

## 30V 1.2A 1.4MHz Synchronous Step-Down Converter

### FEATURES

- High Efficiency: Up to 95%
- Fixed 1.4MHz Switching Frequency
- 1.2A Output Current
- No Schottky Diode Required
- 4V to 30V Input Voltage Range
- 0.8V Reference
- Slope Compensated Current Mode Control for Excellent Line and Load Transient Response
- Integrated internal compensation
- Stable with Low ESR Ceramic Output Capacitors
- Over Current Protection with Hiccup-Mode
- Thermal Shutdown
- Inrush Current Limit and Soft Start
- Available in SOT23-6 Package
- -40°C to +85°C Temperature Range

### APPLICATIONS

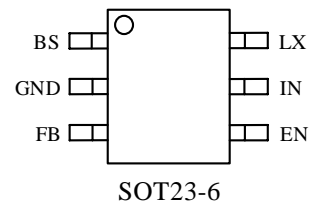
- CCTV Camera
- Digital Set Top Boxes
- Flat Panel Television and Monitors
- Wireless and DSL Modems
- Notebook Computer

### GENERAL DESCRIPTION

The PN3012 is a fully integrated, high-efficiency 1.2A synchronous rectified step-down converter. The PN3012 operates at high efficiency over a wide output current load range.

The PN3012 requires a minimum number of readily available standard external components and is available in an 6-pin SOT23 ROHS compliant package.

### PACKAGE



### TYPICAL APPLICATION

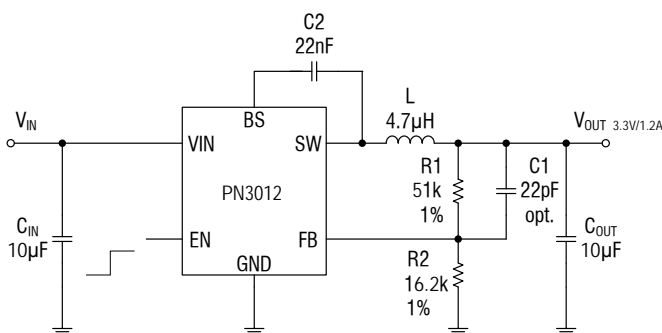


Figure 1. Basic Application Circuit

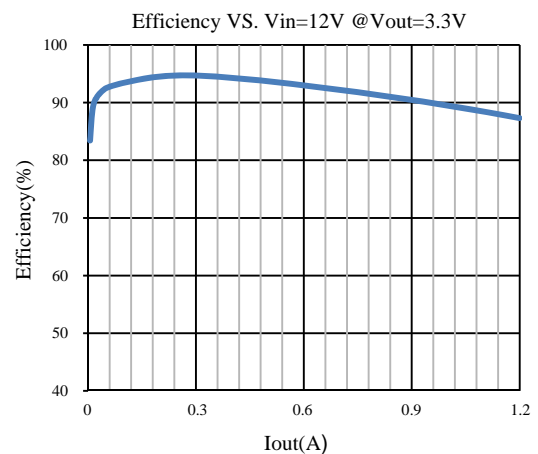


Figure 2 Typical Efficiency Curve