CT4071

50 MHz Differential Probe

Datasheet

Overview:

The CT4071 is an active differential probe with a high input impedance and low input capacitance. With a 50 MHz bandwidth, this probe is great for working on a wide variety of measurements ranging up to ±3500 V. The CT4071 is compatible with oscilloscopes from all major manufacturers.

Features:

- 50 MHz bandwidth (-3 dB)
- Up to ±3500 V (DC + AC peak)
- Attenuation 100x/200x/500x/1000x
- High accuracy (±2%)
- Power indicator LED
- Meets IEC 61010-1:2010 CAT II safety standard

Kit Contents:

- Differential Probe
- (2) High voltage hook probes
- (2) Alligator clips
- (2) Retractable, sheathed 4 mm banana plug test leads, silicone jacketed
- (1) Insulated BNC cable
- (1) 9 V power adapter

Technical data subject to change.

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All specifications apply to the unit after a temperature stabilization time of 20 minutes over an ambient temperature range of 25 °C ± 5 °C.

Electrical Characteristics	
Bandwidth	50 MHz
Rise Time	7 ns for 200x, 500x, & 1000x 14 ns for 100x
Attenuation	100x, 200x, 500x, 1000x
Accuracy	±2% *
AC CMRR	80 dB @ 60 Hz 60 dB @ 100 Hz 50 dB @ 1 MHz
Maximum Input Voltage (100x) (DC + AC peak)	±350 V
Maximum Input Voltage (200x) (DC + AC peak)	±700 V
Maximum Input Voltage (500x) (DC + AC peak)	±1750 V
Maximum Input Voltage (1000x) (DC + AC peak)	±3500 V
Absolute Maximum Rated Input Voltage (each side to ground)	2500 Vrms
Input Impedance (Differential)	54 MΩ // 1.2 pF
Input Impedance (each side to ground)	27 MΩ // 2.3 pF
Output Voltage Swing	±8 V (driving 1 MΩ oscilloscope input)
Offset (typical)	±5 mV
Noise (typical)	2 mVrms
Source Impedance	50 Ω
Power Supply	9 V power adapter (included)

Mechanical Characteristics	
Weight (probe only)	280 g
Dimensions	240 x 80 x 30 mm
BNC Cable Length	100 cm
Input Leads Length	55 cm each

Environmental Characteristics	
Operating Temp/Humidity	0°C to 50°C / 10% to 85% RH
Storage Temp/Humidity	-30°C to 70°C / 10% to 90% RH
Pollution Degree	Pollution Degree 2

Safety Specifications
IEC 61010-1 CAT II

* Accuracy based on DMM with 10 MΩ input impedance

Specifications are subject to change without notice. To ensure the most current version of this manual, please download the current version from our website: caltestelectronics.com

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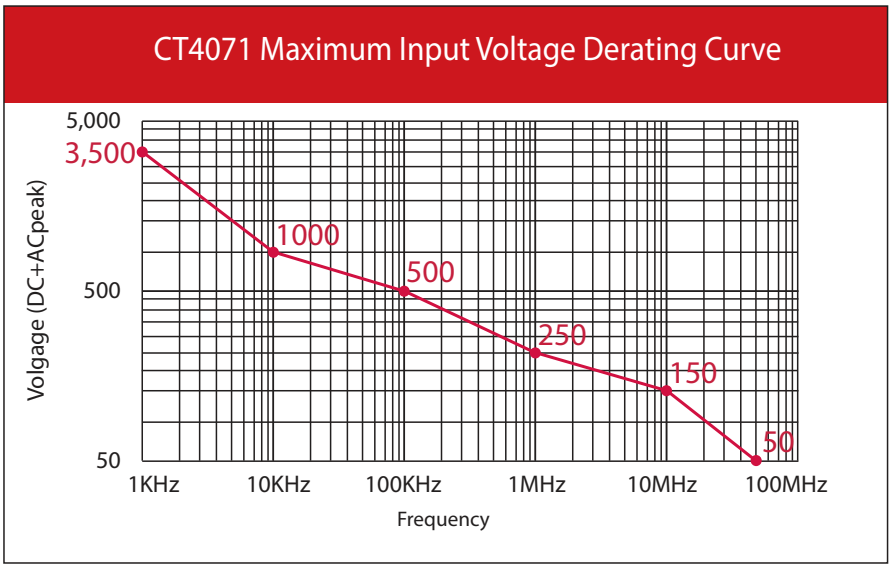
Performance Data Plots



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