

4 GHz Active Probe

P7240 Datasheet



Applications

- High-speed digital systems design
- Component design/characterization
- Signal integrity, jitter, and timing analysis
- Mechanical engineering and test
- Measures 3.0 V logic, InfiniBand, PCI Express, DDR, Rambus Data Lines, Gigabit Ethernet

The P7240 4 GHz, 5X active FET probe provides truer signal reproduction and fidelity for high-frequency measurements. The probe has low input capacitance and high input resistance to minimize circuit loading over a wide bandwidth range.

Key features Features and benefits

- <120 ps Rise Time (Guaranteed)
- 4 GHz Bandwidth
- <1 pF input capacitance
- Small form factor probe head
- Direct access to SMDs
- Supports MSO/DPO/DSA70000 series oscilloscopes
- TekConnect™ Interface

Performance you can count on

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.

The small profile and low-mass head make probing dense circuitry by hand fast **an** **and** easy.

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

The accessory tips and adapters included with the P7240 probe enable it to be used on a wide variety of circuits to meet your probing needs.



TekConnect™ Interface

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 is 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.

Specifications

All specifications are guaranteed unless noted otherwise. ~~All specifications apply to all models unless noted otherwise.~~

Warranted characteristics

Rise time	≤120 ps
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Attenuation	5X
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Typical characteristics

Bandwidth	4.0 GHz
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DC resistance	20 kΩ
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Input capacitance	<1 pF
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Dynamic range	±2 V
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Offset range	±5 V
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Physical characteristics

Unit weight (probe only)	223 g (7.52 oz)
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Cable length	1.3 m (50 in)
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Environmental characteristics

Temperature

Operating	0 °C to +40 °C (+32 °F to +104 °F)
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Nonoperating	-55 °C to +75 °C (-67 °F to +167 °F)
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Humidity	0 to 90% RH at +30 °C to +40 °C (+86 °F to +104 °F)
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Altitude

Operating	4572 m (15,000 ft)
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Nonoperating	15,240 m (50,000 ft)
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Ordering information

Ordering information

Models

P7240

4.0 GHz Active Probe

Standard accessories

Part number	Description	Quantity
006-3415-xx	Wrist strap	1
006-7164-xx	Accessory case	1
016-1315-xx	Color coding bands, 2 each of 5 colors	1
016-1772-xx	Pogo pin (set of 10)	1
016-1773-xx	Square pin socket (set of 10)	1
016-1774-xx	Adapter spring (set of 10)	1
016-1952-xx	Probe carrying case	1
071-0759-xx	User manual	1
131-5638-xx	Probe Tip (Set of 10)	1
131-6254-xx	SureToe™ (set of 4)	1
196-3456-xx 196-3437-xx 196-3457-xx 196-3456-xx	Lead set <u>consisting of:</u> 3-in Ground lead (3) Y-Lead (2)	1 3 2
196-3482-xx	Customizable ground lead (set of 5)	1
206-0569-xx	SMT KlipChip™ Adapter	2
-	<u>Calibration data report</u>	<u>1</u>

Recommended accessories

Part number	Description	Quantity
013-0309-xx	SMK4 IC Grabber (set of 2)	1

Warranty

One-year warranty covering all parts and labor.

Recommended accessories

Part number	Description	Quantity
013-0309-xx	SMK4 IC Grabber (set of 2)	1

Options

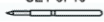
Service options

Opt. C3	Calibration Service 3 Years
Opt. C3	Calibration Service 3 Years
Opt. C5	Calibration Service 5 Years

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 (including warranty)
Opt. R5	Repair Service 5 Years (including warranty)



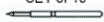
P7240 Probe Accessory Reorder List

 Tektronix 131-6254-XX SureToe™ SET of 4 	 Tektronix 131-5638-XX PROBE TIP SET of 10 	 Tektronix 016-1774-XX SPRING ADAPTER SET of 10 		
 Tektronix 016-1772-XX POGO PIN GND SET of 10 	 Tektronix 016-1773-XX SOCKET, SQ PIN SET of 10 	 016-1315-XX COLOR MARKER BANDS SET SET of 1		
 196-3437-XX GROUND LEAD 3.0" 3 EACH			 196-3456-XX LEAD SET SET of 1	 196-3457-XX Y LEAD 2 EACH
 196-3482-XX CUSTOMIZABLE GROUND LEAD SET of 5				
 206-0569-XX SMT KlipChip 2 EACH		 013-0309-XX IC GRABBER 2 SET of 2		

1

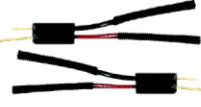


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 206-0569-XX SMT KlipChip 2 EACH	 013-0309-XX IC GRABBER 2 SET of 2	



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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.tek.com.

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