PZ2120A and PZ2121A Precision Source/Measure Unit

Precision SMU Modules for PZ2100A SMU Mainframe

High-Speed SMU Enabling Best-In-Class Dynamic/Pulsed Measurements with a Narrow Pulse Down to 10 µS at a Fast-Sampling Rate of up to 15 MSa/s for a Wide Range of Emerging Applications

Key features

- Best-in-industry narrow pulse down to 10 µs pulse width
- Best-in-industry fast Digitizer Mode with 15 MSa/s sampling rate
- Wide output range up to 60 V/3.5 A DC/10.5 A pulse
- Wide dynamic range for dynamic measurement with seamless current measurement ranging
- Fast transient with 3.5 V/µs slew rate at maximum

Typical applications

- Optical devices
  (laser diodes, photodiodes, LEDs, etc.)
- Vertical cavity surface emitting laser (VCSEL) sensors/modules
- Integrated circuit (IC) design verification tests/function tests
  (RF PA/FEM, analog ICs, RFICs, MMICs, etc.)

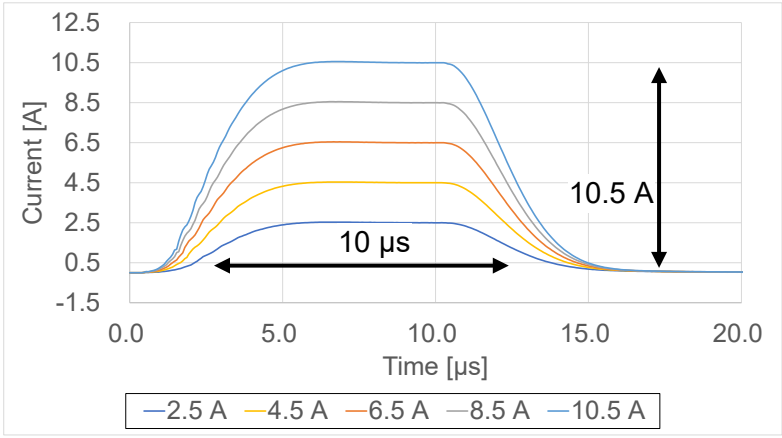

Figure 1. 10 µs Current Pulse Output measured with Digitizer Mode at 15 MSa/s

More Information: www.keysight.com/find/pz2121a

Key specifications and characteristics

		PZ2120A	PZ2121A
Number of channels		1	
Number of slots		1	
Output range	Max. voltage	60 V	
	Max. current (DC)	3.5 A	
	Max. current (Pulse)	10.5 A	
Resolution	Min. voltage	6 µV	
	Min. current	100 fA	
Current measurement noise RMS(1 PLC)		400 fArms	
Voltage source noise	RMS (20 MHz)	< 3.5 mVrms	
	RMS (200 MHz)	< 6 mVrms	
Min. pulse width		50 µs	10 µs
Max. slew rate		3.5 V/µs	
Digitizer mode		Yes	
Max. sampling rate		1 MSa/s	15 MSa/s
Auto measurement ranging		Yes	
Seamless current measurement ranging		Yes	

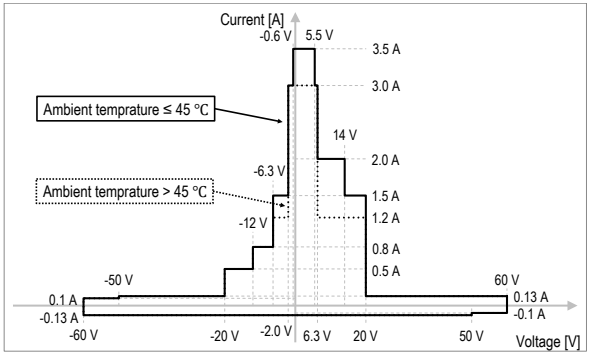

Figure 2. DC voltage and current output capability

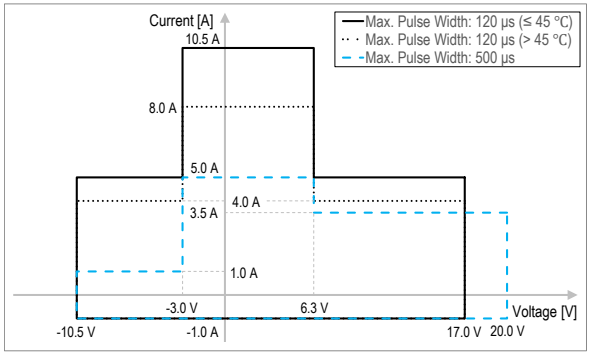

Figure 3. Pulsed voltage and current output capability

PathWave IV Curve software

PathWave IV Curve software enables the PZ2100A series SMU solution to accelerate research, development, and design verification by executing synchronous current-voltage (IV) measurements on up to 20 channel SMUs in a mainframe, immediately reviewing test results on graphs and tables and efficiently generating reports without programming.

PZ2100 High Channel Density Precision SMU Solution