# mail

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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## **CT4072** 100 MHz Differential Probe

# **Datasheet**

#### **Overview:**

The CT4072 is an active differential probe with a high input impedance and low input capacitance. With a 100 MHz bandwidth, this probe is great for working on a wide variety of measurements ranging up to  $\pm 3500$  V. The CT4072 is compatible with oscilloscopes from all major manufacturers.

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#### Features:

- 100 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 CAT II safety standard

#### Kit Contents:

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

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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  $^{\circ}$ C ± 5  $^{\circ}$ C.

| Electrical Characteristics                                 |  |
|--|--|
| Bandwidth  | 100 MHz  |
| Rise Time  | 18 ns for 200x, 500x, & 1000x<br>25 ns for 100x  |
| Attenuation  | 100x, 200x, 500x, 1000x                          |
| Accuracy   | ±2% *  |
| AC CMRR  | 80 dB @ 60 Hz<br>60 dB @ 100 Hz<br>50 dB @ 1 MHz |
| Maximum Input Voltage (100x)<br>(DC + AC peak)             | ±350 V   |
| Maximum Input Voltage (200x)<br>(DC + AC peak)             | ±700 V   |
| Maximum Input Voltage (500x)<br>(DC + AC peak)             | ±1750 V  |
| Maximum Input Voltage (1000x)<br>(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 61010-031:2015 CAT II

\* Accuracy based on DMM with 10 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



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### Performance Data Plots





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