

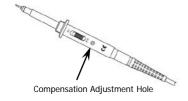
**PVP3150 Passive Probe** 

# To Adjust the Probe Compensation



#### **Frequency Compensation**

Before taking any measurement using a probe, first check the frequency compensation of the probe and adjust it to match the oscilloscope used. Generally, the oscilloscope provides a calibration signal output terminal at the front panel. Connect the probe (set the probe attenuation to 10X) to the signal output terminal to display a square waveform on the oscilloscope. Insert the adjustment tool into the compensation adjustment hole at the probe head and rotate it clockwise/counterclockwise until the properly compensated square waveform is displayed (flat-top square waveform).









Undercompensated

Overcompensated Properly Compensated

## Probe Specifications

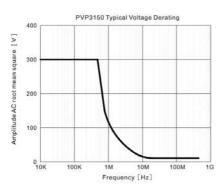
Electrical Specifications						
Bandwidth	1X: DC to 20 MHz 10X: DC to 150 MHz	Input Resistance	1X: 1 M $\Omega$ ± 1% @ DC 10X: 10 M $\Omega$ ± 1% @ DC			
Rise Time	1X: 17.5 ns 10X: 2.3 ns	Input Capacitance	1X: 50 pF ± 20 pF 10X: 10 pF ± 5 pF			
Attenuation Ratio	10:1 or 1:1 Switchable	Max. Rated Input Voltage	1X: 150 V <sub>RMS</sub> CAT II 10X: 300 V <sub>RMS</sub> CAT II			
Compensation Range		10 pF to 25 pF				
Mechanical Characteristics						
Weight (probe only)		About 45 g				
Cable Length		120 ± 2 cm				
Probe Tip Diameter		4.8 mm				
Environmental Specifications						
Temperature		Operating: 0°C to +50°C Nonoperating: -20°C to +70°C				
Altitude		Operating: 2,000 m Nonoperating: 15,000 m				
Max. Relative Humidity		80% relative humidity for temperature up to $+31^{\circ}$ C, decreasing linearly to 40% relative humidity at $+50^{\circ}$ C				
Pollution Degree		Pollution Degree 2				

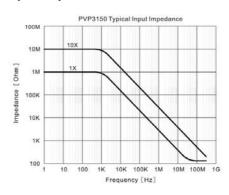
Note[1]: Connected to an appropriate SISCO oscilloscope.

## **Voltage Derating**

#### Input Impedance







- CAT II IEC measurement category II is for measurements performed on circuits directly connected to low voltage installations. Examples are measurements on household appliances, portable tools and similar equipment.
- Equipment fully protected by DOUBLE INSULATION or REINFORCED INSULATION.
- Review this user manual carefully to avoid any personal injury or damage to this product and any product connected to it. To avoid potential hazards, use this product only as specified.
- The measurement category of a combination of a PROBE ASSEMBLY and an accessory (an auxiliary to the measurement) is the lower of the measurement categories of the PROBE ASSEMBLY and of the accessory.

  Follow the instructions to use the PROBE ASSEMBLY properly. The improper use of the PROBE ASSEMBLY will

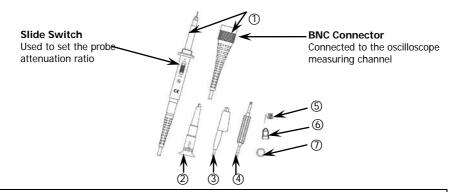
impair or ruin its self-owned protection function.

Note: Contents of this document are subject to change without notice.

### Accessories and Features



PVP3150 is provided with several accessories designed to make probing and measurement simpler. Please review the following instructions carefully in order to use the product properly.



Accessory Kit						
No.	Name	Description	Quantity Dual Probes Kit	One Probe Kit		
1	Probe		2	1		
2	Hook Tip	Indicates a retractable hook tip.	2	1		
3	Ground Alligator Clip	Ensures the safe grounding of the probe for safe operation and correct signal reading.	2	1		
4	Adjustment Tool	Adjusts the probe compensation.	1	1		
5	Ground Spring	Attaches itself to the probe head for grounding to improve high frequency response.	2	2		
6	Insulation Cap	Covers the exposed metal part of the probe head to avoid electricity leakage and protect the users.	2	1		
7	Maker Rings	Attaches itself (yellow, pink, light blue or dark blue) to the probe cable to identify probes used in different channels.	8	8		