

DOUBLE-PULSE TESTING SOLUTIONS WITH MXO SERIES OSCILLOSCOPES



Benefits:

- ▶ Modules, discretos, silicon, SiC and GaN – one tester for all devices
- ▶ Fast setup times
- ▶ Avoidance of human errors through error-detecting software
- ▶ Fast amortization due to reduction of required human resources
- ▶ Use of existing infrastructure (compatibility)

Features:

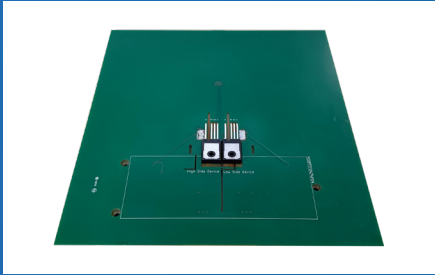
- ▶ Test voltage up to 2 kV (also available in 4.5 kV and 10 kV)
- ▶ Test current up to 6.5 kA
- ▶ Test temperature 25°C to 250 °C / -55°C to 250°C with ThermoStream
- ▶ Optimized test fixtures for all packages
- ▶ Universal gate drivers
- ▶ Different load inductors and DC-links
- ▶ Very low stray inductance
- ▶ High performance Rohde & Schwarz scope and probes

ROHDE & SCHWARZ

Make ideas real



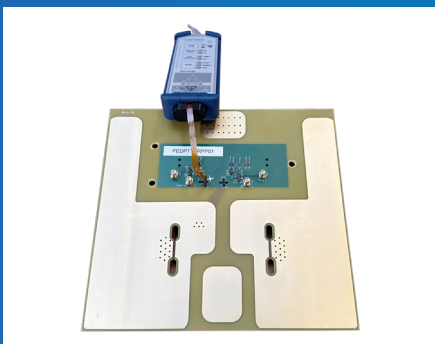
MODULAR DOUBLE-PULSE



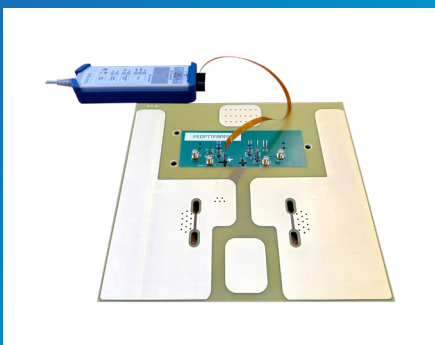
Adapter for TO Package



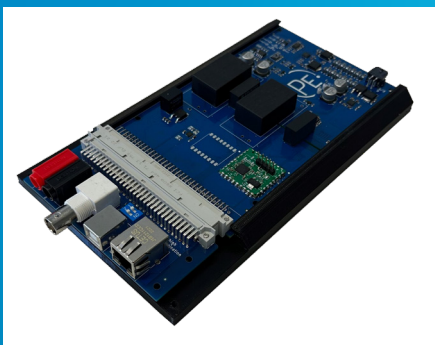
Adapter for RoadPack Package



Short PCB adapter



Long PCB adapter



Flexibly configurable gate driver

FLEXIBLE ADAPTER PCB FOR DIFFERENT PACKAGES AND APPLICATIONS

The double-pulse tester features highly optimized, easily interchangeable PCB-based test fixtures, designed to accommodate a wide range of semiconductor devices. Whether you're testing discrete components, power modules, or custom package designs in Si, SiC, or GaN technologies, the flexible stack design ensures seamless integration with your testing requirements. This adaptability allows you to quickly exchange fixtures and optimize PCBs for each specific use case, providing unmatched precision and performance while reducing setup times.

Experience the ultimate in testing flexibility without compromising on accuracy or efficiency.

CONNECTION TO MEASUREMENT SYSTEM FROM THE BOTTOM

The innovative probe-adapter, made from flexible PCB material, offers a superior alternative for precise and easy measurements. This advanced design offers an exact known impedance, ensuring minimal signal degradation and maximum accuracy. The result? A seamless, highly reliable and repeatable connection that boosts the precision of your measurements.

With our flexible PCB-based adapter, you gain the benefit of optimized performance for measuring fast-switching devices, delivering results you can trust every time.

VARIABLE GATE DRIVE AND LOAD INDUCTOR CONFIGURATIONS

The universal gate driver allows for sweeping of turn-on and turn-off resistances in 2^6 steps as well as the gate on- and off voltage (from 0 to +20V). This enables rapid determination of optimal driver parameters. This implementation is highly versatile and adaptable for various applications.

TEST SYSTEM

FULLY AUTOMIZED MEASUREMENT

The software enables fully automated measurement campaigns, streamlining workflows in the lab. It significantly reduces the time required for manual measurements. By automating repetitive tasks, it enhances efficiency and productivity in the lab.

Lab work is tedious and demands a great deal of resources. PE-Systems intuitive software decreases efforts tremendously with the help of:

- ▶ Automatic device tests
- ▶ Conflict manager for human error reduction
- ▶ Offline analysis and data management
- ▶ Automatic extraction of many device and circuit parameters
- ▶ Uncertainty quantification and automatic device modeler
- ▶ Integration of in-house measurement standards
- ▶ Automatic De-Skew function



NEXT GENERATION OSCILLOSCOPE AND PROBES: EVOLVED FOR MORE CHALLENGES

The specifications make the MXO 5 series as well as the RT-ZISO isolated probing system the industry leader in cutting-edge technology for swift and precise results. The innovative solution delivers unparalleled accuracy, sensitivity, dynamic range and bandwidth, while enabling next generation wide bandgap (WBG) SiC and GaN power designs. The remarkable performance at the core of the solution provides precise differential measurements up to ± 3000 V on reference voltage levels of ± 60 kV with rise time of < 450 ps. Most importantly, the solution can suppress fast common-mode signals that distort and disturb accurate measurements.



Probing	RT-ZHD	RT-ZISO
Bandwidth / max. Risetime	up to 200 MHz / < 4 ns	up to 1 GHz / < 0.45 ns
Input Voltage	up to ± 6 kV	± 3 kV
max. Voltage to GND	up to 6 kV	± 60 kV
Offset	up to ± 2 kV	± 3 kV
CMRR	> 80 dB@DC	> 145 dB @ DC, > 90 dB @ 1 GHz
Divider Ratio	25:1 to 1000:1	1.5:1 up to 100:1



Service at Rohde & Schwarz You're in great hands

- ▶ Worldwide
- ▶ Local and personalized
- ▶ Customized and flexible
- ▶ Uncompromising quality
- ▶ Long-term dependability

Rohde & Schwarz

The Rohde & Schwarz technology group is among the trailblazers when it comes to paving the way for a safer and connected world with its leading solutions in test & measurement, technology systems and networks & cybersecurity. Founded 90 years ago, the group is a reliable partner for industry and government customers around the globe. The independent company is headquartered in Munich, Germany and has an extensive sales and service network with locations in more than 70 countries.

www.rohde-schwarz.com

Sustainable product design

- ▶ Environmental compatibility and eco-footprint
- ▶ Energy efficiency and low emissions
- ▶ Longevity and optimized total cost of ownership

Certified Quality Management

ISO 9001

Certified Environmental Management

ISO 14001

Information Security Management System

ISO/IEC 27001

Certified Quality Management

AQAP-2110

Rohde & Schwarz training

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