

Maximizing IC Performance

## High PF, High Efficiency Linear, Constant Current LED Driver

### DESCRIPTION

MT7668 is a high precision, high efficiency, high PF (PF>0.7), flicker-free, linear constant current LED driver. With simple power structure, the output constant current can be achieved by a few peripheral components, which greatly reduces the BOM cost.

Integrated with internal high-voltage power MOSFET and high-voltage power supply circuit, the chip can easily pass EMI test without magnetic components, such as inductors and transformers, and achieve simple and low cost peripheral circuit.

MT7668 integrates line voltage compensation function, good linear regulation and constant input power is realized. The chip also integrates thermal regulation function to balance the output power and the system temperature. The output current will be reduced when the temperature goes higher than the threshold, system reliability is guaranteed.

#### FEATURES

- Latest EU ERP standard compliant
- High efficiency, no flicker
- High power factor (PF>0.7)
- Few external components, low BOM cost, support all SMD design
- Integrated with 700V power MOSFET
- Set LED current through external resistor
- Constant current precision:  $\pm 5\%$
- External line voltage compensation ensures constant input power
- No EMI issues
- Embedded with thermal regulation function
- Available in ESOP8 package

#### APPLICATION

- LED candle, Filament lamp
- LED fluorescent, panel light
- LED Bulb, Projection lamp
- Other compact LED lightings



# **TYPICAL APPLICATION CIRCUIT**