

2A, 4V-18V Input, 600KHz Synchronous Step-Down Converter

Features

- Wide 4V to 18V Operating Input Range
- 2A Continuous Output Current
- No Schottky Diode Required
- 600KHz Frequency Operation
- Built-in Over Current Limit
- Built-in Over Voltage Protection
- Internal Soft start
- Output Adjustable from 0.6V
- Integrated internal compensation
- Short Protection with Hiccup-Mode
- Thermal Shutdown
- Available in SOT23-6 Package
- -40°C to +85°C Temperature Range

Applications

- Digital Set-top Box (STB)
- Tablet Personal Computer (Pad)
- Flat-Panel Television and Monitor
- Digital Video Recorder (DVR)
- Portable Media Player (PMP)
- General Purposes

General Description

The PN1820E is a high frequency, synchronous, rectified, step-down, switch-mode converter with internal power MOSFETs. It offers a very compact solution to achieve a 2A continuous output current over a wide input supply range, with excellent load and line regulation.

The PN1820E requires a minimal number of readily available, external components and is available in a space saving SOT23-6 package.

Typical Application Circuit

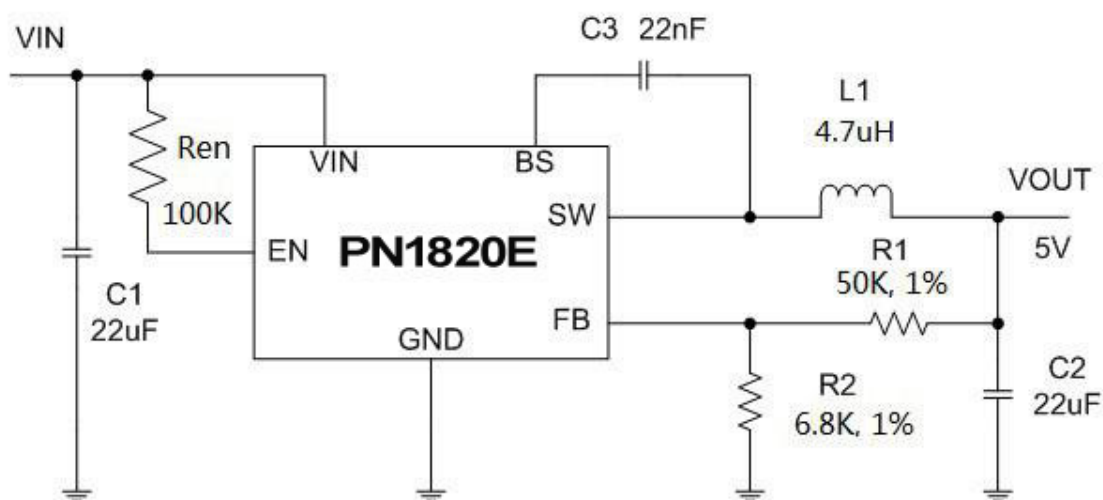


Figure 1. Basic Application Circuit