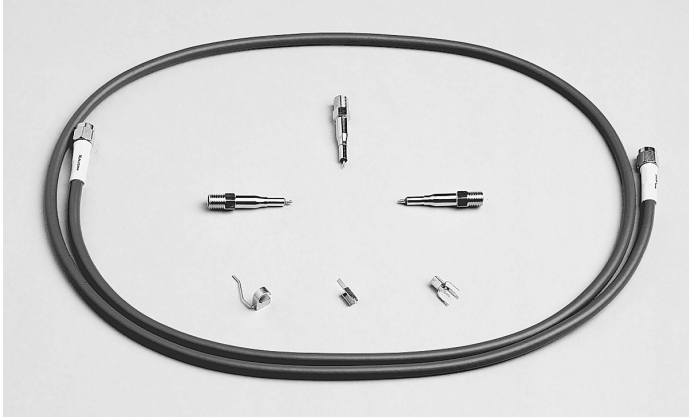


# 50 Ω Divider (Zo) Low Capacitance

## P6150 Data Sheet



P6150

### Features & Benefits

#### Low Impedance Zo TDR Passive Probes

- Low Capacitive Loading to Extremely High Frequencies
- Interchangeable Attenuator Tip Assemblies: 1X, 10X (P6150)

### Applications

- High-speed Device Characterization in Microwave Communication, Signal Processing and Logic Applications
- Propagation Delays for ECL, GaAs and Other Logic Circuitry and Devices
- Circuit Board Impedance Testing (TDR)
- High-speed Sampling Systems

### P6150 DC to 9 GHz

The P6150 is a 9 GHz bandwidth, 10X attenuation, low impedance probe designed for use with the SD2X family of Sampling/TDR plug-ins. The probe consists of interchangeable, screw-in attenuator tip assemblies (1X and 10X) and an SMA-to-SMA probe cable. An assortment of circuit and grounding attachments is included to optimize attachment to the device under test while maintaining high signal integrity.

### Characteristics

**Nominal Length** – 1 m.

**Attenuation** – 10X:  $\pm 2\%$ , 1X:  $\pm 2\%$ .

**Bandwidth** – 9 GHz,  $\geq 3$  GHz

**Rise Time** –  $< 38.8$  ps,  $\leq 170$  ps.

**Loading Input R/C** – 500 Ω/ $< 0.15$  pF, 50 Ω/N/A.

**Max  $V_{in}$**  –  $12.5 V_{RMS}$  \*1.

**Propagation Delay** – 4.40 ns  $\pm 0.1$  ns, 4.40 ns  $\pm 0.1$  ns.

\*1 Limited by scope input or 30  $V_{RMS}$ , whichever is less.

### Recommended Instruments

TDS8000, CSA8000, TDS820, 11801C, CSA803C, TDS7404, CSA7404, TDS6404, and TDS6604 with TCA-SMA adapter.

### Ordering Information

#### P6150

10X, 9 GHz, 1.0 m, Low Impedance Probe.

**Includes:** One 1X Attenuator Head (206-0398-00); Two 10X Attenuator Heads (206-0399-03); 1.0 m Cable Assembly (174-1341-00); Instruction Sheet (070-7173-01); and 1 Accessory Kit consisting of: 20 each Ground Clip, 3 each Adjustable Ground Lead, 10 each Electrical Contact and 2 each Probe to Circuit Board Ground Connectors (020-1708-00).

### Additional Accessories

	Order
<b>Electrical Contact</b>	
GND, CLIP, PH, BRZ	131-4474-00
GND, LEAD, 0.025 WIRE NICKEL	131-4473-00
0.025 NICKEL ALLOY 52 WIRE	131-4468-00
<b>SMA Male to BNC Female</b>	015-0554-00
<b>SMA Female to BNC Male</b>	015-0572-00



Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.



Product(s) complies with IEEE Standard 488.1-1987, RS-232-C, and with Tektronix Standard Codes and Formats.

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\* European toll-free number. If not accessible, call: +41 52 675 3777

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**For Further Information.** Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit [www.tektronix.com](http://www.tektronix.com)



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