# **CT4066**25 MHz Differential Probe

## **Datasheet**

### Overview:

The CT4066 is an active differential probe with a high input impedance and low input capacitance. With a 25 MHz bandwidth, this probe is great for working on a wide variety of measurements ranging up to ±700 V. The CT4066 is compatible with oscilloscopes from all major manufacturers.

# Features: 25 MHz bandwidth (-3 dB) Up to ±700 V (DC + AC peak) Attenuation 20x/50x/200x High accuracy (±2%) Power indicator LED Meets IEC 61010-1:2010 CAT II safety standard

- Differential Probe
- (2) Pincer clips
- (2) Alligator clips
- (2) 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  $^{\circ}$ C  $\pm$  5  $^{\circ}$ C.

Electrical Characteristics	
Bandwidth	25 MHz (50x and 200x attenuation) 15 MHz (20x attenuation)
Rise Time	14 ns for 50x and 200x 23.4 ns for 20x
Attenuation	20x, 50x, 200x
Accuracy	±2% *
AC CMRR	80 dB @ 60 Hz 60 dB @ 100 Hz 50 dB @ 1 MHz
Maximum Input Voltage (20x) (DC + AC peak)	±70 V
Maximum Input Voltage (50x) (DC + AC peak)	±175 V
Maximum Input Voltage (200x) (DC + AC peak)	±700 V
Absolute Maximum Rated Input Voltage (each side to ground)	600 Vrms
Input Impedance (Differential)	4 MΩ // 1.2 pF
Input Impedance (each side to ground)	2 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	250 g	
Dimensions	195 x 55 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

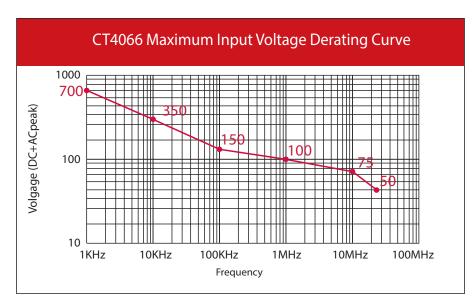


Figure 1 Derating Curve





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