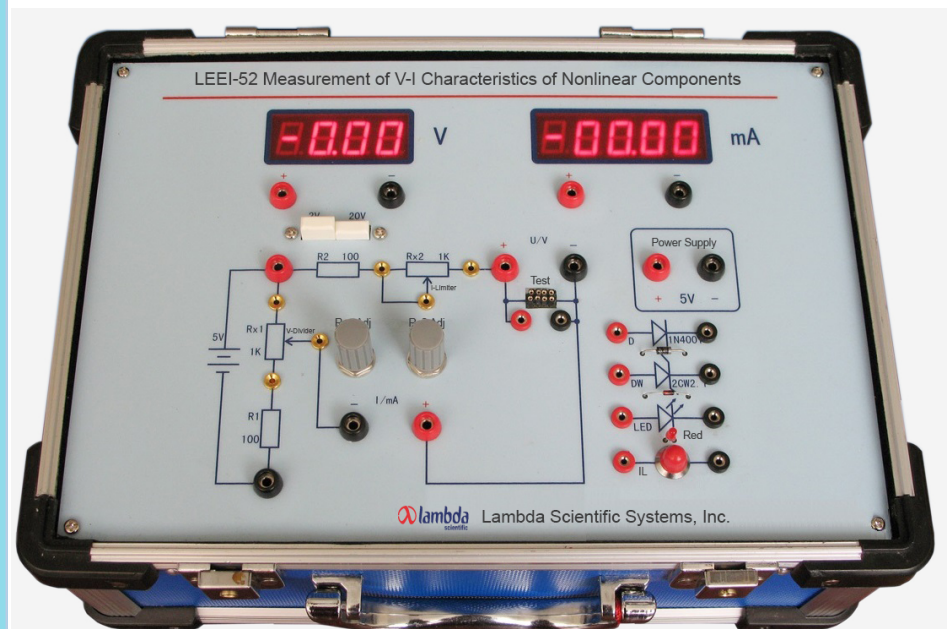


## LEEI-52 Measurement of V-I Characteristics of Nonlinear Components



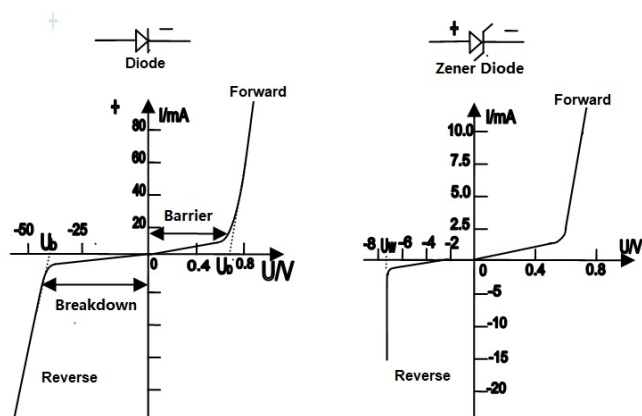
The measurement of electrical properties of linear or nonlinear components by V-I method is an important lab topic in college physics training. This experimental apparatus can help students to understand the principles of resistance current-limiting in serial connection and voltage-dividing in parallel connection and understand the electrical characteristics of different components, while master the method for measuring V-I characteristics of regular diode, Zener diode, light-emitting diode and ordinary tungsten bulb.

LEEI-52 apparatus consists of a 5 VDC regulated power supply, a digital voltage meter, a digital current meter, variable resistors, a regular diode, a Zener diode, a light-emitting diode, a tungsten bulb and so on. The following objectives can be achieved:

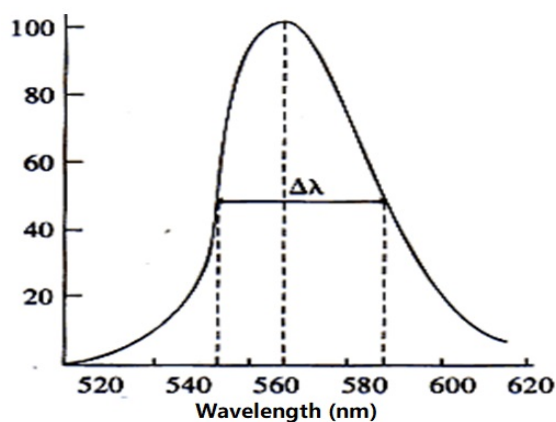
1. Master the method and the basic circuit of measuring V-I characteristics of nonlinear components.
2. Master the basic characteristics of diodes, Zener diodes and light-emitting diodes. Accurately measure their forward threshold voltages.
3. Plot the graphs of V-I characteristic curves of the above three nonlinear components.

## Specifications

Description	Specifications
Voltage source	+5 VDC, 0.5 A
Digital voltmeter	0 ~ 1.999 V, resolution, 0.001V; 0 ~ 19.99 V, resolution 0.01 V
Digital ammeter	0 ~ 200 mA, resolution 0.01 mA
Power consumption	< 10 W



V-I characteristics of diode and Zener diode



Light spectrum of a LED