TELEDYNE LECROY
Everywhereyoulook™

Power-Device Software

Key Features

- **Double/Multi pulse test analysis**
- **Complete solution for DPT**
- **Supported tests**
  - **Turn on/off delays**
  - **Switching power/energy losses**
  - **Conduction losses**
  - **Reverse recovery analysis**
- **Help markers to highlight limits**

Teledyne LeCroy's Power-Device Software simplifies wide bandgap (WBG) device analysis.

Complete Solution for DPT

Double Pulse Test (DPT) for characterizing silicon carbide (SiC) and gallium nitride (GaN) devices is easier with Teledyne LeCroy's Power-Device software, 12-bit high definition oscilloscopes, comprehensive probe offerings, and arbitrary function generators.

Easy Setup and Configuration

Define your input signals once and allow Power-Device to display measurement results in an easy to read, interactive table with the ability to track measurements. Fine tune any horizontal or vertical skews between signals from within the software itself for enhanced convenience.

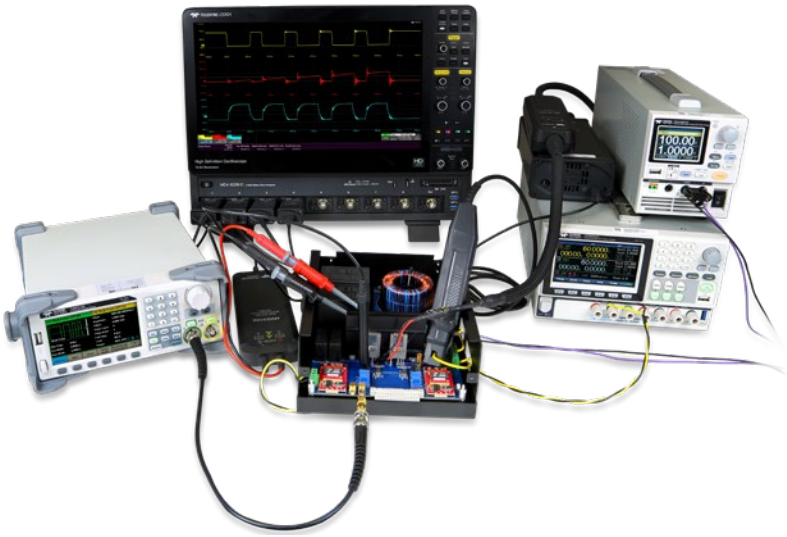
Flexible

Simply select a test and make measurements by automatically setting limits recommended by JEDEC® guidelines. Power-Device also allows customers to override pre-defined limits and set any of the measurement limits manually.

Efficient

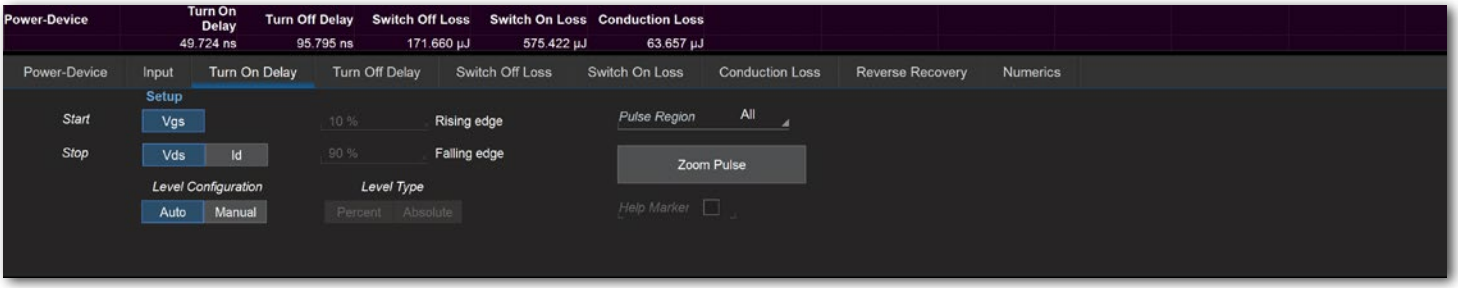
Whether it is single, double, or multiple pulses, view all test results in the Numerics window with a simple push of a button, or select per cycle waveform to view per-pulse results.

MOST ACCURATE GaN AND SiC CHARACTERIZATION



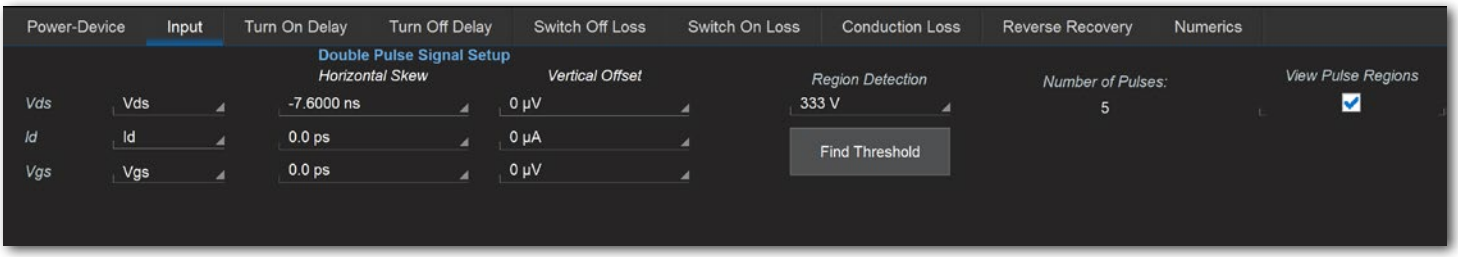
Complete Solution for Double Pulse Testing

- Teledyne LeCroy's 12-bit high definition oscilloscopes provide low noise, high precision
- Teledyne LeCroy probes have exceptional CMRR, signal fidelity, and high accuracy
- Power-Device software simplifies analysis by automatically and accurately measuring captured waveforms
- Teledyne Test Tools' Arbitrary Function Generator (AFG) and power supplies simulate gate driver and DC bus link



Flexible and Efficient

- Toggle between pre-defined JEDEC or manual limits with a push of a button
- View all test results in a simple Numerics table
- Hone in on individual pulses for more detailed analysis



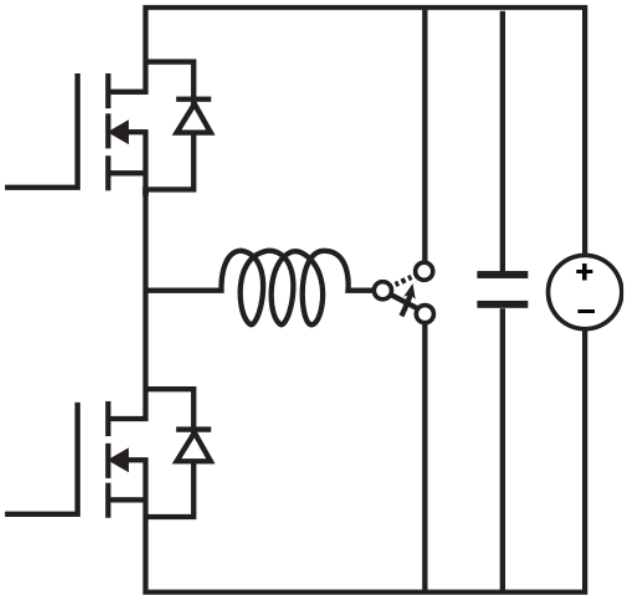
Easy Setup and Configuration

- Drag-and-drop DPT signals into Power-Device; values for skews get pulled over from channels automatically
- Convenient fine tuning of horizontal and vertical skews within the setup tab
- Automatic configuration of measurements

HIGHEST CONFIDENCE FOR WIDE BANDGAP MEASUREMENTS

Full Double Pulse Test Coverage

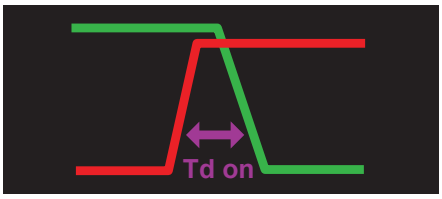
- Confidently execute double pulse test on both high-side (floating) and low-side devices
- Configure Teledyne Test Tools arbitrary function generators (AFGs) to drive gate drivers with double or multiple pulses of varying pulse widths to simulate tests at different current levels
- Use one, or daisy chain multiple, Teledyne LeCroy power supplies to test devices at various DC bus levels
- Capture waveforms using a mix of isolated and non-isolated measurements. To select an appropriate probe for DPT measurements, use the interactive guide at teledynelecroy.com/powerprobes



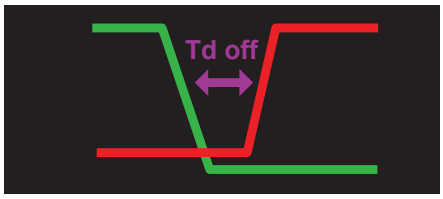
DPT block diagram for both low side and high side devices

Power-Device Supported Measurements

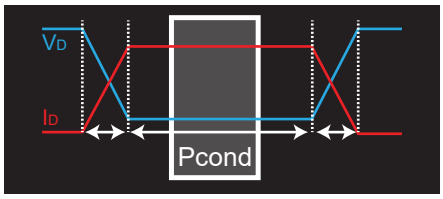
Turn On Delay



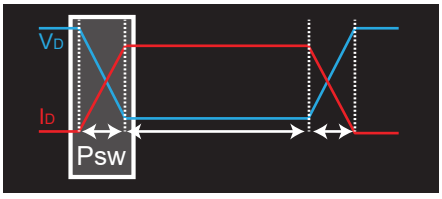
Turn Off Delay



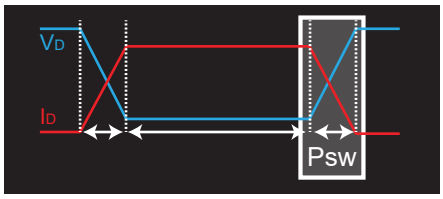
Conduction Loss



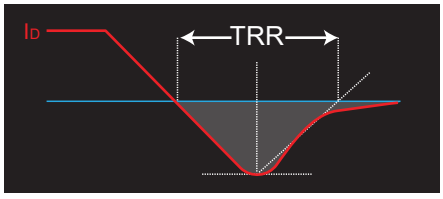
Switch On Loss



Switch Off Loss



Reverse Recovery Analysis



ORDERING INFORMATION

Recommended Double Pulse Test Equipment

DL-ISO Series

Optical isolation provides the best noise immunity at the fastest dV/dt while also providing safe operation, high signal fidelity, and flexible connectivity to in-circuit signals in SiC and GaN designs.

HVD Series

The HVD3000A series high voltage differential probes provide high CMRR over a broad frequency range to simplify the measurement challenges found in noisy, high common-mode power electronics environments.

DL-HCM Series

The ideal probes for lower GaN power conversion measurement with the highest accuracy, best CMRR, and lowest noise. Up to 1 GHz in bandwidth.

T3AFG 200/350/500

Configure Teledyne Test Tools AFGs to drive gate drivers with double or multiple pulses of varying pulse widths to simulate tests at different current levels.

T3PS Series

Use one or daisy chain multiple Teledyne Test Tools power supplies to test devices that are various DC bus levels.

Product Description	Product Code
Power Device Analysis Software Options	
Power Device Analysis Option for HDO4000	HDO4K-POWER-DEVICE
Power Device Analysis Option for HDO6000	HDO6K-POWER-DEVICE
Power Device Analysis Option for WaveRunner 9000	WR9K-POWER-DEVICE
Power Device Analysis Option for WaveRunner/MDA 8000HD	WR8KHD-POWER-DEVICE
Power Device Analysis Option for WavePro HD	WPHD-POWER-DEVICE
Power Device Analysis Option for WaveMaster 8 Zi-B	WM8ZI-POWER-DEVICE
Power Device Analysis Option for WaveMaster 8000HD	WM8KHD-POWER-DEVICE

Customer Service

Teledyne LeCroy oscilloscopes and probes are designed, built, and tested to ensure high reliability. In the unlikely event you experience difficulties, our digital oscilloscopes are fully warranted for three years and our probes are warranted for one year. This warranty includes:

- No charge for return shipping
- Long-term 7-year support
- Upgrade to latest software at no charge

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1-800-5-LeCroy
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Local sales offices are located throughout the world.
Visit our website to find the most convenient location.