

## Low Noise, Regulated Charge Pump DC/DC Converter

### Description

The KF9902 is a low noise, constant frequency (1.2MHz) switched capacitor voltage doubler. It produce a regulated output voltage from a 2.7V to 4.5V input with up to 250mA of output current. Low external parts count (one flying capacitor and two small bypass capacitors at VIN and VOUT) make the KF9902 ideally suited for small, battery-powered applications.

A new charge-pump architecture maintains constant switching frequency to zero load and reduces both output and input ripple. The KF9902 have thermal shutdown capability and can survive a continuous short circuit from VOUT to GND. Built-in soft-start circuitry prevents excessive inrush current during start-up.

The KF9902 is available in the 6-pin SOT23 package.

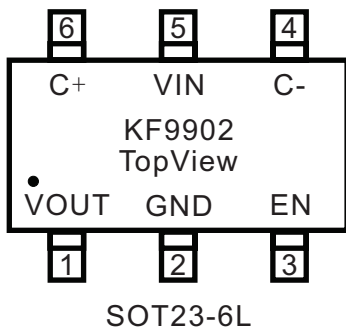
### Features

- Fixed 5V ± 4% Output
- VIN Range: 2.7V to 5V
- Output Current: Up to 250mA
- Low Noise Constant Frequency Operation
- Shutdown Current <1μA
- Short-Circuit Protection
- Soft-start
- No Inductors
- Available in Low Profile 6-Lead SOT23 Package

### Applications

- White LED Backlighting
- Li-Ion Battery Backup Supplies
- Local 3V to 5V Conversion
- Smart Card Readers
- PCMCIA Local 5V Supplies

### Pin Description



PIN NUMBER SOT-23-6	PIN NAME
1	VOUT
2	GND
3	EN
4	C-
5	VIN
6	C+

### Typical Applications

