

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 Ω 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 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 Ω , 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 Ω 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 Ω , 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



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

Contact Tektronix:

ASEAN / Australasia (65) 6356 3900
Austria 00800 2255 4835*
Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777
Belgium 00800 2255 4835*
Brazil +55 (11) 3759 7627
Canada 1 800 833 9200
Central East Europe and the Baltics +41 52 675 3777
Central Europe & Greece +41 52 675 3777
Denmark +45 80 88 1401
Finland +41 52 675 3777
France 00800 2255 4835*
Germany 00800 2255 4835*
Hong Kong 400 820 5835
India 000 800 650 1835
Italy 00800 2255 4835*
Japan 81 (3) 6714 3010
Luxembourg +41 52 675 3777
Mexico, Central/South America & Caribbean 52 (55) 56 04 50 90
Middle East, Asia, and North Africa +41 52 675 3777
The Netherlands 00800 2255 4835*
Norway 800 16098
People's Republic of China 400 820 5835
Poland +41 52 675 3777
Portugal 80 08 12370
Republic of Korea 001 800 8255 2835
Russia & CIS +7 (495) 7484900
South Africa +41 52 675 3777
Spain 00800 2255 4835*
Sweden 00800 2255 4835*
Switzerland 00800 2255 4835*
Taiwan 886 (2) 2722 9622
United Kingdom & Ireland 00800 2255 4835*
USA 1 800 833 9200

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

Updated 10 February 2011

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



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.

02 Oct 2011

51W-26150-1

