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# XR46073 Product Brief

## Two-Step LED Current Controller with Line Regulation Compensation

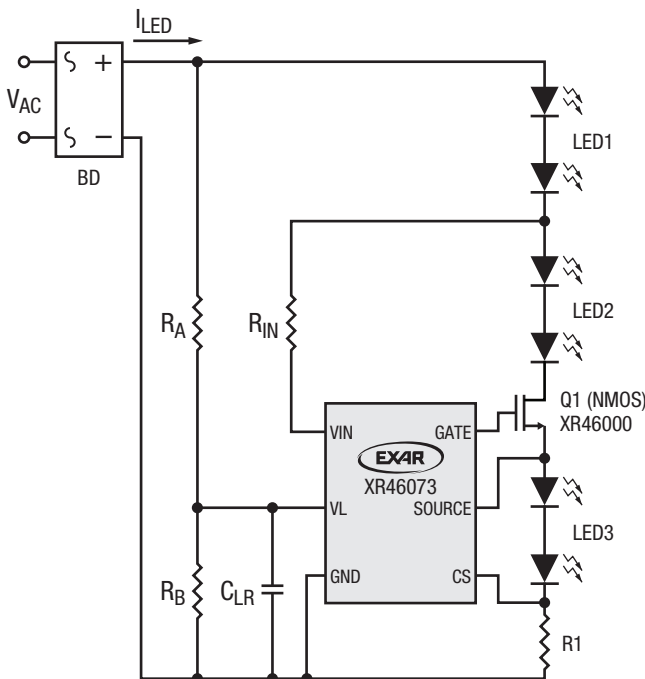
### Description

The XR46073 is a two-step LED current controller with line regulation compensation for operating over a wide Alternative Current (AC) voltage source range. It can drive an external N-channel power MOSFET to regulate the current flowing through a High Voltage (HV) LED string.

The XR46073 works as a constant current sink with linear type Overvoltage Protection (OVP), linear type Over Temperature Protection (OTP) and line regulation compensation. It is suitable for applications with a rectified AC voltage source.

The PCB design can be very compact to meet various shape requirements. It is especially suitable for replacing incandescent light bulbs.

### Typical Application



### FEATURES

#### Device

- Two-current step control from a single device
- Excellent system power regulation over AC input range
- 6V to 76V supply voltage range
- Over temperature protection
- Overvoltage protection
- TDFN-6 2mm x 2mm package

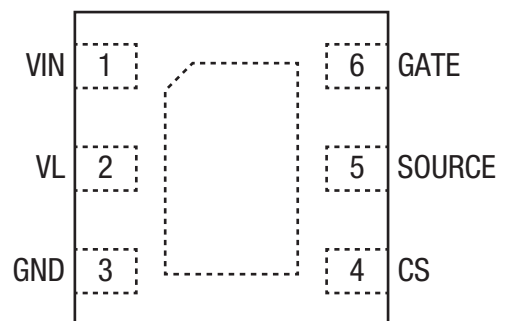
#### System

- Single board LED lighting solution available
- No electrolytic capacitor or MOV required
- Scalable architecture allows optimization of performance vs. cost
- Driver-on-board and chip-on-board design solution available which minimize process flow and assembly cost
- High PF and Low THD performance
- Flexible PCB layout options
- TRIAC dimmable
- All solid state components

### APPLICATIONS

- LED Lighting Applications
  - Downlight
  - High bay
  - Specialty
  - Architectural

### Pin Configuration



TDFN-6 2mm x 2mm

## Ordering Information<sup>(1)</sup>

Part Number	Operating Temperature Range	Lead-Free	Package	Packaging Method
XR46073IHBTR	-40°C to 85°C	Yes <sup>(2)</sup>	TDFN6 2x2	Tape and reel

**NOTE:**

1. Refer to [www.exar.com/XR46073](http://www.exar.com/XR46073) for most up-to-date Ordering Information.
2. Visit [www.exar.com](http://www.exar.com) for additional information on Environmental Rating.

Please contact [LEDtechsupport@exar.com](mailto:LEDtechsupport@exar.com) to request a complete datasheet.



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