

High-speed Pulse current source by combining PEL and PSW

In general, the electronic load device is a sink (absorption) used to evaluate the source (supply) side. By connecting DC electronic load PEL in series with DC power supply PSW, it can be operated as a constant current source that can supply high-speed current to the device under test (DUT). Using the sequence function of the PEL-3000 series can be used as a pulse current source of high speed and complicated waveform.

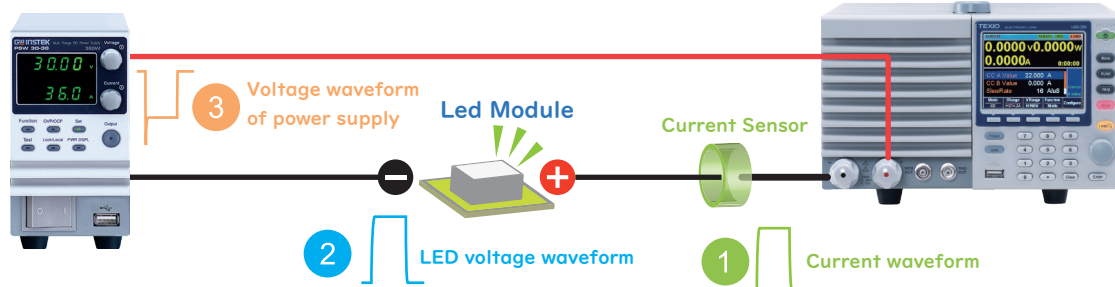
Example: Test Connection

High-speed Pulse current test combining DC power supply PSW and DC electronic load PEL-3000

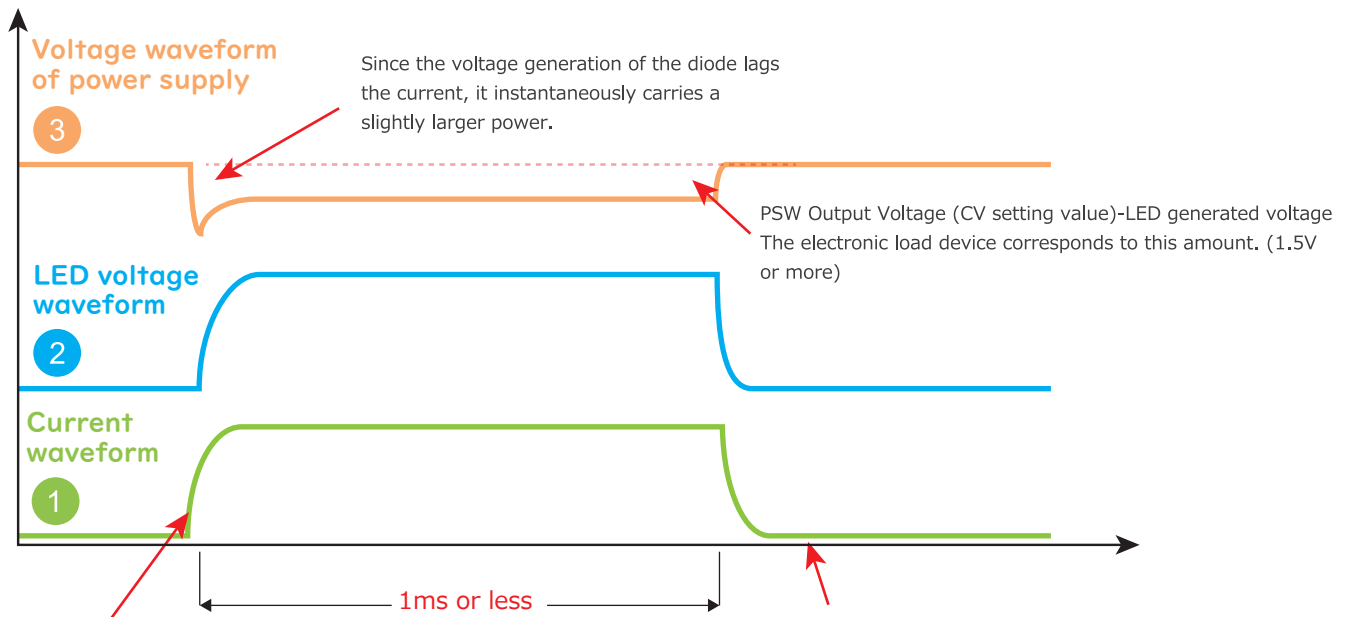
Connect the DUT(LED) in series between the PSW and the PEL. Pulse current is applied to the evaluation LED by forcibly flowing current with the PEL. By using the Sequence operation of PEL-3000 can be set various high-speed currents test conditions.

DC Power Supply PSW

Electronic Load PEL-3000



It is necessary to reduce L component and C component by using short and thick wiring



On the performance of the device it is possible to raise 100 A or more at less than 100 μ s. However, the rise time will be delayed by the L and C components of the wiring including the LED.

Even if the minimum value is set to 0 A, the PEL responds at high speed, so it can not be set to 0 A perfectly, and a slight leakage current will be generated.

Feature

- High current pulse source can be supplied at low cost

- Can be used as a constant current source for various devices

In general, if you need fast current pulses, you need a bipolar power supply. However, those that can supply high current pulses are large and quite expensive.

A system combining PEL and PSW can build a pulsed current source at low cost. In addition, the output level, frequency, and duty ratio can be varied by changing the setting of the electronic load device.

This combination can also used for evaluating with constant current and transient current to DUT such as Diode(include LED), surface treatment (plating) equipment, pulse charging to rechargeable batteries, fuse blow test, current sensor etc can do.