

# 500 MHz Passive Probes

P6139B · P5050B



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. Visit the *Oscilloscope Probe & Accessory Selector Tool* located at [www.tek.com/probes](http://www.tek.com/probes) to ensure the correct probe is selected for your oscilloscope.

## Key performance specifications

- 500 MHz probe bandwidth
- Large input impedance at the probe tip (10 M $\Omega$ , 8pF)

- 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.

## Applications

- Low power devices
- Service
- Manufacturing engineering
- Test research and development

## Specifications

All specifications are guaranteed unless noted otherwise. All specifications apply to all models unless noted otherwise.

### Model overview

	<b>P6139B</b>	<b>P5050B</b>
Attenuation	10X	10X
Dynamic range	300 V CAT II	300 V CAT II
Bandwidth	500 MHz	500 MHz
Input impedance at the probe tip	10 M $\Omega$ , 8 pF	10 M $\Omega$ , 11 pF
Compensation range	8 pF to 18 pF	16 pF to 22 pF
Cable length	1.3 m	1.3 m

# Ordering information

## Models

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
Long ground spring	2	016-2028-xx
6" alligator ground lead	1	196-3521-xx
Standard hook tip	1	013-0362-xx
Universal IC cap, 3.8 mm	1	013-0366-xx
Marker band set, 2 each of 5 colors	1	016-0633-xx
Adjustment tool	1	003-1433-xx
Manual (English only)	1	071-2710-xx

## Recommended accessories

Description	Quantity included	Reorder part number
Short ground spring	2	016-2034-xx
12" alligator ground lead	1	196-3512-xx
6" clip-on ground lead	1	196-3198-xx
Micro hook tip	1	013-0363-xx
MicroCKT test tip	1	206-0569-xx
BNC to probe tip adapter; unterminated	1	013-0367-xx
PCB to probe tip adapter	10	016-2016-xx
Compact probe tip chassis mount test jack	1	131-8831-xx
P6139B replacement tip	1	206-0635-xx
P5050B replacement tip	1	206-0636-xx



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

**ASEAN / Australasia** (65) 6356 3900  
**Belgium** 00800 2255 4835\*  
**Central East Europe and the Baltics** +41 52 675 3777  
**Finland** +41 52 675 3777  
**Hong Kong** 400 820 5835  
**Japan** 81 (3) 6714 3086  
**Middle East, Asia, and North Africa** +41 52 675 3777  
**People's Republic of China** 400 820 5835  
**Republic of Korea** +822 6917 5084, 822 6917 5080  
**Spain** 00800 2255 4835\*  
**Taiwan** 886 (2) 2656 6688

**Austria** 00800 2255 4835\*  
**Brazil** +55 (11) 3759 7627  
**Central Europe & Greece** +41 52 675 3777  
**France** 00800 2255 4835\*  
**India** 000 800 650 1835  
**Luxembourg** +41 52 675 3777  
**The Netherlands** 00800 2255 4835\*  
**Poland** +41 52 675 3777  
**Russia & CIS** +7 (495) 6647564  
**Sweden** 00800 2255 4835\*  
**United Kingdom & Ireland** 00800 2255 4835\*

**Balkans, Israel, South Africa and other ISE Countries** +41 52 675 3777  
**Canada** 1 800 833 9200  
**Denmark** +45 80 88 1401  
**Germany** 00800 2255 4835\*  
**Italy** 00800 2255 4835\*  
**Mexico, Central/South America & Caribbean** 52 (55) 56 04 50 90  
**Norway** 800 16098  
**Portugal** 80 08 12370  
**South Africa** +41 52 675 3777  
**Switzerland** 00800 2255 4835\*  
**USA** 1 800 833 9200

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

**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.tek.com](http://www.tek.com).

Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.

