

TEKTRONIX

P7313SMA

The Tektronix P7313SMA is a high-performance 13 GHz active differential SMA probe designed for high-speed differential signal measurements. Operating on the TekConnect interface, it features adjustable termination voltage and dual attenuation settings for versatile signal acquisition.

SPECIFICATIONS

General

Interfaces	TekConnect
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Physical

Power Supply	Powered directly by host instrument via TekConnect interface
Operating Temperature	0 °C to +40 °C °C

Electrical Performance

Bandwidth	13 GHz
Rise Time (10% to 90%)	< 40 ps (35 ps typical)
Rise Time (20% to 80%)	25 ps (typical)
Attenuation Ratios	2.5X, 12.5X
DC Input Resistance (Differential)	100 Ω
DC Input Resistance (Single-Ended)	50 Ω
Termination Voltage Range	-2.0 V to +3.3 V
Return Loss (S11) - up to 4 GHz	< -15 dB
Return Loss (S11) - up to 8 GHz	< -10 dB
Return Loss (S11) - up to 13 GHz	< -8 dB
Random Noise (2.5X setting)	< 0.9 mV RMS
Random Noise (12.5X setting)	< 4.5 mV RMS

Input Signal Ranges

Differential Dynamic Range (2.5X setting)	0.8 Vp-p
Differential Dynamic Range (12.5X setting)	4.0 Vp-p
Common Mode Operating Voltage Range	-2.0 V to +3.3 V

Connectivity & Interface

Input Connector Type	Dual SMA (female)
Output Connector / Host Interface Type	TekConnect

Compatibility

Supported Oscilloscope Families	TDS6000, TDS7000, DPO7000, DPO70000, DSA70000 series
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Electrical Characteristics

Maximum Nondestructive Input Voltage	±15 V (DC + peak AC)
Common Mode Rejection Ratio (CMRR) @ 1 MHz	>45 dB
Common Mode Rejection Ratio (CMRR) @ 1 GHz	>30 dB
Common Mode Rejection Ratio (CMRR) @ 10 GHz	>20 dB

Physical Characteristics

Cable Length	1.2 m
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Performance

Input Phase Match	<1.0 ps
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Environmental

Non-Operating Temperature	-55 °C to +75 °C
Operating Altitude	3,000 m (9,843 ft)
Non-Operating Altitude	15,240 m (50,000 ft)
Operating Humidity	0% to 90% RH (at or below +30 °C); 0% to 75% RH (+30 °C to +40 °C)

TECHNOLOGY

Active Differential Z-Active Probe

APPLICATIONS

High-speed serial bus measurements, differential signaling analysis, spectral testing

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.