

DESCRIPTION

MT7605CD is a high-PF, three-segment, linear constant current LED driver IC which supports 120VAC/220VAC input, and is mainly used in LED lighting and building lighting.

MT7605CD optimizes the current reference as bus voltage changes, which increases the LED turn-on time throughout the AC cycle, significantly improving system efficiency and power factor.

MT7605CD integrates high-voltage power MOS 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 a built-in line voltage compensation function, the chip can adjust output current through an internal line compensation resistor when the line voltage is too high, ensuring that input power remains nearly constant despite voltage fluctuations.

MT7605CD supports multi-chip parallel connection and is designed with two D2 pins, for constant input power.

FEATURES

- High PF (PF>0.95)
- Internal line compensation resistor, small size and low BOM cost
- LED segment-wise conduction, high system efficiency
- High output current accuracy: ±5%
- Input voltage: 120VAC/220VAC
- Integrates 700V power MOS
- Supports multi-chip parallel connection without oscillation or jumper resistors
- Embedded with over-temperature regulation
- Line voltage compensation function for constant input power
- Available in ESOP8 package

APPLICATIONS

- Floodlights
- Industrial and mining light
- Other LED lighting

TYPICAL APPLICATION CIRCUIT

