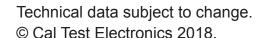
# **CT4071**50 MHz Differential Probe

### **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 iacketed (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  $^{\circ}$ C  $\pm$  5  $^{\circ}$ 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

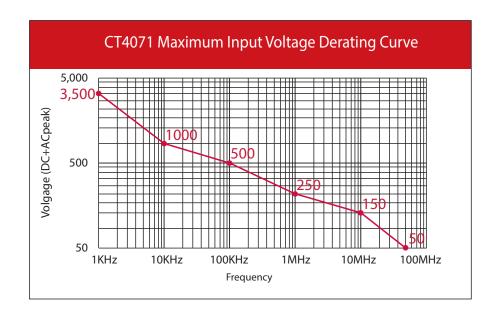
Safety Specifications	
IEC 61010-1 CAT II	

 $<sup>^{\</sup>star}$  Accuracy based on DMM with 10  $\text{M}\Omega$  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



#### Performance Data Plots







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