TEKTRONIX

P7508

The Tektronix P7508 is an 8 GHz TriMode differential probe designed for use with high-bandwidth Tektronix oscilloscopes featuring the TekConnect interface. It allows users to perform differential, single-ended, and common-mode measurements using a single probe connection.

SPECIFICATIONS

General

Interfaces	TekConnect

Physical

Power Supply	Powered directly by host oscilloscope via TekConnect interface
Operating Temperature	0 °C to +40 °C °C
Dimensions (W×H×D)	107 mm × 41 mm × 26 mm (compensation box) mm
Weight	0.154 kg

General Classifications

Probe Type	TriMode Differential Probe
Signal Type	Differential, Single-Ended, Common Mode (TriMode acquisition)
Compatible Host Instruments	Tektronix oscilloscopes with TekConnect interface

Electrical Performance Specs

Bandwidth (-3 dB)	≥ 8.0 GHz
Rise Time (10% to 90%)	< 55 ps
Rise Time (20% to 80%)	< 36 ps (typical)
Attenuation Settings	5.0x or 12.5x (user-selectable)
DC Input Resistance (Differential)	100 kΩ
DC Input Resistance (Single-Ended)	50 kΩ
Input Capacitance (Differential)	< 0.27 pF (with solder-in tip)
Input Capacitance (Single-Ended)	< 0.40 pF (with solder-in tip)
Dynamic Range (5x setting)	0.75 V p-p
Dynamic Range (12.5x setting)	1.75 V p-p
Offset Range	-1.5 V to +2.5 V
DC Common Mode Range	-1.5 V to +2.5 V
Maximum Non-Destruct Input Voltage	±15 V (DC + peak AC)
Common Mode Rejection Ratio (CMRR) @ 50 Hz	> 60 dB
Common Mode Rejection Ratio (CMRR) @ 1 GHz	> 34 dB
Common Mode Rejection Ratio (CMRR) @ 4 GHz	> 24 dB
System Noise (5x setting)	< 3.2 mV RMS (typical)
System Noise (12.5x setting)	< 6.5 mV RMS (typical)

Physical and Connectivity Specifications

Input Connector / Interface Type	P7500 Series TriMode Solder-In, Hand-Held, or Coaxial Adapters
Output Connector / Host Interface	TekConnect
Cable Length	1.3 m (51 in)

Environmental and Safety Compliance

Storage Temperature Range	-20 °C to +60 °C
Operating Humidity Range	20% to 80% RH (non-condensing)
Maximum Operating Altitude	3,000 m (9,843 ft)

Performance

Operating Voltage Window (5x setting)	-1.5 V to +2.5 V
Operating Voltage Window (12.5x setting)	-1.5 V to +2.5 V
Propagation Delay	5.4 ns
DC Gain Accuracy	±2% (differential)
S-parameters Characterization	Individual probe S-parameters stored in probe nonvolatile memory

Features

Probing Modes	TriMode (Differential (A-B), Single-Ended (A-GND), Single-Ended (B-GND), Common-Mode ((A+B)/2))

Environmental

Non-Operating Altitude	Up to 15,240 m
Pollution Degree	2

Inputs & Outputs

Output Termination	50 Ω

TECHNOLOGY

TriMode Active Differential

APPLICATIONS

High-Speed Serial Bus Design, Debugging, and Characterization

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