

# 500 MHz Passive Probes

## P6139B • P5050B Data Sheet



### Applications

- Low Power Devices
- Service
- Manufacturing Engineering
- Test Research and Development

The P6139B and P5050B probes are high bandwidth, high impedance 10X passive voltage probes with 10 M $\Omega$  input resistance. These probes feature a small probe head and sharp tip that makes it easier to probe dense circuitry. The P6139B and P5050B share similar electrical specifications but support Tektronix oscilloscopes with different compensation ranges. Reference the *Oscilloscope Probe & Accessory Selector Tool* located at [www.tektronix.com/probes](http://www.tektronix.com/probes) to ensure the correct probe is selected for your oscilloscope.

The P6139B and P5050B provide:

- Outstanding Electrical Performance
- Ruggedness
- Ease of Use

### Features & Benefits

#### Key Performance Specifications

- 500 MHz Probe Bandwidth
- Large Input Impedance at the Probe Tip (10 M $\Omega$ , 5pF)
- 10X Attenuation Factor
- 300 V CAT II Input Voltage

#### Ease-of-Use Features

- Compact Probe Head for Probing Small Geometry Circuit Elements
- Small Probe Body for Enhanced Visibility to the Device-Under-Test
- Replaceable Probe Tip Cartridges
- Large Accessory Set for Versatile Connectivity

#### Connectivity

- P6139B and P5050B feature the TekProbe Interface for Direct BNC Connection for Oscilloscopes with 1 M $\Omega$  Inputs
- Integrated Oscilloscope and Probe Measurement Systems Feature Intelligent Communication that Automatically Scales and Adjusts Units on the Oscilloscope Display

## Characteristics

Attenuation – 10X

Dynamic Range – 300 V CAT II

Bandwidth – 500 MHz

Input Impedance at the Probe Tip – 10 M $\Omega$ , 8 pF

Compensation Range –

P6139B: 8 pF to 18 pF

P5050B: 16 pF to 22 pF

Cable Length – 1.3 m

## Ordering Information

### P6139B

500 MHz General Purpose Passive Probe with TekProbe I Interface

### P5050B

500 MHz General Purpose Passive Probe with TekProbe I Interface

### Standard Accessories

Description	Quantity Included	Reorder Part Number
Rigid tip 3.8mm (P6139B)	1	206-0635-00
Rigid tip 3.8mm (P5050B)	1	206-0636-00
Long Ground Spring	2	016-2028-00
Alligator Ground (6")	1	196-3521-00
Hook Tip (Regular)	1	013-0362-00
IC Cap (universal) 3.8mm (was 3.5)	1	013-0366-00

### Optional Accessories

Description	Quantity per Package	Order Part Number
Short Ground Spring	2	016-2034-00
Alligator Ground (12")	1	196-3512-00
6" Clip-on Ground Lead	1	196-3198-00
Hook Tip (Micro)	1	013-0363-00
Microcircuit Test Tip	1	206-0569-00
Wire (32AWG Spool)	1	020-3045-00
BNC to Probe Tip Adapter	1	013-0367-00
PCB to Probe Tip Adapter	1	016-2016-00
Compact Probe Tip Chassis Mount Test Jack.	1	131-4210-00
Color Bands	1	016-0633-00



Product(s) are manufactured in ISO registered facilities.

*Radiotek Corporation*

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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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