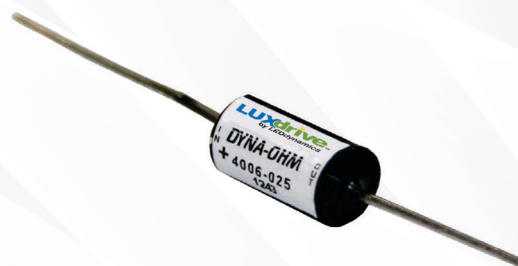


## 4006 DYNAOHM™

### Two Wire Power Module

### PRODUCT OVERVIEW

The 4006 DynaOhm™ by LUXdrive is a semiconductor based resistor that provides constant current to LEDs and strings of LEDs. It also reduces current to the LED(s) when the device temperature rises. It is the perfect replacement for a fixed resistor in circuits where the input voltage varies. The simple two wire DynaOhm™ eliminates complicated math from low power LED circuits. The DynaOhm™ can drop up to 24V (25mA model) allowing for use with 24VDC automotive systems and one LED.



The 4006 DynaOhm™

### FEATURES

- ✓ 20mA, 25mA, or 30mA, constant current output\*
- ✓ Extremely small form factor\* (0.25" diameter x 0.5" long)
- ✓ Output open circuit protection
- ✓ Pulse and strobe capable

### TYPICAL APPLICATIONS

- ✓ Solar & Landscape Lighting
- ✓ Architectural Lighting
- ✓ Track Lighting
- ✓ Automotive & Marine Lighting
- ✓ Portable Lighting & Flashlights
- ✓ Point of Purchase Lighting
- ✓ Desk & Reading Lamps
- ✓ Signal & marker Lighting
- ✓ Flashing & Strobe Lighting
- ✓ Cabinet & Display Case Lighting
- ✓ Sign Lighting
- ✓ Flashlights



## 4006 DYNAOHM™

### Two Wire Power Module

### Part Number Identification Table

Part Number	Maximum Voltage Drop	Drive Current	Connection Type
4006-020	30V	20mA	2 Wires
4006-025	24V	25mA	2 Wires
4006-030	20V	30mA	2 Wires

\*Output current rating in milliamperes (mA): 20, 25, 30 or special order factory custom rating

### Electrical Specifications

#### Absolute Maximum Ratings

Input Voltage (transient)	50VDC
Output Voltage	VIN - 2.6VDC
Reverse Voltage	-1VDC
Power Dissipation	0.6W

#### Typical Characteristics

Output tolerance (within specied temp. range)	±10%
Min input voltage for current regulation	2.6VDC + Vf LED
Min input voltage for device to conduct	0.6VDC

#### Specifications

Output current, 4006-020	20mA1
Output current, 4006-025	25mA1
Output current, 4006-030	30mA1
Maximum Operating temperature (Tcase)	-40-+100°C
Storage temperature	-40-+135°C

1 - Measured with single emitter; output current drops slightly with additional series junctions to limit maximum power dissipation

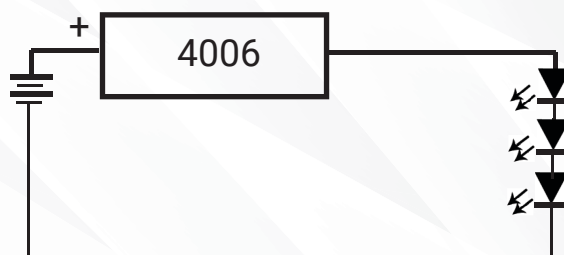
# 4006 DYNAOHM™

## Two Wire Power Module

### Application Figures

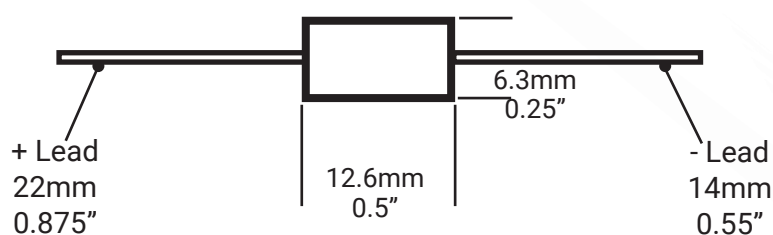


**Figure 1.**  
25mA unit driving 1 5mm LED  
(VIN > 5VDC)

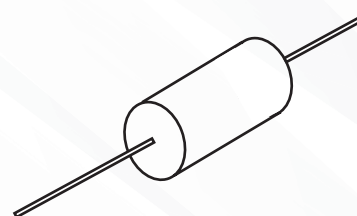


**Figure 2.**  
25mA unit driving 3 5mm LED  
(VIN > 12VDC)

### Physical Dimensions



**Figure 3.**  
Top View - Typical Physical Dimensions



**Figure 4.**  
Side View