



Technical Data Sheet

Differential Probe for High Voltage Power Measurement- Model 4241

The 4241 meets IEC61010-031 Category I Requirements and is ideally suited for measuring high-speed voltage surge in power electronics circuits.

Features

- Safety Certified-Over range Indicator
- Up to +/-7000 V(DC +Peak AC) Differential
- Bandwidth up to 70 MHz

Applications

- High Voltage Floating Measurements
- Voltage Surge Measurement
- Power Electronics System Design
- Electronic Ballast Design

Included

- Red & Black Sprung Hooks
- Calibration Certificate
- 4ea AA Batteries
- 9 VDC Adapter



Model 4241 Specifications

Bandwidth	DC to 70MHz (-3dB)
Attenuation	1:100/1000
Input Impedance	10 M OHm/10pF each side to ground
Accuracy	+/- 2%
Rise Time	<5ns
Input Voltage-Category	CAT I
-Differential Input Voltage	700Vrms and +/-700V (DC+Peak AC) @ 1/100 5000Vrms and +/- 7000V (DC +Peak AC) @ 1/1000
-Common Mode Voltage	2500Vrms and +/-7000V (DC+ Peak AC) @ 1/100 & 1/1000
-Absolute Max . Input	2500Vrms and +/-7000V (DC+ Peak AC) @ 1/100 & 1/1000 in Commom Mode 5000Vrms and +/-7000V (DC +Peak AC) @ 1/100 & 1/1000 in Differential Mode
Output Voltage	
-Swing	+ 7V (into 50kohm load)
-Offset (typical)	<+5mV
-Noise (typical)	0.9m Vrms
-Source Impedance (typical)	50 Ohm (for using 1 Mohm input system oscilloscope)
CMRR (typical)	-80dB @ 50Hz, -60dB @ 20kHz
Ambient Operating temp	-10 to 40 degree centigrade
Ambient Storage temperature	-30 to 70 degree centigrade
Ambient Operating humidity	Up to 85% RH
Ambient Storage humidity	Up to 85% RH
Power Requirements*	Standard- 4 x AA cells or 9VDC adapter (Both Included) Options- Power Leads
Length of Input Leads	23"
Length of BNC Cables	36"
Weight	0.9 lb
Dimensions	(LxWxH) 8" x 3 1/4" x 1 1/2"

- * a. The supplied voltage must be less than 12V and greater than 4.4V, otherwise the probe could be damaged and will not operate properly.
- b. polarity is "+" inside and "i V" outside. For wrong polarity, built-in circuit protects the probe, no danger or damage will occur.
- c. When the voltage of the cells become too low, the power indicator on the panel will flicker.
- d. The adjustment screw on the front panel of the unit is the output offset adjustment. The output offset adjustment is to adjust the output voltage to zero before measuring.

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