

### DESCRIPTION

MT7201C+ is a BUCK, constant current LED driver who operates in Continuous Conduction Mode (CCM). The chip can drive single or multiple series connected LEDs efficiently when the input voltage is higher than the LED voltage. MT7201C+ supports 6V~50V input voltage and achieves up to 1.2A externally adjustable output current.

MT7201C+ integrates power switch and a high-end output current sensing circuit. The average output current can be set through external resistor.

The output current can be adjusted below the set value, by applying an external control signal to the ADJ pin.

The ADJ pin can receive the analog dimming signal and PWM dimming signal. If the ADJ pin voltage is below 0.2V, the internal power switch will be shut down and then the system will enter the standby state with ultra-low power dissipation.

MT7201C+ is designed with PWM filter circuit, which can realize soft-start function by controlling the rising edge of the current. Besides, the soft-start time can be extended by adding an external capacitor between ADJ pin and GND.

### FEATURES

- Simple external circuit with few components
- Constant output current: Up to 1.2A
- Single pin for ON/OFF, analog/PWM dimming
- Internal PWM filter
- Frequency jittering technique to reduce EMI
- High efficiency: up to 97%
- Wide input voltage range: 6V~50V
- Switching frequency: Up to 1MHz
- Inherent open-circuit protection
- High accuracy output current:  $\pm 5\%$
- Available in SOT89-5 packages

### APPLICATION

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

### TYPICAL APPLICATION CIRCUIT

