

### DESCRIPTION

The TCS4326 is a synchronous current mode buck regulator capable of driving 3A continuous load current with excellent line and load regulation. The TCS4326 can operate with an input range 4.5V to 26V and the output can be externally set from 0.92V to 20V with a resistor divider.

Fault condition protection includes cycle-by-cycle current limiting and thermal shutdown. In shutdown mode the regulator draws 3 $\mu$ A of supply current. Programmable soft-start minimizes the inrush supply current and the output overshoot at initial startup. Automatic pulse skipping mode operation increase efficiency at light loads.

The TCS4326 require a minimum number of external components.

### FEATURES

- 3A Output Current
- Automatic Pulse Skipping Mode at Light Load
- 33V Input Surge Protection
- Integrated 160m $\Omega$ /110m $\Omega$  DMOS Switches
- 4.5V to 26V Input Operating Range
- Output Adjustable from 0.92V to 20V
- Up to 94% Efficiency
- 3 $\mu$ A Shutdown Current
- Fixed 340KHz Frequency
- Programmable Soft-Start
- Thermal Shutdown and Overcurrent Protection
- Input Supply Overvoltage and Undervoltage Lockout
- 220ns Minimum On Time
- Available in SOP-8 (EP) Package
- RoHS Compliant and 100% Lead(Pb)-Free Halogen-Free

### APPLICATIONS

- Distributed Power Systems
- Networking Systems
- PC Monitors
- Portable Electronics

### Typical Application Circuit

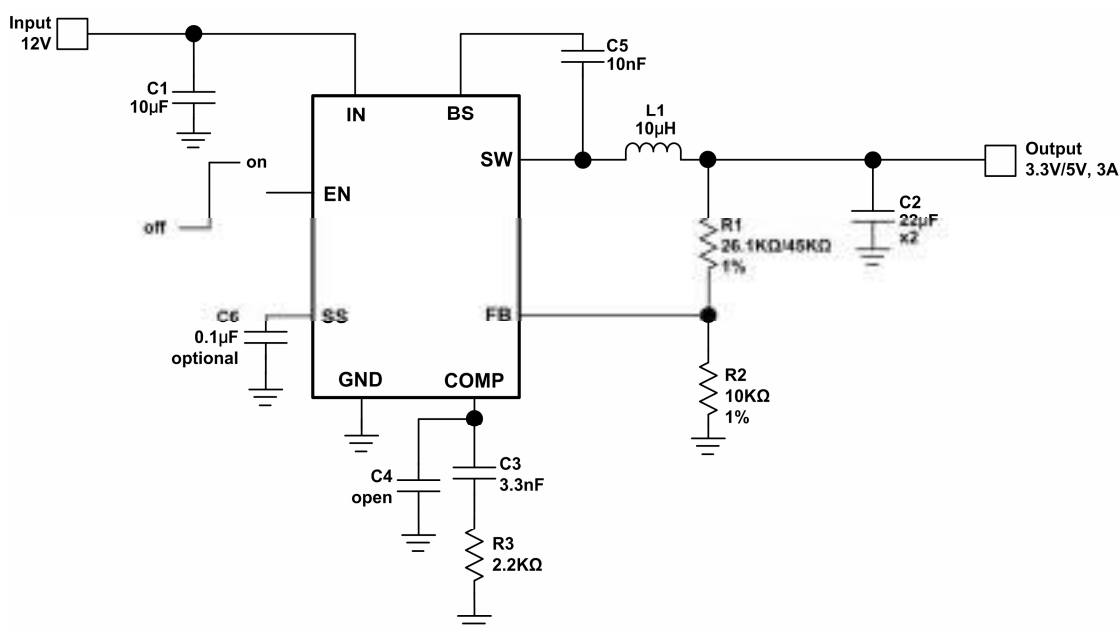


Figure 1. 12V to 3.3V/5V Application Circuit