

# 4 GHz Active Probes

## P7240 • P6209 Data Sheet



### Features & Benefits

- <120 ps Rise Time (Guaranteed)
- 4 GHz Bandwidth
- <0.5 pF Input Capacitance (P6241 Only)
- Small Form Factor Probe Head
- 8 V<sub>p-p</sub> 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<sub>p-p</sub>
- 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.



### 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 k $\Omega$	20 k $\Omega$
Input Capacitance	<1 pF	<1 pF
Dynamic Range	$\pm 2$ V	$\pm 2$ V
Offset Range	$\pm 5$ V	$\pm 5$ V
Interface	TekConnect™	TekProbe SMA

## Ordering Information

### P7240

4.0 GHz Active Probe.

### P6209

4.0 GHz Active Probe.

**Warranty** – One year.

### 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. R3** – Repair Service 3 Years

**Opt. R5** – Repair Service 5 Years



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

 <b>Tektronix</b> <b>SF502</b> Small Foot Bellix 25mil SET OF 12 PAT. 5,387,872	 <b>Tektronix</b> <b>ST501</b> SureTip™ Soldering Iron SET OF 12	 <b>Tektronix</b> <b>016-1775-00</b> Soldering Iron SET OF 16
 <b>Tektronix</b> <b>SF501</b> SureFootFORANGE 50mil SET OF 12 PAT. 5,387,872	 <b>Tektronix</b> <b>SF503</b> SureFootFORANGE 0.8mm SET OF 12 PAT. 5,387,872	 <b>Tektronix</b> <b>016-1775-00</b> POGO PIN GND SET OF 16
 <b>Tektronix</b> <b>131-3436-30</b> PROBE TIP SET OF 30	 <b>Tektronix</b> <b>016-1774-00</b> SPRING ADAPTER SET OF 10	 <b>016-1315-00</b> Coding Color Clips
 Quantity 1 SMT KlipChip Adapter		 <b>013-0309-00</b>



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

 <b>ST501</b> SureTip™ Soldering Iron SET OF 12	 <b>016-1910-XX</b> SQUARE PIN ADAPTER SET OF 4	 <b>016-1913-XX</b> Y-ADAPTER SET OF 2	 <b>016-1917-XX</b> POGO PIN GROUND SET OF 8
 <b>196-3437-10</b> 3" GROUND LEAD SET OF 2	 <b>016-1315-XX</b> (P6241) COLOR MARKER BANDS 5 COLORS	 <b>206-0364-XX</b> SMT KlipChip 1 EA	 <b>SMG50</b> SMT KlipChip SET OF 20
 <b>196-3434-XX</b> Y-LEAD ADAPTER 1 EA	 <b>196-3468-XX</b> Y-LEAD ADAPTER SET OF 2	 <b>016-1886-XX</b> (P7240) COLOR MARKER BANDS 5 COLORS	 <b>013-0309-XX</b> IC GRABBER SET OF 2
 <b>196-3482-XX</b> Customizable Ground Lead			



Product(s) are manufactured in ISO registered facilities.

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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](http://www.tektronix.com)



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