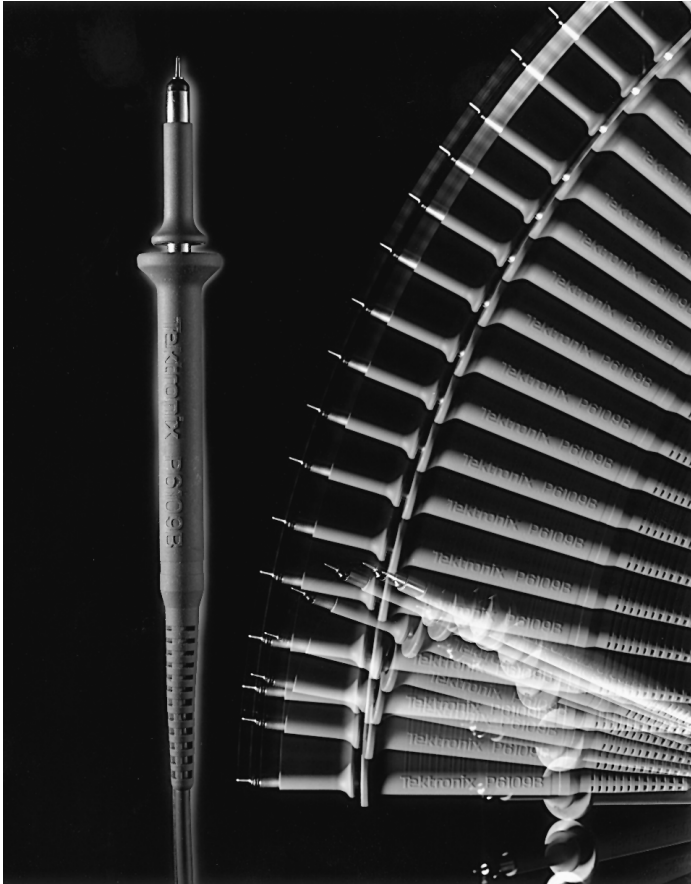


Passive Voltage Probes

P3010 • P6101B • P6109B • P6111B • P6112 • P6114B • P6117 Data Sheet



Features & Benefits

- 1 M Ω Inputs
- P6101B
 - 1X, 15 MHz, 300 V CAT I
- P6109B
 - 10X, 100 MHz, 300 V CAT II
 - Readout
- P6111B
 - 10X, 200 MHz, 300 V CAT II
 - Readout
- P6112
 - 10X, 100 MHz, 300 V CAT II
- P6114B
 - 10X, 400 MHz, 300 V CAT II
- P6117
 - 10X, 200 MHz, 300 V CAT II
- P3010
 - 10X, 100 MHz (P3010)
- Molded Passive Voltage Probes
- Single Piece, Molded Rubber Body
- Lightweight Ergonomic Design
- 10-times Improvement in Durability
- HYBRID/SMT Circuitry on Multilayer Circuit Board for Improved Performance and Reliability
- New Stronger, Replaceable Probe Tip
- Safety Certification
 - UL3111-2-031, CSA1010.2-031, EN61010-2-031, IEC61010-2-031
- 1-year Unconditional Guarantee
- Miniature Probe Tip Compatible with a Wide Range of Tektronix Accessories and Adapters

Applications

- Mixture of High, Medium, and Low-frequency General-purpose Relative Measurements
 - Engineering and Design
 - Service
 - Manufacturing



P6109B/P3010.

Passive voltage probes are the most commonly used oscilloscope probe. Other specialty probes expand the range and functionality of an oscilloscope as a measurement system, but a general-purpose, passive voltage probe is the working end of the oscilloscope, a tool used every day by engineers and technicians.

Two years of customer research, design innovation, and an exhaustive test program resulted in a most remarkable family of oscilloscope probes. This family of passive voltage probes is specifically designed for Tektronix analog and digital portable oscilloscopes. The 1X and 10X switchable probes combine the same high-quality electrical performance that customers expect from Tektronix with a new rugged mechanical design.

These probes are encased in a resilient, molded rubber body that is virtually indestructible. They are lighter in weight, more comfortable to hold, and more reliable than modular probe styles. The probes' replaceable tips are designed to withstand up to 20 pounds of force. Patented integral strain relief allows complete freedom of movement while providing superior cable flex. Each probe has received UL safety certification and meets MIL-T-28800, Class 3, environment specifications – something portable scope users will appreciate.

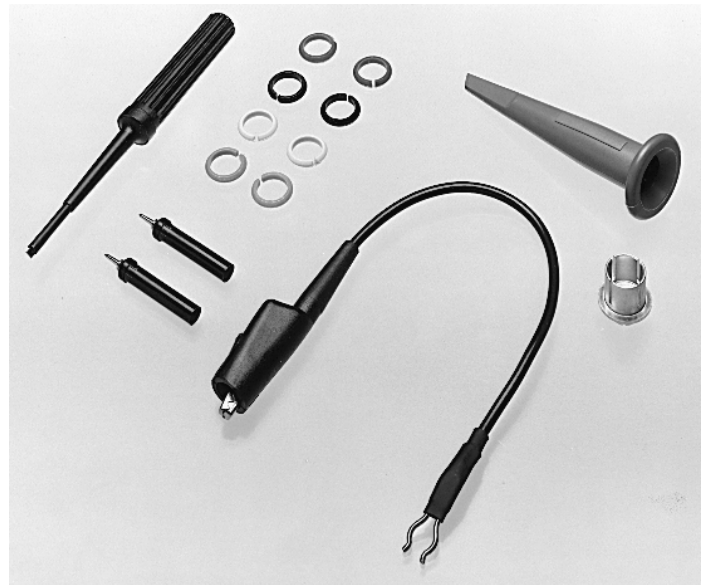
The P3010, P6101B, P6109B, P6111B, P6112, P6114B, and P6117 probes are designed to complement the Tektronix family of portable DSO and ART instruments. The core of each probe's performance is supplied by a Tektronix HYBRID/SMT device.

The instrumentation experience possessed by Tektronix provides an extra margin of quality and reliability to the molded probes that is not commonly available to probe manufacturers. These molded probes have been designed and tested to support the overall system performance and measurement quality that Tektronix oscilloscopes guarantee.

Through the introduction of the molded probes, Tektronix has set a new standard for passive voltage probe styling, performance, and durability.



P6117.



Standard Accessories.

Characteristics

| Type | Attenuation | Bandwidth (MHz) | Comp. Range (pF) | System Input Resistance (MΩ) | Typical Input C (pF) | Input RMS (Volts) | Readout | Scope/Product |
|--------|-------------|-----------------|------------------|------------------------------|----------------------|---|---------|--|
| P6101B | 1X | 15 | NA | 1 | 100 | 300 V _{RMS} CAT I | | All Scopes |
| P6109B | 10X | 100 | 15 to 35 | 10 | 13 | 400 V _{RMS} CAT I 300 V _{RMS} CAT II | X | 2211, 2221, 2224, 2230, 2232, 2235A, 2236A, 2245A, 2246A, 2247A, 2252, TAS455, TAS465, TAS475, TDS310, TDS320, TDS340, TDS340A |
| P6111B | 10X | 200 | 15 to 35 | 10 | 14 | 400 V _{RMS} CAT I 300 V _{RMS} CAT II | X | TAS485, TDS350, TDS360 |
| P6112 | 10X | 100 | 15 to 35 | 10 | 13.3 | 400 V _{RMS} CAT I 300 V _{RMS} CAT II | | TDS200 |
| P6114B | 10X | 400 | 10 to 35 | 10 | 14.1 | 400 V _{RMS} CAT I 300 V _{RMS} CAT II | X | TDS380 |
| P6117 | 10X | 200 | 15 to 35 | 10 | 13.3 | 400 V _{RMS} CAT I 300 V _{RMS} CAT II | | THS700 |
| P3010 | 10X | 100 | 10 to 15 | 10 | 13 | 400 V _{RMS} CAT I 300 V _{RMS} CAT II | X | TDS3012, TDS3012B, TDS3014, TDS3014B |

Ordering Information

P6101B

1X, 15 MHz Passive Voltage Probe.

Includes: 4 pairs of colored cable markers, retractable hook tip, 6 in. ground lead, 2 replacement probe tips, BNC to probe tip adapter, adjustment tool, storage pouch, instruction manual (070-7819-07).

P6109B

10X, 100 MHz Passive Voltage Probe with Readout.

Includes: Same as P6101B except instruction manual (070-7849-06).

P6111B

10X, 200 MHz Passive Voltage Probe.

Includes: Same as P6101B except instruction manual (070-8543-05).

P6112

10X, 100 MHz Passive Voltage Probe.

Includes: 4 pairs of colored cable markers, retractable hook tip, 6 in. ground lead, BNC to probe tip adapter, adjustment tool, instruction manual (070-9694-00).

P6114B

10X, 400 MHz Passive Voltage Probe.

Includes: Same as P6112 except instruction manual (070-9491-02).

P6117

10X, 200 MHz Passive Voltage Probe.

Includes: Same as P6112 except instruction manual (070-9729-00).

P3010

10X, 100 MHz Passive Voltage Probe.

Includes: Same as P6101B except instruction manual (071-0466-00).

Recommended Accessories

See 5 mm Probe Accessories (miniature) probe system.



Product(s) are manufactured in ISO registered facilities.

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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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