



**THE DATASHEET OF  
XR46010ISBTR**





# XR46010 Product Brief

## Active Load Current Regulator for Phase-Cut Dimmable AC Direct Drive LED Lamp

### Description

The XR46010 is an active load current regulator for phase-cut dimmable AC direct drive LED lamp system. The active load circuit can provide the holding current for TRIAC and also the charging current path of R/C circuit in a dimmer. It can help to stabilize TRIAC operation and increase the dimming range of the lamp system.

The application of the XR46010 is configured in parallel with an LED string. It conducts the current when the LED string is in off state, and stops conducting the current when the LED string is in on state.

The active load circuit can be placed in the same board with the LED string or a separate board in front of the LED board. The design is very flexible to meet various shape requirements.

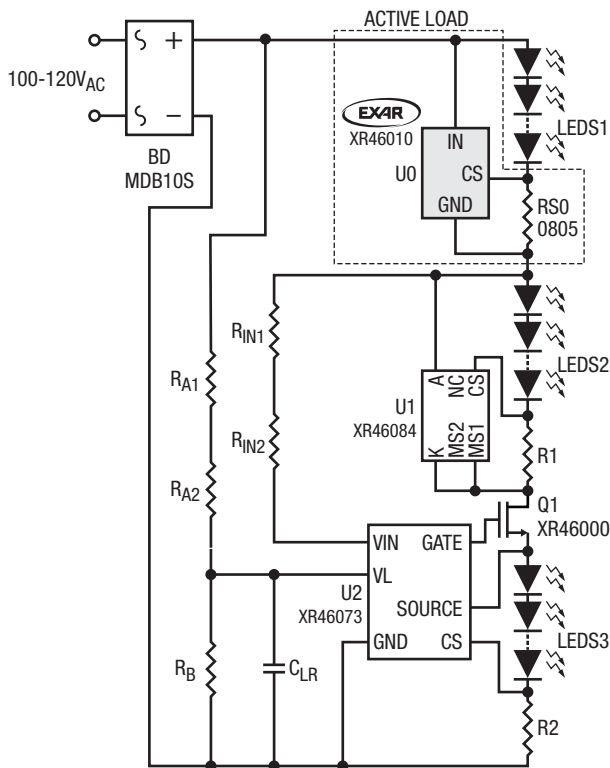
### FEATURES

- 3V to 80V input operation range
- 250mV low current sense voltage
- Linear over temperature protection

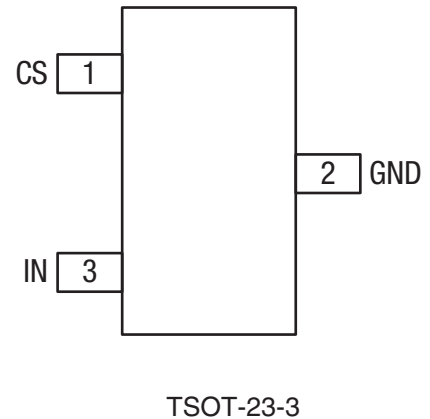
### APPLICATIONS

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

### Typical Application



### Pin Configuration



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

Part Number	Junction Temperature Range	Lead-Free	Package	Packaging Method
XR46010ISBTR	$-40^{\circ}\text{C} \leq T_J \leq 150^{\circ}\text{C}$	Yes <sup>(2)</sup>	TSOT-23-3L	Tape and reel

**NOTE:**

1. Refer to [www.exar.com/XR46010](http://www.exar.com/XR46010) 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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