

DESCRIPTION

The TCS5292 is a high performance controller for LED Backlight. The internal soft start function can reduce the inrush current. The device uses current mode, fixed frequency architecture to regulate the LED current, which is measured through an external current sense resistor. Its low 300mV feedback voltage reduces power loss and improves efficiency.

The TCS5292 offers external low frequency PWM dimming method for a wide range of dimming control.

The TCS5292 integrated multiple protections, such as over current protection (OCP), over voltage protection (OVP), Diode & Inductor short protection, LED cathode short to GND protection, Under Voltage Lockout (UVLO), Thermal Shutdown Protection (OTP), and LED open protection.

The TCS5292 is available in SOP-8 package to provide the best solution for PCB space saving and total BOM cost.

FEATURES

- 9V to 30V Input Voltage Range
- Current Mode PWM controller with good dynamic
- Internal Soft-Start
- External PWM Dimming Control
- Over Voltage Protection
- Over Current Protection
- Under Voltage Lockout
- Thermal Shutdown Protection
- LED cathode short to GND Protection
- LED Open Protection
- SOP-8 Package
- RoHS Compliant and 100% Lead (Pb)-Free

APPLICATIONS

- LCD Monitor
- LCD TV
- Flat panel display

Typical Application Circuit

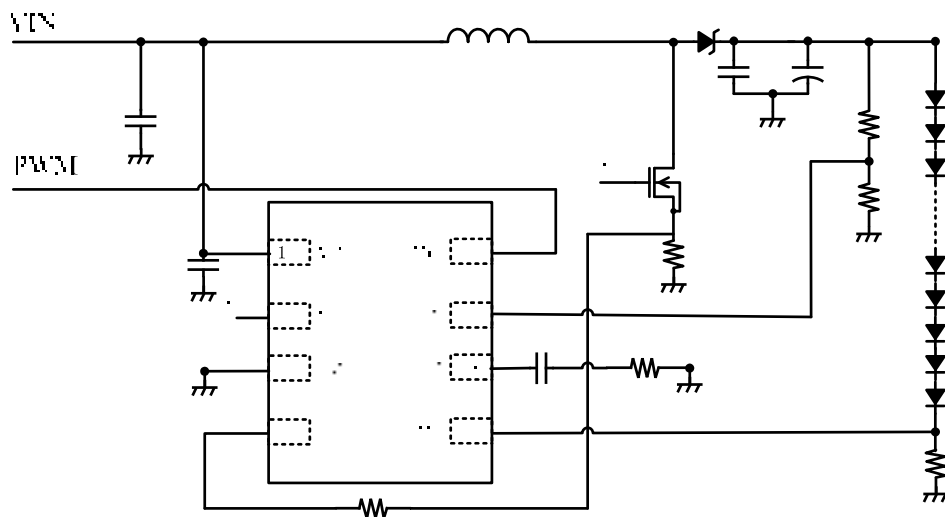


Fig 1 TCS5292 PWM Dimming for White LED Application