

2A, High Efficiency 1.2MHz Current Mode Step-Up Converter

FEATURES

- Integrated 80mΩ Power MOSFET
- 2V to 24V Input Voltage
- 1.2MHz Fixed Switching Frequency
- Internal 4A Switch Current Limit
- Adjustable Output Voltage
- Internal Compensation
- Up to 28V Output Voltage
- Automatic Pulse Frequency Modulation Mode at Light Loads
- up to 93% Efficiency
- Available in a 6-Pin SOT23-6 Package

APPLICATIONS

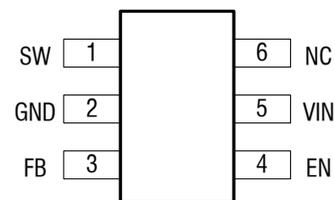
- Battery-Powered Equipment
- Set-Top Boxed
- LCD Bias Supply
- DSL and Cable Modems and Routers
- Networking cards powered from PCI or PCI express slots

GENERAL DESCRIPTION

The KF9108 is a constant frequency, 6-pin SOT23 current mode step-up converter intended for small, low power applications. The KF9108 switches at 1.2MHz 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 KF9108 features automatic shifting to pulse frequency modulation mode at light loads. The KF9108 includes under-voltage lockout, current limiting, and thermal overload protection to prevent damage in the event of an output overload. The KF9108 is available in a small 6-pin SOT-23 package.

TOP VIEW



6-LEAD PLASTIC SOT-23

$T_{JMAX} = 160^{\circ}C$, $\theta_{JA} = 250^{\circ}C/W$, $\theta_{JC} = 130^{\circ}C/W$

TYPICAL APPLICATION

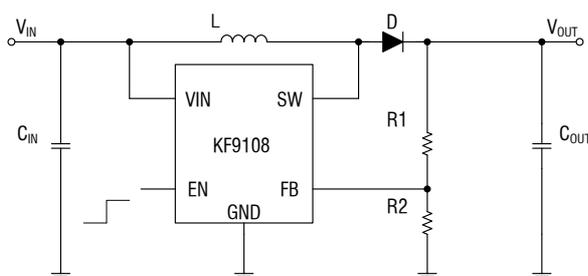


Figure 1. Basic Application Circuit

