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.tektronix.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 MΩ, 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 MΩ 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



Datasheet

Specifications

All specifications apply to all models unless noted otherwise.

Model overview

	P6139B	P5050B
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 MΩ, 8 pF	10 MΩ, 8 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
32AWG spool wire	1	020-3045-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.

Datasheet

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) 6771 43 010
Middle East, Asia, and North Africa +41 52 675 3777
People's Republic of China 400 820 5835
Republic of Korea 001 800 8255 2835
Spain 00800 2255 4835*
Taiwan 886 (2) 2722 9622

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

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
Departs 45 90 99 1401

Denmark +45 80 88 1401 Germany 00800 2255 4835* Italy 00800 2255 4835* Mexico, Central/South Ame

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

Updated 10 April 2013

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.

15 Apr 2013

51W-26150-2

www.te	ktroni	v com
VV VV VV . LC	NU OHI	A.00111

