

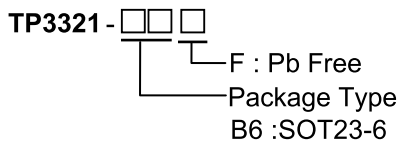
2A, 23V, 600kHz Synchronous Step-Down Converter

General Description

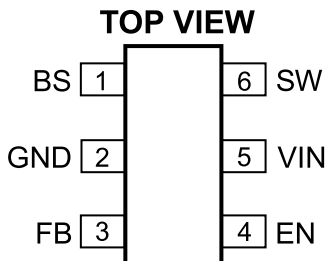
The TP3321 is a monolithic step-down switch mode converter with a built-in power MOSFET. It achieves 2A output current over a wide input supply range with excellent load and line regulation. Current mode operation provides fast transient response and eases loop stabilization. Fault condition protection includes cycle-by-cycle current limiting and over temperature protection.

The TP3321 requires a minimum number of available standard external components. The TP3321 is available in SOT23-6 package.

Ordering Information



Pin Configurations



Function Pin Description

Pin NO.	Pin Name	Pin Description
1	BS	Bootstrap. A 22nF capacitor is connected between SW and BS pins to drive the power switch's gate above the supply voltage.
2	GND	Ground. This pin is the voltage reference for the regulated output voltage. For this reason care must be taken in its layout.
3	FB	Feedback. An external resistor divider from the output to GND, tapped to the FB pin sets the output voltage.
4	EN	On/Off Control Input. Pull EN above 1.2V and below 5V to turn the device on.
5	VIN	Power Supply Input. Drive 4.5V to 23V voltage to this pin to power on this chip. Connecting a 10uF ceramic bypass capacitor between VIN and GND to eliminate noise.
6	SW	Switch Output. Connect this pin to the switching end of the inductor.

Features

- 2A Output Current
- 180m Internal Power MOSFET Switch
- Stable with Low ESR Output Ceramic Capacitors
- Up to 93% Efficiency
- Fixed 600KHz Frequency
- Current Mode Operation
- Over-Temperature Protection with Hiccup-Mode
- Cycle-by-Cycle Over Current Protection
- Wide 4.5V to 23V Operating Input Range
- Output Adjustable from 0.805V to 15V
- 10uA Shutdown Current
- Available in SOT23-6 Package

Applications

- Distributed Power Systems
- Battery Charger
- Networking Systems
- Portable Electronics

Marking Information

For marking information, contact our sales representative directly or through a TPmicro distributor located in your area.