- ◆ Internal Soft Start 3ms
- ◆ CC/CV Mode Control
- ◆ QFN20L-5×5 Package

General Description

The SP1259HN is a synchronous buck converter with output current to 4.8A. It is designed to allow for operating a wide supply voltage range from 9V to 40V. The external shutdown function can be controlled by logic level to pull COMP/EN pin down, and then comes into standby mode. The external compensation makes feedback control have good line and load regulation with flexible external design.

The SP1259HN operates in the CC(Constant output Current) mode or CV(Constant output Voltage) mode, and the OCP current value is set by current sensing resistors.

The SP1259HN is suitable for the DC/DC switching power applications when requested the current limit function. The devices are available in QFN20L-5×5 package and require very few external devices for operation.

Applications

- ◆ Car Chargers
- ◆ Portable Charger Devices
- ◆ General-Purpose DC/DC Converters with Current Limit

Simplified Application Circuit

