

4 GHz Active Probes

▶ P7240 • P6249 • P6209



P7240 Active Probe for TekConnect Interface

The P7240 with TekConnect interface is Tektronix' highest-performance active probe, designed for use with the new TDS7404 oscilloscope. High bandwidth and low capacitive loading make this the probe of choice for demanding design applications, such as Rambus, DDR DRAM, and AGP. This probe and the others in its family are also suited for applications in the communication industry, for measurements on FibreChannel and Gigabit Ethernet. The P7240 features the new TekConnect interface which preserves signal integrity to 10 GHz and beyond to meet present and future bandwidth needs.



P6249 Active Probe for TEKPROBE BNC Interface

The P6249 has similar performance to the P7240 above. Primarily used for the TDS694C and TDS794D high performance scopes, the P6249 may also be used with conventional BNC interfaces via the Tektronix 1103 TEKPROBE Power Supply. A full complement of versatile probe tip accessories helps users connect to the wide range of devices faced by digital designers.

▶ Features & Benefits

- 4 GHz Bandwidth
- <120 ps Rise Time
- Small Form Factor Probe Head
- Full Set of SMD Connection Accessories
- Direct Access to SMDs as Small as .010" Pitch
- Oscilloscopes Supported
 - P7240 TDS7404 with TekConnect™ Interface
 - P6249 TDS Oscilloscopes with TEKPROBE II® Interface
 - P6209 TDS8000/800 Series, CSA8000
- Probe Interfaces
 - P6209 TEKPROBE® SMA Interface
 - P6249 TEKPROBE II BNC Interface
 - P7240 TekConnect Interface

▶ Applications

- High-speed Digital Systems Design
- Component Design/Characterization
- Manufacturing Engineering & Test
- Measures 3.0 V Logic, Rambus Data Lines, Gigabit Ethernet

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P6209 Active Probe for SMA Interface/Sampling Oscilloscopes

The P6209 provides a high-bandwidth, low circuit loading probing solution for the TDS8000 and TDS 800 Series 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

Bandwidth – DC to 4.0 GHz at –3 dB (typical, probe only).

Rise Time – < 120 ps (guaranteed, 20°C to 30°C).

Dynamic Range – ± 1.75 V.

Attenuation – 5x.

Input Resistance – 20 kΩ (typical).

DC Offset Range – ± 5 Vdc.

Input Capacitance – < 1 pF (typical).

Max Voltage (Nondestruct) – ± 30 V (DC plus peak AC).

Cable Length –

P6209: 1.37 m (includes output SMA cable).

P7240, P6249: 1.4 m.

Output Load Requirement – 50 Ω.

Linearity – ± 0.1% at DC.

Output Offset – Probe Only: ± 7.5 mV or less (20°C to 30°C).

DC Offset Drift –

150 μV/°C or less (probe only).

System on-screen display w/TEKPROBE™ or TekConnect™ interface: 0.75 mV/°C or less.

► Ordering Information

P7240

4.0 GHz Active FET Probe.

P6249

4.0 GHz Active FET Probe.

P6209

4.0 GHz Active FET Probe.

Warranty – One Year.

User Manuals –

P7240: Order 071-0759-00.

P6209: Order 071-0634-00.

P6249: Order 071-0538-01.

MEASUREMENT SERVICE OPTIONS

Opt. D1 – Calibration Data Report.

Opt. C3 – Three Years of Calibration Service.

Opt. D3 – Test Data: Requires Opt. C3.

Opt. R3 – Three Years of Repair Service.

P7240/P6209/P6249 Included Accessories

Product Name/Description	Part Number	Quantity
50 mil SureFoot®	SF501	12 Each
25 mil SureFoot	SF502	12 Each
0.5 mm SureFoot	SF503	12 Each
3-inch Ground Leads and 2 Y Lead Adapters	196-3457-00	3 Each
IC Grabber (Pkg of 2)	013-0309-00	1 Each
SMT KlipChip™	206-0364-00	2 Each
Cable Markers	016-1315-00	5 Each
Pogo Pin Grounds	016-1772-00	15 Each
Square Pin Sockets	016-1773-00	15 Each
Right Angle Square Pin Adapters	016-1774-00	10 Each
Probe Tips	131-5638-30	30 Each
0.010 in. SureToe™	ST501	12 Each
Anti-static Wrist Strap	006-3415-04	1 Each
Certificate of Traceable Calibration		1 Each

Contact Tektronix:

ASEAN Countries (65) 356-3900

Australia & New Zealand 61 (2) 9888-0100

Austria, Central Eastern Europe, Greece, Turkey, Malta & Cyprus +43 2236 8092 0

Belgium +32 (2) 715 89 70

Brazil and South America 55 (11) 3741-8360

Canada 1 (800) 661-5625

Denmark +45 (44) 850 700

Finland +358 (9) 4783 400

France & North Africa +33 1 69 86 81 81

Germany +49 (221) 94 77 400

Hong Kong (852) 2585-6688

India (91) 80-2275577

Italy +39 (2) 25086 501

Japan (Sony/Tektronix Corporation) 81 (3) 3448-3111

Mexico, Central America, & Caribbean 52 (5) 666-6333

The Netherlands +31 23 56 95555

Norway +47 22 07 07 00

People's Republic of China 86 (10) 6235 1230

Republic of Korea 82 (2) 528-5299

South Africa (27 11) 651-5222

Spain & Portugal +34 91 372 6000

Sweden +46 8 477 65 00

Switzerland +41 (41) 729 36 40

Taiwan 886 (2) 2722-9622

United Kingdom & Eire +44 (0)1344 392000

USA 1 (800) 426-2200

For other areas, contact: Tektronix, Inc.

Export Sales, P.O. Box 500, M/S 50-255,

Beaverton, Oregon 97077-0001, USA 1 (503) 627-6877

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