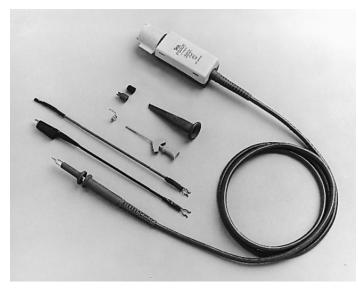
Active FET Probe

P6205 Datasheet



The P6205 probe is part of Tektronix' line of Low Circuit Loading Signal Acquisition probes for CSA (Communications Signal Analyzers), DSA (Digitizing Signal Analyzers), 11000 Series and the TDS family of oscilloscopes.

Key features

- DC to 750 MHz
- 2 pF Input C
- 1 MΩ Input R
- Integral Probe Power TekProbe[™] BNC
- High-speed Digital Systems Design
 - _ ECL
 - GaAs
 - MOS: CMOS; FastCMOS; BiCMOS; TTL
- Component Design/Characterization
 - Amplitude Levels
 - Aberrations
 - Propagation Delay and Timing
 - Bandwidths and Rise Times

- Educational Research
- Manufacturing Engineering and Test

Active FET probes for TekProbe[™] BNC interface

The P6205 is designed with FET devices for its inputs, which allows very high input resistance values and low input capacitances.

Both Active FET probes provide a wide linear dynamic input range for accessing most digital device families using today's logic voltage levels.

Power for the P6205 is supplied by the CSA, DSA, TDS and 11000 Series mainframes through the TekProbe BNC Interface, eliminating the need for extra cabling and/or external power supplies.

Probe information such as type, serial number, attenuation factor, offset scale factor, input resistance, and termination resistance required is communicated through the TekProbe interface between the Active Probe and the CSA, DSA, and 11000 Series mainframes. This information is used by these oscilloscope mainframes during the initialization sequence and measurement analysis.

Benefits

- Low Input C, High Input R Minimizes circuit under test loading
- Probe Power Directly from CSA, DSA, TDS, or 11000 Series
 TekProbe™ BNC Interfaces Means no additional cables or power supplies required
- Readout Coding for 10X Attenuation Reduces confusion and errors in measurement readings
- Gold-plated Replaceable Probe Tips Improved electrical connections and lower maintenance costs
- Miniature Size Accessories Provides wide range of circuit attachments
- UL Listed UL 1244



Datasheet

Specifications

All specifications apply to all models unless noted otherwise.

Warranted electrical characteristics

Attenuation 10X

Nominal electrical characteristics

Cable length 1.5 m (60 in) tip to BNC

 $\begin{array}{lll} \textbf{Bandwidth at -3 dB} & 750 \text{ MHz} \\ \textbf{Input capacitance} & 2 \text{ pF} \\ \textbf{Input resistance} & 1 \text{ M}\Omega \\ \textbf{Linear dynamic range} & \pm 10 \text{ V} \\ \textbf{DC offset range} & \text{NA} \\ \end{array}$

 $\textbf{Interface/Readout/Identity} \qquad \qquad \textbf{TekProbe}^{\text{\tiny{TM}}} \ \textbf{BNC} \ / \ \textbf{Yes} \ / \ \textbf{No}$

Recommended instruments 1 11000 ², TDS400, TDS500, TDS600, TDS700, TDS3000, TDS5000, TDS7000

¹ The P6205 also works with other instruments with appropriate adapters. Please visit http://www.Tek.com/probes for more details.

^{2 1100} Series = 11A32/11A34/11A52/11A71/11A72/11A81

Ordering information

Standard accessories

P6205 10x, 750 MHz active FET probe

013-0107-xx Retractable hook tip

196-3120-xx 6 in. ground lead with alligator

196-3198-xx 6 in. ground lead with square-pin receptacle

214-4125-xx Ground contact, spring SMT KlipChip[™] adapter 206-0569-xx 166-0404-xx Insulating ground cover

015-0201-xx IC test tip

016-0156-xx Carrying case

070-8202-xx Instruction manual

Warranty

One-year warranty covering all parts and labor.

Recommended accessories

Please see 5 mm Probe Accessories (miniature) probe system at http://www.tek.com/datasheet/probe-accessories-2





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

Datasheet

ASEAN / Australasia (65) 6356 3900 **Belgium** 00800 2255 4835* Belgium 00800 2255 4835* Central East Europe and the Baltics +41 52 675 3777 Finland +41 52 675 3777 Hong Kong 400 820 5835 Japan 81 (3) 6714 3010 Middle East, Asia, and North Africa +41 52 675 3777 People's Republic of China 400 820 5835 Republic of Korea 001 800 8255 2835 Spain 00800 2255 4835* Taiwan 886 (2) 2722 9622

* European toll-free number. If not accessible, call: +41 52 675 3777

Austria 00800 2255 4835* Brazil +55 (11) 3759 7627 Central Europe & Greece +41 52 675 3777 France 00800 2255 4835* India 000 800 650 1835 Luxembourg +41 52 675 3777 The Netherlands 00800 2255 4835* Poland +41 52 675 3777 Russia & CIS +7 (495) 6647564 Sweden 00800 2255 4835* United Kingdom & Ireland 00800 2255 4835* Balkans, Israel, South Africa and other ISE Countries +41 $52\ 675\ 3777$ Canada 1 $800\ 833\ 9200$

Denmark +45 80 88 1401 Germany 00800 2255 4835* Italy 00800 2255 4835*

Mexico, Central/South America & Caribbean 52 (55) 56 04 50 90

Norway 800 16098 Portugal 80 08 12370 South Africa +41 52 675 3777 Switzerland 00800 2255 4835* USA 1 800 833 9200

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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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