POWER-N

1.0MHz, 1.2A Up to 24V Output Micropower

Step-Up Converter

General Description

The PN2116 is a constant frequency, 5-pin SOT23 current mode step-up converter intended for small, low power applications. The PN2116 switches at 1.0MHz and allows the use of tiny, low cost capacitors and inductors 2mm or less in height. Internal soft-start results in small inrush current and extends battery life. The PN2116 operates from an input voltage as low as 3.0V and can generate 24V at up to 80mA from a 5V supply. The PN2116 includes current limiting, and thermal overload protection to prevent damage in the event of an output overload. The PN2116 is available in a small 5-pin SOT-23 package.

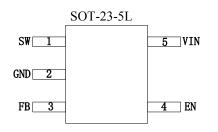
Applications

- OLED Biasing
- LCD Bias Supply
- White LED Driver
- PDAs
- Digital Still Cameras

Features

- Integrated 0.7Ω Power MOSFET
- 400µA Quiescent Current
- 3.0V to 5.5V Input Voltage
- 1.0MHz Fixed Switching Frequency
- Internal 1.2A Switch Current Limit
- Adjustable Output Voltage
- Internal Compensation
- Up to 24V Output Voltage
- Over 85% Efficiency
- Available in a 5-Pin SOT23-5 Package

Package



Typical Application Circuit

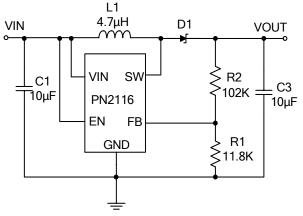


Figure 1. Basic Application Circuit with PN2116

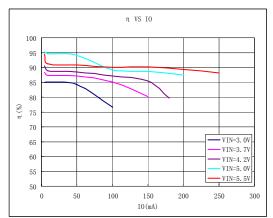


Figure 2. Typical Efficiency Curve