

TEKTRONIX

P6249

The Tektronix P6249 is a high-performance 4 GHz active FET probe designed for high-speed digital design and debugging. Offering a rapid rise time of less than 120 ps, low input capacitance of under 1 pF, and a 4 Vp-p dynamic range, it provides excellent signal fidelity for probing small-geometry surface mount devices.

SPECIFICATIONS

General

Interfaces	TekProbe II BNC
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Physical

Power Supply	Powered directly via TekProbe II BNC interface, or via Tektronix 1103 TekProbe Power Supply
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Operating Temperature	0 °C to +50 °C °C
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Electrical Specifications

Bandwidth	4 GHz
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Rise Time (10% to 90%)	< 120 ps (guaranteed)
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Attenuation Ratio	5X
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Input Characteristics

Input Resistance	20 kΩ
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Input Capacitance	< 1.0 pF
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Linear Dynamic Range	4 Vp-p
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Input Offset Range	±22 V
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Maximum Non-Destructive Input Voltage	±15 V (DC + peak AC)
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Host Interface & Compatibility

Host Oscilloscope Compatibility	Tektronix TDS7000B, CSA7000B, TDS6000B, TDS700, and TDS600 series
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Alternative Interface Support	Compatible with conventional BNC interfaces via Tektronix 1103 TekProbe Power Supply
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Physical & Mechanical Properties

Probe Head Form Factor	Small Form Factor
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Cable Length	1.3 m
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Performance

Output Impedance	50 Ω
Propagation Delay	5.3 ns (typical)
DC Attenuation Accuracy	±2%
System Noise	< 1.5 mV RMS

Environmental

Non-Operating Temperature	-55 °C to +75 °C
Operating Altitude	Up to 3,000 m
Non-Operating Altitude	Up to 15,240 m
Operating Humidity	0% to 90% RH (at up to +30 °C), 0% to 75% RH (+30 °C to +50 °C)
Non-Operating Humidity	0% to 90% RH (at up to +30 °C), 0% to 75% RH (+30 °C to +60 °C)

Compliance

Safety Certifications	UL3111-1, CSA1010.1, EN61010-1/A2
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TECHNOLOGY

Active FET Probe

APPLICATIONS

High-speed digital system design, semiconductor device characterization, and debugging

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