

DESCRIPTION

MT7603 is a high voltage linear constant-current LED driver. It's designed to drive LED string directly from 110VAC/220VAC mains.

The system can easily pass EMI without inductor, transformer or other magnetic components, it can achieve simplified peripheral circuit and low BOM cost. The application of high power can be achieved by controlling the MOS temperature.

The output current can be set by external resistor. With Maxic's proprietary linear compensation technology, MT7603 can achieve constant power output when the input voltage is variable.

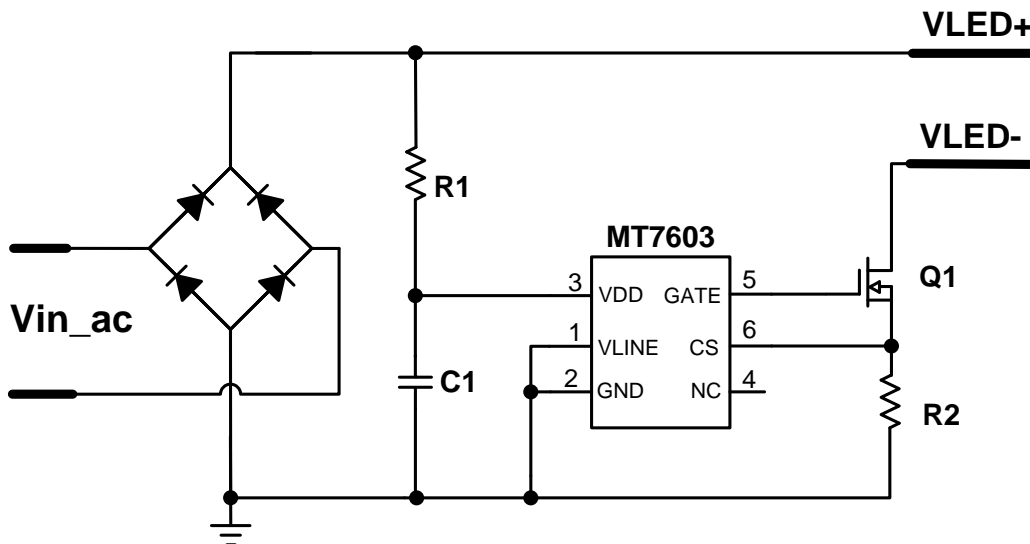
FEATURES

- Supports high power application with external MOS
- High precision constant current
- Supports linear voltage compensation
- Both of With/without electrolytic capacitor schemes are supported
- High power factor application
- Low EMI interference
- Available in SOT23-6 package

APPLICATION

- Fluorescent, candle lamp
- Bulb, decorative lamp
- Street lamp

Typical Application Circuit



ABSOLUTE MAXIMUM RATINGS

VDD pin voltage	-0.3V ~ 20V
CS, VLINE pin voltage	-0.3V ~ 6V
GATE pin voltage	-0.3V ~ 20V
Storage Temperature	-55°C~150°C
Junction Temperature (Tj)	150°C

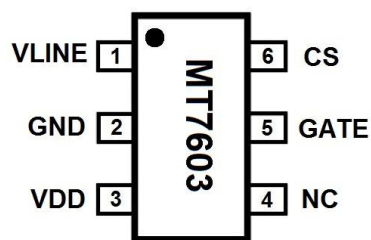
RECOMMENDED OPERATING CONDITIONS

Supply voltage VDD	15V
Operating Temperature	-40°C~105°C

THERMAL RESISTANCE

Junction to ambient (R θ JA)	170°C/W
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PIN CONFIGURATIONS



Chip Mark

7603xYW

— Manufacture code
— Week code
— Year code

Pin description

Name	Pin No	Description
VLINE	1	Linear compensation pin. If this pin connects to ground directly, the linear voltage compensation is unavailable
GND	2	Chip ground
VDD	3	Power supply pin
NC	4	No connection
GATE	5	Gate of the internal MOSFET
CS	6	Current sense pin