

Scope Based RF Network Analyzer

J2151A PerfectPulse® TDR Based RF Network Analyzer

Measuring the S-Parameter Transfer Function (S21) of Filters, Probes, and Other RF Devices Can Be Performed Using an Oscilloscope

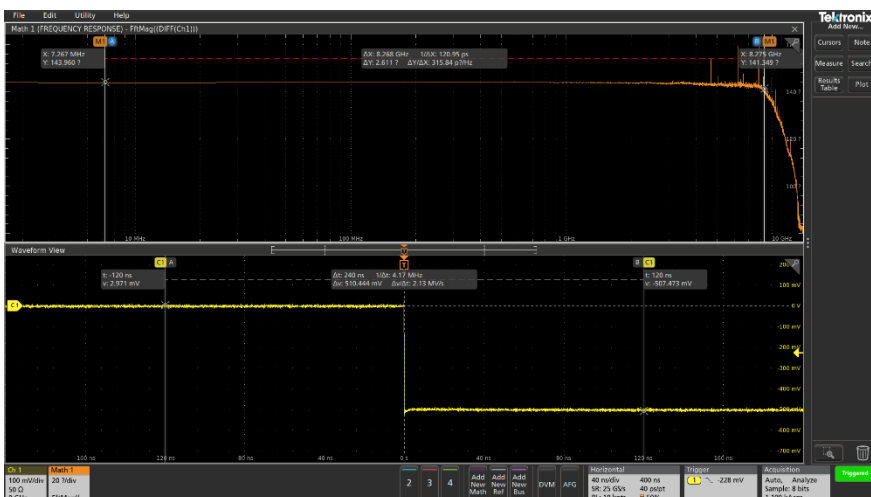
Engineers frequently need to measure frequency response components, probes and other signal and measurement paths at high frequency. Excellent Network Analyzers (VNA) with extended calibration capabilities and lower dynamic range exist for this purpose.

In many cases these measurements are below 8GHz and in these cases an oscilloscope-based measurement offers a low cost, convenient add-on to the scope you already own.

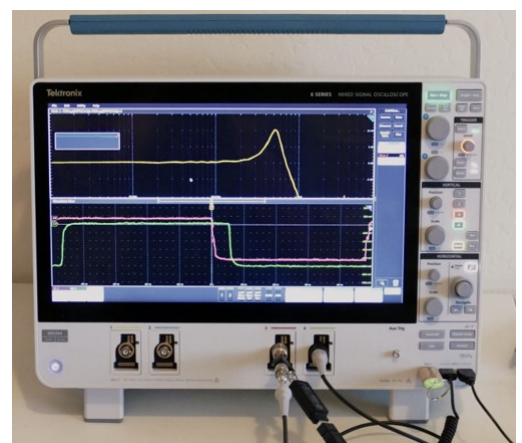
The J2151A PerfectPulse® Fast Edge Signal Generator TDR kit includes a 32ps edge generator and 6dB power divider, capable of performing TDR measurements with any oscilloscope. By reversing the direction of the resistor divider, the kit also provides a 50Ω source impedance required to make S21 transmission measurements.

With an impulse bandwidth of 10.5GHz, measuring the frequency response of an 8GHz oscilloscope is quick and easy.

- Measure S21 of cables, probes, filters, scopes, and RF devices
- ~32ps Fall time allows measurements up to 10.5GHz
- Uses FFT math functions to convert the ultra-fast pulse edge to frequency domain
- Measures in conjunction with the oscilloscope for end-to-end measurement
- Pocket size
- USB powered
- Very simple to use
- Low cost J2151A PerfectPulse® TDR kit includes the power divider required for this measurement solution

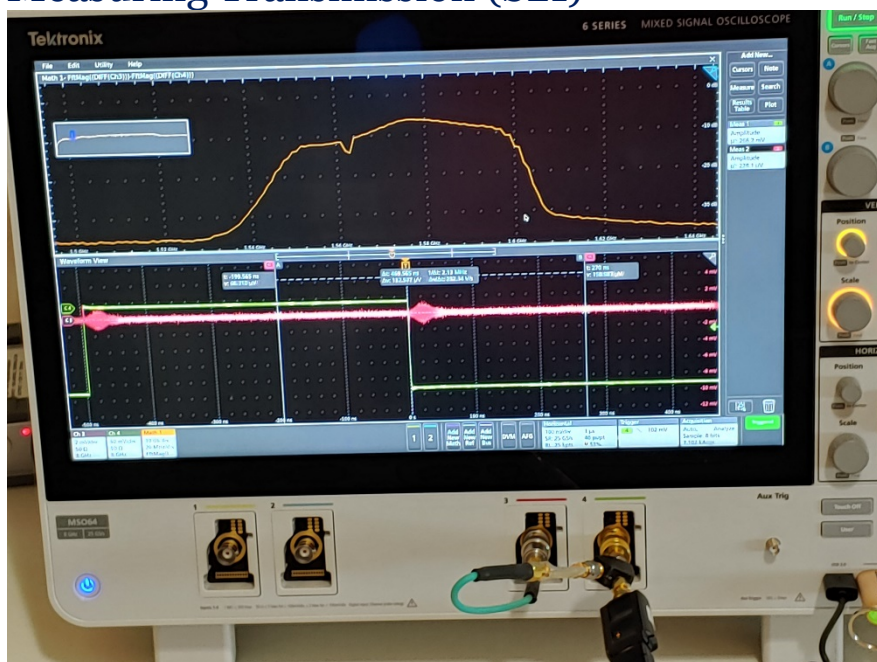


6 Series 8GHz oscilloscope frequency response using step response setting

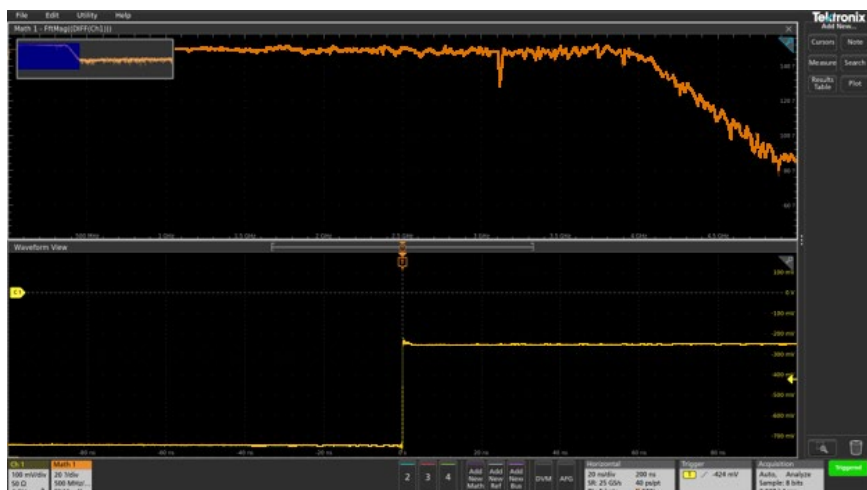


Measured frequency response of a passive, high impedance oscilloscope probe

Measuring Transmission (S21)



Measuring the frequency response of a 1.575GHz bandpass filter is fast and accurate using the J2151A PerfectPulse® TDR Kit.



Measured frequency response of a TPR4000 4GHz Power Rail Probe

The J2151A TDR Kit, which includes the high frequency power divider, makes a fast, simple to use network analyzer.

Products

J2151A PerfectPulse® Fast Edge Signal Generator Precise, Fast Edge Generation and TDR in one convenient package

PDN Cable (0.5m or 1m) Very thin, ultra-flexible cable optimized for PDN and SI testing. Reduced shield resistance for more accurate PDN impedance measurements

To learn how this solution can address your specific needs please contact Picotest:

877-914-7426

info@picotest.com

www.picotest.com



J2151A Pocket TDR



PDN Cable

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