



# Linear LED Driver With Adjustable Current Up to 180mA

## GENERAL DESCRIPTION

The SM6701 is a linear mode constant current LED driver that has a wide range of output current from 20mA to 180mA which through an external resistor (Rext pin) to set the required output source or sink current which gives users flexibility in controlling the light intensity of LEDs. The current source generator can endure high voltage up to 48V supporting applications with long strings of LEDs. The SM6701 also built-in over temperature protection shuts off the LED current when the chip junction temperature rises above 135°C (typical), Full LED current resumes when the chip junction temperature falls below 75°C. The SM6701 is available in a thermally robust package with lead-free RoHS compliant and uses halogen-free molding compound.

The SM6701 is designed with a negative temperature coefficient to protect LEDs from thermal runaway at extreme voltages and currents. The Rext pin allows current source to be adjusted to higher currents by attaching a resistor between Rext and GND pin. Thus multiple SM6701 can also be used in parallel to provide higher output current.

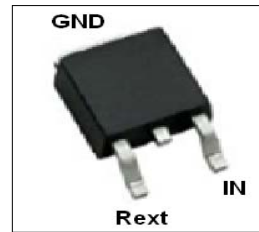
## FEATURES

- 5.5V to 48V supply voltage range
- Adjustable constant current from 20mA to 180mA
- Output current adjusted through an external resistor
- LED brightness stable
- No need external components
- Can be paralleled for higher current
- Excellent output current accuracy between IC and IC
- Over temperature protection
- Available in T0-252(D-PAK) package

## APPLICATIONS

- LED lamp (e.g. E27, GU10, T-8, T-5 Tube)
- Constant current source/sink
- AC lighting panels, cluster, Decorative lighting
- channel lettering

## PIN ASSIGNMENTS



TO-252 (D-PAK)

## TYPICAL APPLICATION

