# **PINTEK** 50MHz DP - 50 100MHz DP - 100

# 6500V HIGH VOLTAGE DIFFERENTIAL PROBE

# SPECIFICATIONS

MODEL	DP-50	DP-100		
Differential Voltage DC+ pk AC	6500∨	6500∨		
Bandwidth ( $50 \Omega \log -3 dB$ )	50MHz	100MHz		
Common Mode Voltage DC+ pk AC	6500∨	6500∨		
Common Mode Voltage RMS CAT II	6500∨	6500V		
Common Mode Voltage RMS CAT III	6500∨	6500V		
Attenuation ( Switchable )	$\times$ 100, $\times$ 200, $\times$ 500, $\times$ 1000	× 100, × 200, × 500, × 1000		
Input R ( Each input )	27 M Ω ± 1 %	27 M $\Omega \pm 1$ %		
Input C ( Each input )	2.5 PF $\pm$ 2 $\%$	2.5 PF $\pm$ 2 %		
	$\leq$ $\pm$ 650V at $ imes$ 100	≤ ± 650V at × 100		
Maximum Operation Voltage	$\leq$ $\pm$ 1300V at $ imes$ 200	≤ ± 1300V at × 200		
(DC+ pk AC)	$\leq$ $\pm$ 3250V at $ imes$ 500	$\leq$ $\pm$ 3250V at $ imes$ 500		
	$\leq$ $\pm$ 6500 $\vee$ at $ imes$ 1000	$\leq$ $\pm$ 6500V at $ imes$ 1000		
Common Mode Rejection Ratio	60 Hz : > 10,000 : 1	60 Hz : > 20,000 : 1		
	100 Hz : > 1,000 : 1	100 Hz : > 2,000 : 1		
(CMRR)	1 MHz : > 300 : 1	1 MHz : > 600 : 1		
Noise ( Into $50 \Omega load$ )	≤ 2 m Vrms	≤1 m Vrms		
Input Impedance ( between input )	54 M Ω // 1.25 PF	54 M Ω // 1.25 PF		
Accuracy ( at 20 ~ 30 ℃ 70 % RH	< ± 2.0/	≤ ± 1.5 %		
after 20 minutes )	≤ ± 2 %			
Maximum Output Voltage	$\leq \pm 6.5 \text{ V}$ $\leq \pm 6.5 \text{ V}$			
POWER SOURCE	① 9V battery ① 9V battery			
FOWER SOUNCE	2 External 6V ~ 9V DC	2 External 6V ~ 9V DC		

#### WARNING

- Do not use DP-50/100 above 6500V (DC+peak AC) between ground and the input or 6500V (DC+peak Ac) between the input lead.
- Do not operate DP-50/100 in wet or damp condition
- Do not operate DP-50/100 in an explosive atmosphere.
- 4. Do not immerse DP-50/100 in liquids.
- 5. Do not operate DP-50/100 without covers.
- 6. Please change the battery when the "LOW BATT" LED is lighted. At this time DP-50/100 can operate but not guaranteed the accuracy.
- DP-50/100 can not operate if both POWER and LOW BATT LED are not light.

# **FEATURES**

- The DP-50/100 FET input differential probe provieds a safe means of measuring circuits with floating potentials up to 6500V (DC+ peak AC) from ground and 6500V (DC+peak AC) differential.
- The DP-50/100 converts the high voltage differencial input signal to a low voltage ground refereced signal for display on any Oscilloscope.
- 3. The output BNC of DP-50/100 is calibrated to drive a high impedance ( 1 M  $\Omega$  ) load.

### INSTRUCTION FOR USE

- Connect the output BNC of DP-50/100 to the input BNC of the Oscilloscope by the accessory BNC cable.
- Adjust the vertical offset of the Oscilloscope if necessary.
- Set the select proper range of the DP-50/100 and the V/DIV of the Oscilloscope according to the scale conversion chart.

NOTE: If the voltage of the input signal exceeds the linear range of the setting range. The signal output of the DP-50/100 would not accurately, the wave form display will be cut off.

4. Scale conversion chart: The effective V/DIV is the attenuation factor of  $\times$  100  $\sim \times$  1000 multiplied by the scale factor of the Oscilloscope. It will be twice when the 50  $\Omega$  load was used. For example, with the range set at  $\times$  200, and the scope set to 0.5V/DIV, the effective V/DIV equals 200  $\times$  0.5 or 100V, when the 50  $\Omega$  load was used, it becomes 200V, the power consumption will increase too.

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