# 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 + Peak AC)
- 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 (-3 dB) | 50 MHz |
| Rise Time | 7 ns |
| Attenuation Ratio | 100x / 200x / 500x / 1000x |
| Gain Accuracy | ±2% * |
| CMRR (typical) | 60 Hz: 80 dB<br>100 Hz: 60 dB<br>1 MHz: 50 dB |
| Maximum Differential Input Voltage<br>(DC + Peak AC) | ±350 V at 100x<br>±700 V at 200x<br>±1750 V at 500x<br>±3500 V at 1000x |
| Maximum Common Mode Input Voltage<br>(DC + Peak AC) | ±3500 V |
| Input Impedance (Differential) | 16 MΩ // 1.2 pF |
| Input Impedance (each side to ground) | 8 MΩ // 2.3 pF |
| Output Voltage Swing | ±7 V (driving 1MΩ load) |
| 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 61010-031:2015 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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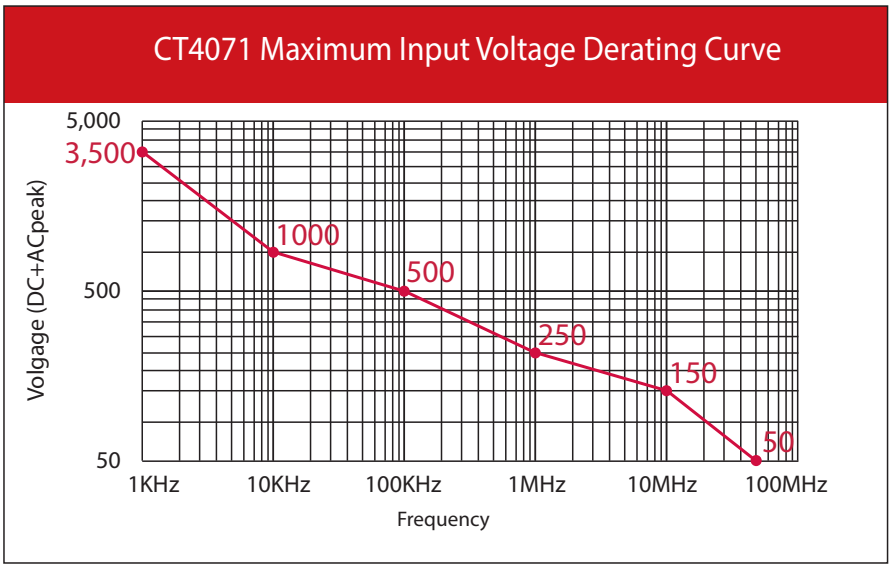
## Performance Data Plots




Technical data subject to change.





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