

## **General Description**

The TCS4226 is a high frequency, synchronous, rectified, step-down, switch-mode converter with internal power MOSFETs. It offers a very compact solution to provide a 2A continuous output current over a wide input supply range, with excellent load and line regulation. ECOT PSM control operation provides very fast transient response and easy loop design as well as very tight output regulation.

The TCS4226 requires a minimal number of readily available, external components and is available in a space saving SOT23-6 package.

## **Features**

Wide 4.5V to 28V Operating Input Range 2A Continuous Output Current 500KHz Switching Frequency ECOT PSM Mode Control with Fast Transient Response Built-in Over Current Limit Built-in Over Voltage Protection PFM Mode for High Efficiency in Light Load Internal Soft-Start

## **Applications**

Automotive Systems Network Terminal Equipment Security Monitoring Camera  $100 \text{m}\Omega/50 \text{m}\Omega$  Low  $R_{\text{DS(ON)}}$  Internal Power MOSFETs Output Adjustable from 0.6V No Schottky Diode Required Short Protection with Hiccup-Mode Integrated internal compensation Thermal Shutdown Available in SOT23-6 Package -40°C to +85°C Temperature Range

Printer Systems Industrial Power Systems Distributed Power Systems

## **Typical Application Circuit**



**Basic Application Circuit**