

20 GHz Single-ended TDR Probe

P8018 Datasheet



The P8018 TDR Probe is a single-ended passive probe with a precision 20 GHz bandwidth SMA cable that provides a high performance solution for electrical sampling TDR circuit board impedance characterization and high-speed electrical signal analysis applications.

Notice to EU customers

This product is not updated to comply with the RoHS 2 Directive 2011/65/EU and will not be shipped to the EU. Customers may be able to purchase products from inventory that were placed on the EU market prior to July 22, 2017 until supplies are depleted. Tektronix is committed to helping you with your solution needs. Please contact your local sales representative for further assistance or to determine if alternative product(s) are available. Tektronix will continue service to the end of worldwide support life.

Features and benefits

- 20 GHz probe tip bandwidth
- 50 Ω impedance TDR passive probe

- Undisturbed 50 Ω probe reference section
- Includes 20 GHz precision SMA cable
- Probe tip pressure actuation feature used to actuate 80A02 EOS/ESD protection module

Applications

- Circuit board controlled impedance testing (TDR)
- Designed for use with 80A02 EOS/ESD protection module

P8018 Handheld TDR probe

The P8018 Handheld TDR Probe is a greater than 20 GHz, 50 Ω input impedance, single-ended passive probe with a precision 20 GHz bandwidth SMA cable that provides a high performance solution for electrical sampling TDR circuit board impedance characterization and high-speed electrical signal analysis applications. The P8018 probe can be used as a stand alone high bandwidth probe, but it is specially designed with features to be used with the 80A02 EOS/ESD Protection Module for protecting the sampling bridge of Tektronix electrical sampling modules from damage due to electro-overstress (EOS) and electro-static discharge (ESD) where large static charges can be stored in the DUT.

The P8018 provides a unique probe tip pressure actuating feature and control circuit which, used with the matching 80A02 EOS/ESD Protection Module, enables a superior technique and performance capability for electrical sampling module EOS/ESD protection of acquired electrical signals and TDR measurements. (See 80A02 product description.)

Specifications

All specifications are typical.

Nominal length with cable	1 m
Attenuation	1X
Probe bandwidth	>20 GHz
Cable bandwidth	20 GHz
Probe pitch	1.8 mm (signal to ground)
Connector type	SMA
Measured reflected TDR fall time	<38 ps spec (<28 ps typical measure with 80E04)
Loading input	50 Ω
Maximum input voltage	5.0 V
Propagation delay	1.0 ns
TDR control activation force	200 to 260 grams

Ordering information

Models

P8018

20 GHz Single-ended TDR Probe

Includes: 20 GHz bandwidth 50 Ω input impedance, single-ended passive handheld probe with precision 20 GHz SMA cable, 20 each replaceable ground clips

Replaceable parts

016-1936-xx

20 each ground clips

174-4879-xx

20 GHz SMA cable with parallel control line (1 m)