

## DESCRIPTION

MT7200 is a BUCK, constant current LED driver who works in continuous conduction mode (CCM). When the input voltage is higher than the LED voltage, the chip can be used to efficiently drive one or series-connected LEDs. MT7200 supports up to 55V voltage, and the output current can be adjusted externally.

MT7200 integrates power switch and the high-end output current sense circuit. The analog dimming and PWM dimming can be realized through the ADJ pin, wherein the PWM signal can support up to 20kHz frequency. The soft-start time is extended by adjusting an external capacitor between the ADJ pin and ground. When the voltage of ADJ pin is below 0.2V, the power switch will turn off and then the system enters the standby state with ultra-low power dissipation.

MT7200 provides various protection features to improve the system reliability, including thermal regulation (OTR), over-temperature protection (OTP), LED short/open circuit protection, etc.

## FEATURES

- Simple external circuit with few components
- Single pin for ON/OFF and DC voltage or PWM dimming
- Integrated excellent line regulation
- Frequency Jittering technique to reduce EMI
- High efficiency: up to 97%
- Wide input voltage range
- Adjustable constant output current
- Up to 1MHz switching frequency
- Thermal regulation (OTR)
- Inherent open/short-circuit protection
- High accuracy output current:  $\pm 3\%$
- Available in SOT23-6 packages

## APPLICATION

- Low voltage halogen replacement LEDs
- Automotive lighting
- Low voltage industrial lighting
- LED back-up lighting
- Illuminated signs
- Stage lights
- LCD TV backlighting

## TYPICAL APPLICATION CIRCUIT

