

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 ($\pm 2\%$)
- 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

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

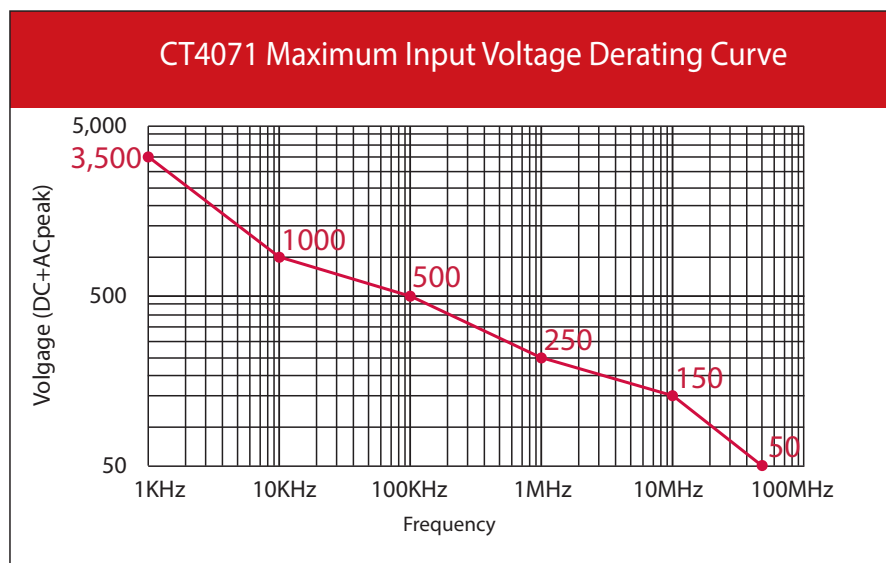
Environmental Characteristics	
Operating Temp/Humidity	0°C to 50°C / 10% to 85% RH
Storage Temp/Humidity	-30°C to 70°C / 10% to 90% RH
Pollution Degree	Pollution Degree 2

Safety Specifications	
IEC 61010-1 CAT II	

* Accuracy based on DMM with 10 MΩ input impedance

Specifications are subject to change without notice.

Performance Data Plots



Technical data subject to change.
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