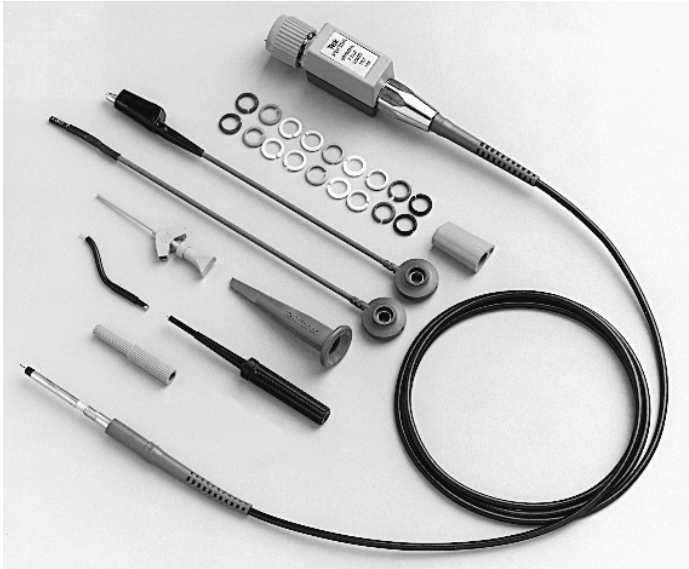


Passive Voltage Probes

P6131 • P6137 • P6138A • P6139A • P5050 Data Sheet



P6139A Model.

Features & Benefits

- Small Geometry Tips – Easier Circuit Access
- Readout for 10X Attenuation Factor – Reduces Confusion and Errors in Measurement Readings
- Flexible Lightweight Cable – Easier to Use and Reduces Mechanical Stress to Device Under Test
- HYBRID/SMT Circuitry – Provides Improved Performance and Reliability
- Modularity – Provides Lower Cost of Ownership
- Compact-size Accessories – Provides Compatibility with Existing Adapters
- UL3111-2-031, CSA1010.2.032, EN61010-2-031 (UL1244, CSA231 – P6137 only)

Applications

- High- and Low-frequency Relative Measurements for:
 - Design
 - Service
 - Manufacturing



P6137.

This family of oscilloscope probes sets the standard for high performance passive voltage probes. Continued growth of the family paces the new series of Tektronix high-performance benchtop oscilloscopes, the

TDS400/500/600/700/3000B/5000/7000B Series high-performance portable oscilloscopes.

These probes feature modular construction, HYBRID/SMT circuitry, a smaller probe head/cable assembly than traditional passive probes, 10X attenuation readout encoding, and a full complement of attachment accessories. Smaller probe tips and lightweight cable assemblies allow easy negotiation of dense circuitry or tight spaces.

The compact probe head/tip assembly is compatible with the full line of compact accessories. When the Subminiature/Compact-to-Miniature probe tip adapter (013-0202-03) is installed over the probe head/tip, the P5050, P6138A, and P6139A probes are fully compatible with all miniature tip accessories.

The NEW P5050 probe is designed to provide 500 MHz bandwidth at the probe tip for the TDS5000 Series oscilloscopes. The P6139A probe has been designed to meet the signal path requirements of the TDS500/600/700/3000B/7000B Series of oscilloscopes. Similarly, the P6138A's design meets the TDS400 Series signal path requirements, helping to ensure the highest accuracy ever in a general-purpose oscilloscope.

Characteristics

| Type | Cable Length in Meters | Bandwidth MHz | Atten. | Comp. Range pF | Input C pF | System Input Resistance MΩ | Input Voltage | Readout ID/Ground Ref. | Scope/Product Compatibility |
|--------|------------------------|---------------|--------|----------------|------------|----------------------------|----------------------------|------------------------|---|
| P6131 | 1.3 | 300 | 10X | 14 to 18 | 10.8 | 10 | 150 V _{RMS} CATII | Y/N/N | 2400 Series (2445, 2465) |
| P6133 | 2 | 150 | 10X | 10 to 25 | 12.7 | 10 | 150 V _{RMS} CATII | Y/N/N | 2400 Series (2430/A/M, 2445A, 2445B) |
| P6136 | 1.3 | 350 | 10X | 12 to 18 | 10.8 | 10 | 150 V _{RMS} CATII | Y/N/N | 2400 Series (2431L, 2439, 2455 A/B, 2465A, 2467) |
| P6137 | 1.5 | 400 | 10X | 12 to 18 | 10.8 | 10 | 400 VDC + pkAC | Y/N/N | 2400 Series (2432/A/M, 2440/MU, 2445B, 2465B, 2467B/HD) |
| P6138A | 1.3 | 400 | 10X | 12 to 18 | 10 | 10 | 300 V _{RMS} CATII | Y/N/N | TDS400 Series |
| P6139A | 1.3 | 500 | 10X | 8 to 12 | 8 | 10 | 300 V _{RMS} CATII | Y/N/N | TDS500, 600, 700, 7000B and 3000B Series |
| P5050 | 1.3 | 500 | 10X | 16 to 22 | 11.1 | 10 | 300 V _{RMS} CATII | Y/N/N | TDS5000 Series |

NOTE: Maximum voltage DC + peak AC ≤ 500.

Ordering Information

P6131

10X, 300 MHz Modular Subminiature Probe.

Includes: Retractable hook tip; adjustment tool; 8 in. ground lead; 6 in. ground lead; 2 in. ground lead with alligator clip; probe holder; 4 pairs of colored cable markers; instruction sheet (070-5514-03).

P6133

10X, 150 MHz Modular Subminiature Probe.

Includes: Same as P6131 except instruction sheet (070-5795-04).

P6136

10X, 350 MHz Modular Subminiature Probe.

Includes: Same as P6131 except instruction sheet (070-5795-04).

P6137

10X, 400 MHz Modular Compact Probe.

Includes: Adjustment tool; retractable hook tip; 2 in. ground lead; 6 in. ground lead with 0.025 in. square-pin receptacle; 6 in. ground lead with alligator clip; SMT KlipChip adapter; low inductance lead ground collar; 4 pairs of colored cable market; instruction sheet (070-6432-03).

P6138A

10X, 400 MHz Modular Compact Probe.

Includes: Adjustment tool; retractable hook tip; 2 in. ground lead; 6 in. ground lead with 0.025 in. square-pin receptacle; 6 in. ground lead with alligator clip; SMT KlipChip adapter; low inductance lead ground collar; 2 in. low inductance ground lead; 4 pairs of colored cable markers; accessory pouch; instruction sheet (063-0835-00).

P6139A

10X, 500 MHz Modular Compact Probe.

Includes: Same as P6138A except instruction sheet (063-0870-04).

P5050

10X, 500 MHz Modular Compact Probe.

Includes: Same as P6138A except instruction sheet (071-1018-01).

Recommended Accessories

Probe Accessories

| Type | Description |
|--------|--|
| 2.5 mm | Subminiature probe system for P6131, P6133, P6136. |
| 3.5 mm | Compact probe system for P6133 Opt.25, P6136 Opt.25, P6138A, P6137, P6139A, P5050. |

CE



Product(s) are manufactured in ISO registered facilities.

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 7600
Canada 1 800 833 9200
Central East Europe, Ukraine, 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) 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

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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



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