

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

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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)

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