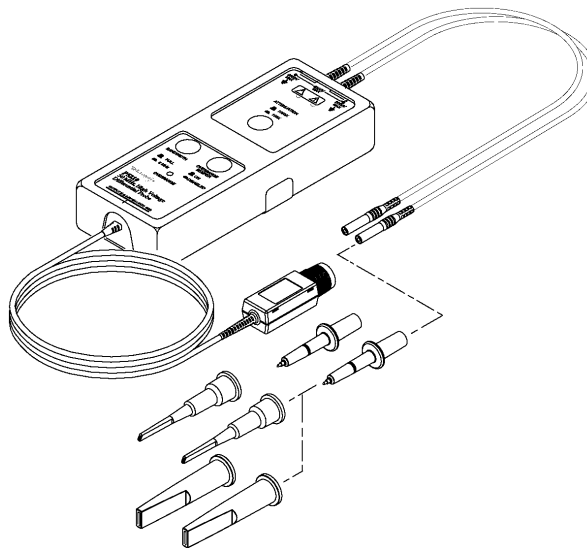


# P5210 High Voltage Differential Probe

## ★ Features

### P5210

- Maximum Differential Input Voltage\*  
5600 V (DC + peak AC)  
4400 V<sub>RMS</sub>
- 50 MHz Bandwidth
- Probe Connects Directly to TDS Scope through TEKPROBE® Interface
- Double Insulated Probe Head
- Easy Connection to Power Devices, Discrete Components, and Bus Bars
- Make Safe Floating Measurements with Grounded Scope
- Safety Certified



The P5210 enables users to make floating measurements with the scope grounded, resulting in safer, more accurate measurements and higher productivity.

The P5210 is ideal for power supply design, motor drive design, electric vehicle research, electronic ballasts design, and the field service industry. The probe is specifically designed for use with Tektronix TDS oscilloscopes. It can also be used with other oscilloscopes by utilizing the 1103 TEKPROBE® Power Supply.

## CHARACTERISTICS

### STANDARD SPECIFICATIONS

**Max. Differential Input Voltage\*** –  
5600 V (DC + peak AC)  
4400 V<sub>RMS</sub> CAT II

**Max. Common Input Voltage\*** –  
(either input to Ground)  
5600 V (DC + peak AC)  
(Duty Cycle <12.5%)  
2200 V<sub>RMS</sub> CAT II

**Bandwidth** – 50 MHz

**DC Gain Accuracy** – ±3%

**TEKPROBE Power** –  
(for non-TEKPROBE BNC scopes use  
1103 TEKPROBE Power Supply)

**Switchable Attenuation** – 100X/1000X

**Electrostatic Immunity** – >8 kV

### TYPICAL CHARACTERISTICS

**Input C** – 7 pF (each input)

**Input R** – 8 MΩ (each input)

**CMRR** – >80 dB at 60 Hz; 50 dB at 100 kHz

**Propagation Delay** – 20 ns

**Risetime** – 7.0 ns

**Noise** –  
<150 mV<sub>RMS</sub> (100X);  
<800 mV<sub>RMS</sub> (1000X)

**Overdrive Recovery** –  
<10% error after 50 ns

### PHYSICAL CHARACTERISTICS

**Weight** – 0.44 kg (0.96 lb)  
(with soft case and large tips)

**Input Lead Length** – 46 cm (18 in.)

**Output Cable Length** – 2 m (6.6 ft)

### SAFETY CERTIFICATIONS

UL 3111-1

CSA 1010.1, 1010.2-031

IEC 1010-1, 1010-2-031

EN 61010-1, 61010-2-031

\* Voltage limit is the lesser of the DC + peak AC and RMS values



Products comply with IEEE Standard 488.1-1987, and with Tektronix Standard Codes and Formats.

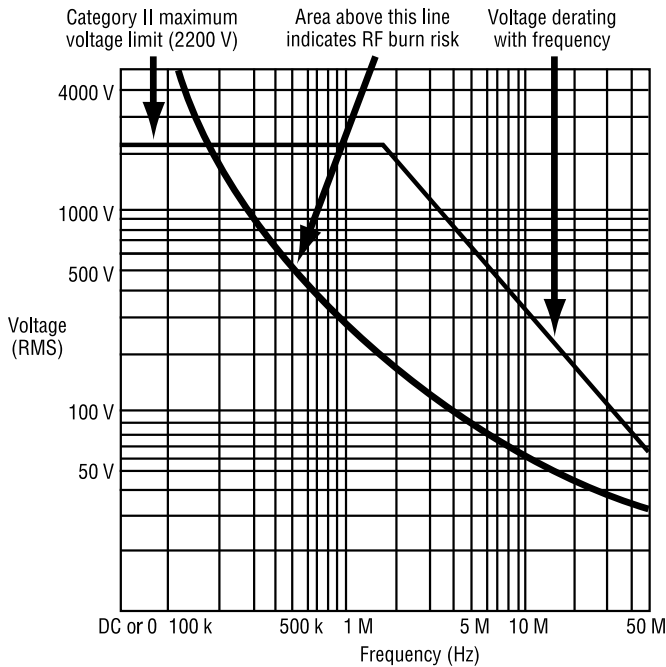


See Tektronix on the World Wide Web:  
<http://www.tek.com>



Tektronix Measurement products are manufactured in ISO registered facilities.

# P5210 High Voltage Differential Probe



P5210 Differential Probe Voltage Limits			
	Volts RMS Cat II	Volts RMS Cat III	Volts DC + peak AC
Differential (Tip to Tip)	4400	1000	5600 (1000X) 560 (100X)
Common (Tip to GND)	2200	1000	5600

Notes:

1. Voltage limit is lesser of
  - a) DC + peak AC
  - b) RMS limit for appropriate overvoltage category
2. If DC only: limit is RMS rating
3. DC + peak AC limit is determined by the point at which the probe amplifier starts clipping

P5210 Voltage Limit Specification

Safety Limits (either input to ground)

## ORDERING INFORMATION

### P5210

#### High Voltage Differential Probe

**Includes:** 1 Accessory Pack (020-2195-00) (consisting of: 2 Large Hook Tips, 2 Small Hook Tips, 2 Probe Heads), Soft Case (mounting) (016-1461-00), Adjustment Tool (003-1433-00), Marker Set (016-0633-00), 1 Each Set of Instruction Manuals (070-9841-00) (Instruction Manuals in English, German, French, and Japanese); 1 Technical Manual (English) (070-9895-00)

### RELATED PRODUCTS

1103 – TEKPROBE® Power Supply  
 ADA400A – Differential Preamplifier  
 P5100 – High Voltage Probe  
 P5200 – High Voltage Differential Probe  
 P5205 – High Voltage Differential Probe  
 TCP202 – Current Probe

### RECOMMENDED OSCILLOSCOPES

TDS 400 Series  
 TDS 500 Series ("A" and "B" versions)  
 TDS 600 Series  
 TDS 700 Series

For further information, contact Tektronix:

World Wide Web: <http://www.tek.com>; ASEAN Countries (65) 356-3900; Australia & New Zealand 61 (2) 888-7066; Austria, Eastern Europe, & Middle East 43 (1) 7 0177-261; Belgium 32 (2) 725-96-10; Brazil and South America 55 (11) 3741 8360; Canada 1 (800) 661-5625; Denmark 45 (44) 850700; Finland 358 (9) 4783 400; France & North Africa 33 (1) 69 86 81 81; Germany 49 (221) 94 77-0; Hong Kong (852) 2585-6688; India 91 (80) 2275577; Italy 39 (2) 250861; Japan (Sony/Tektronix Corporation) 81 (3) 3448-4611; Mexico, Central America, & Caribbean 52 (5) 666-6333; The Netherlands 31 23 56 95555; Norway 47 (22) 070700; People's Republic of China (86) 10-62351230; Republic of Korea 82 (2) 528-5299; Spain & Portugal 34 (1) 372 6000; Sweden 46 (8) 629 6500; Switzerland 41 (41) 7119192; Taiwan 886 (2) 765-6362; United Kingdom & Eire 44 (1628) 403300; USA 1 (800) 426-2200

From other areas, contact: Tektronix, Inc. Export Sales, P.O. Box 500, M/S 50-255, Beaverton, Oregon 97077-0001, USA (503) 627-1916

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