microARC USA

eeZ LED
LED calculator

- Analog dimmable constant current circuit
- Self calibrating system ensures accuracy
- Simple interface
- User controlled voltage selection
- Accurate power and current measurement

Applications:

This LED measurement device is used to set the brightness of an LED simply without any other equipment. Ensure that the LED is at the brightness needed and power is conserved without guessing the outcome. Accurate JFET based current controller ensures precise dimming. For LED indicators and other lighting applications.

Function	Values
Range	300 uA to 25mA
Voltage selection	3.3, 4.5, 5.0, 7.4, 9.0, 12, 15, 18, 24
LED voltage accuracy	+/- 1% and 2 LSB
LED current accuracy	+/- 1% and 2 LSB
Luminosity	+/- 2%

Power Supply	5V @ 100mA, USB-C

Screen output:

5.00 V
172 Ω
1/16 W

Screen 1:
Selected Voltage,
Resistor value
Resistor Power Rating

2.02 V
17.23 mA
51 mW

Screen 2:
LED voltage
LED current
Resistor Dissipation

Operation:

Connect LED to the spring loaded connector

Adjust the dimmer by turning the potentiometer

Use up or down buttons to select system voltage

Read the resistor value and the resistor power rating.

TIPS:

* Ensure you are operating in the recommended LED current range (usually 20 mA or less). Over driving LEDs may shorten life.

* Round up from the measured value and pick a standard value (example: if it says 93Ω, pick 100Ω)

* Connect wire leads when working with SMD LEDs.