MT7613HB

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

DESCRIPTION

MT7613HB is a high PF, low THD, high voltage, three-segment, linear constant current IC for LED driver. The chip features high output current accuracy and no EMI issues. In addition, the output current can be set by an external resistor.

MT7613HB adopts harmonic compensation technology, making the output current present a sine-like wave, which effectively reduces THD so that the chip can easily meet the requirements of subharmonic certification.

MT7613HB integrates high-voltage power MOSFET and high-voltage power supply circuit, has the ability of passing EMI test easily without magnetic components such as inductor or transformer, which simplifies the peripheral circuit and reduces the BOM cost.

MT7613HB configures line voltage compensation pin to realize excellent line regulation, constant input power achieved. With over-temperature regulation function, the chip automatically reduces the output current once IC temperature exceeds the threshold, system reliability is guaranteed.

FEATURES

- PF>0.95, THD < 15%
- Meet subharmonic limit requirements
- Simple peripheral circuit and low BOM cost
- Integrates 700V power MOSFET
- Output current can be set externally
- LED output current accuracy: ±5%
- External line voltage compensation function to achieve constant input power
- Supports multi-chip parallel connection without jumper resistor
- No EMI issues
- Integrates over-temperature regulation (OTR)
- Available in ESOP8 package

APPLICATIONS

- LED candle/filament lamp
- LED fluorescent/panel light
- LED bulbs/spotlights
- Other LED lightings

TYPICAL APPLICATION CIRCUIT