

4 GHz Active Probes

P7240 • P6209 Datasheet



Features & Benefits

- <120 ps Rise Time (Guaranteed)
- 4 GHz Bandwidth
- <0.5 pF Input Capacitance (P6241 Only)
- Small Form Factor Probe Head
- 8 V_{p-p} Dynamic Range (P6241 Only)
- Direct Access to SMDs

- Oscilloscopes Supported:
 - P7240 TDS/CSA7000 Series
 - P6209 CSA/TDS8000, TDS800 Series
- Probe Interfaces:
 - P7240 TekConnect™ Interface
 - P6209 TekProbe SMA Interface

Applications

- High-speed Digital Systems Design
- Component Design/Characterization
- Signal Integrity, Jitter and Timing Analysis
- Manufacturing Engineering and Test
- Signals with Voltage Swings up to 8 V_{p-p}
- Measures 3.0 V Logic, InfiniBand, PCI Express, DDR, Rambus Data Lines, Gigabit Ethernet

Selecting the right probe for your application is key to attaining the best signal fidelity in your measurements. Active probes provide truer signal reproduction and fidelity for high-frequency measurements. Tektronix provides you a wide range of 4 GHz active probes to select from for your application.

Performance You Can Count On

Depend on Tektronix to provide you with performance you can count on. In addition to industry-leading service and support, this product comes backed by a three-year warranty as standard.



TekConnect™ Interface – P7240

The P7240 with TekConnect interface is a high-performance active probe with high bandwidth and low-capacitive loading to make it the probe of choice for demanding design applications, such as Rambus, DDR DRAM and AGP. This probe and others in the family are also suited for applications in the communication industry, for measurements on Fibre Channel and Gigabit Ethernet. With the TekConnect interface, you can be assured that maximum signal integrity is maintained to meet present and future bandwidth needs.

SMA Interface/Sampling Oscilloscopes – P6209

The P6209 provides a high-bandwidth, low circuit loading probing solution for the CSA/TDS8000B sampling oscilloscopes with TekProbe SMA input connection. Based on the P6249 probe design, the P6209 has similar performance and a similar small probe head for access to today's fine-pitch SMDs and connection points.

Characteristics

| Model | | |
|-------------------|-------------|--------------|
| Characteristic | P7240 | P6209 |
| Rise Time | <120 ps | <120 ps |
| Bandwidth | 4.0 GHz | 4.0 GHz |
| Attenuation | 5X | 5X |
| DC Resistance | 20 kΩ | 20 kΩ |
| Input Capacitance | <1 pF | <1 pF |
| Dynamic Range | ±2 V | ±2 V |
| Offset Range | ±5 V | ±5 V |
| Interface | TekConnect™ | TekProbe SMA |

Ordering Information

P7240
4.0 GHz Active Probe.

P6209
4.0 GHz Active Probe.

Warranty – Three years.

User Manuals –
P7240: Order 071-0759-xx.
P6209: Order 071-0634-xx.

Included Accessories

| Product Name/Description | Part Number | Quantity |
|---|----------------------------------|----------|
| Customizable Ground Lead (Set of 5) | 196-3482-00 | 1 |
| Lead Set: 196343700 (3) 196345700 (2) | 196-3456-00 | 1 |
| Adapter Spring (Set of 10) | 016-1774-00 | 1 |
| SMT KlipChip™ Adapter | 206-0364-01 | 2 |
| Pogo Pin (Set of 10) | 016-1772-xx | 1 |
| Square Pin Socket (Set of 10) | 016-1773-xx | 1 |
| Square Pin Adapter (Set of 4) | | |
| Probe Tip (Set of 30) | 131-5638-30 | 1 |
| Color Coding Bands, 2 Each of 5 Colors | 016-1315-00 | 1 |
| Probe Carrying Case | 016-1879-01 | 1 |
| Accessory Case | 016-7164-00 | 1 |
| Wrist Strap | 006-3415-04 | 1 |
| SureToe™ (Set of 12) | ST501 (Replacement Pkg of 12) | 1 |

Recommended Accessories

| Product Name/Description | Part Number | Quantity |
|-------------------------------|-------------|----------|
| SMK4 – IC Grabber (Set of 2) | 013-0309-00 | 1 |
| SureFoot®, 50 mil (Set of 12) | SF501 | 1 |
| SureFoot, 25 mil (Set of 12) | SF502 | 1 |
| SureFoot, 0.5 mil (Set of 12) | SF503 | 1 |

Support Options

- Opt. C3 – Calibration Service 3 Years.
- Opt. C5 – Calibration Service 5 Years.
- Opt. D1 – Calibration Data Report.
- Opt. D3 – Calibration Data Report 3 Years (with Opt. C3).
- Opt. D5 – Calibration Data Report 5 Years (with Opt. C5).
- Opt. R5 – Repair Service 5 Years.
- Opt. SILV900 – Standard Warranty Extended to 5 Years (P7240 Only).



P7240 / P6249 / P6209
Part Reorder 1-800-835-3553

| | | |
|---|---|--|
| Tektronix SF502 Small Push Ballz 25mil SET OF 12 PAT. 5,387,872 | Tektronix ST501 Small Pin Sockets SET OF 12 | Tektronix 016-1775-00 NICKEL SQ PIN SET OF 15 |
| Tektronix SF501 Small Push FOR ANGLE 30mil SET OF 12 PAT. 5,387,872 | Tektronix SF503 Small Push 832 6.5mm SET OF 12 PAT. 5,387,872 | Tektronix 016-1775-00 POGO PIN GND SET OF 15 |
| Tektronix 131-3638-30 PROBE TIP SET OF 30 | Tektronix 016-1775-00 SPRING ADAPTER SET OF 15 | 016-1315-00 Coding Color Clips |
| Quantity 1 SMT KlipChip Adapter | | 013-0309-00 |



P6241 Probe Accessory Reorder List
To reorder parts, visit www.tektronix.com/accessories or call 1-800-833-9200 (USA)
Outside USA contact your local Tektronix representative

| | | | |
|--|---|---|---|
| ST501 Small Pin Sockets SET OF 12 | 016-1910-XX SQUARE PIN ADAPTER SET OF 4 | 016-1913-XX T-ADAPTER SET OF 2 | 016-1917-XX POGO PIN GROUND SET OF 8 |
| 196-3437-10 3" GROUND LEAD SET OF 2 | 016-1315-XX (P6241) COLOR MARKER BANDS 5 COLORS | 206-0364-XX SMT KlipChip 1 EA | SMG50 SMT KlipChip SET OF 20 |
| 196-3434-XX Y-LEAD ADAPTER 1 EA | 196-3468-XX Y-LEAD ADAPTER SET OF 2 | 016-1886-XX (P7240) COLOR MARKER BANDS 5 COLORS | 013-0309-XX IC GRABBER SET OF 2 |
| SMK4 IC GRABBER 2 SETS OF 2 | | 196-3482-XX Customizable Ground Lead | |



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

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* 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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