MT7605CB

High PF, Three-Segment Linear, Constant Current IC for LED Driver

DESCRIPTION

MT7605CB is a high PF, three-segment, linear constant current IC for LED driver which supports 120Vac/220Vac input, and is mainly applied in LED lighting and building lighting field.

MT7605CB optimizes the current reference as line voltage changes, which increases the LED turn on time in AC cycle. By this way, both efficiency and power factor are improved.

MT7605CB integrates high-voltage power MOSFET and high-voltage power supply circuit, has the ability of passing EMI test easily without magnetic components such as inductors or transformers, which simplifies the peripheral circuit and reduces the BOM cost.

With built-in line voltage compensation circuit, MT7605CB realizes excellent line regulation, constant input power achieved. When line voltage is too high, the output current can be adjusted according to the external line compensation resistor to ensure that the input power does not vary with the line voltage.

MT7605CB supports multi-chip parallel connection and is designed with two D2 pins, while parallel connected, no jumper resistor is needed.

FEATURES

- High PF (PF>0.95)
- Simple peripheral circuit, small size and low BOM cost
- LED segmentation conduction, high system efficiency
- High output current accuracy: <±5%
- Input voltage: 120Vac/220Vac
- Integrates 700V high-voltage power MOSFET
- Supports multi-chip parallel connection, no oscillation and no jumper resistor required
- Embedded with over-temperature regulation
- Line voltage compensation function to keep the input power constant
- Available in ESOP8 package

APPLICATIONS

- Spotlights
- Mining Light
- Other LED lighting

TYPICAL APPLICATION CIRCUIT