

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 ($\pm 2\%$)
- Power indicator LED
- Meets IEC 61010-1:2010 CAT II safety standard



Kit Contents:

- 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 °C ± 5 °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 | |

* Accuracy based on DMM with 10 M Ω input impedance.

Specifications are subject to change without notice.

Performance Data Plots

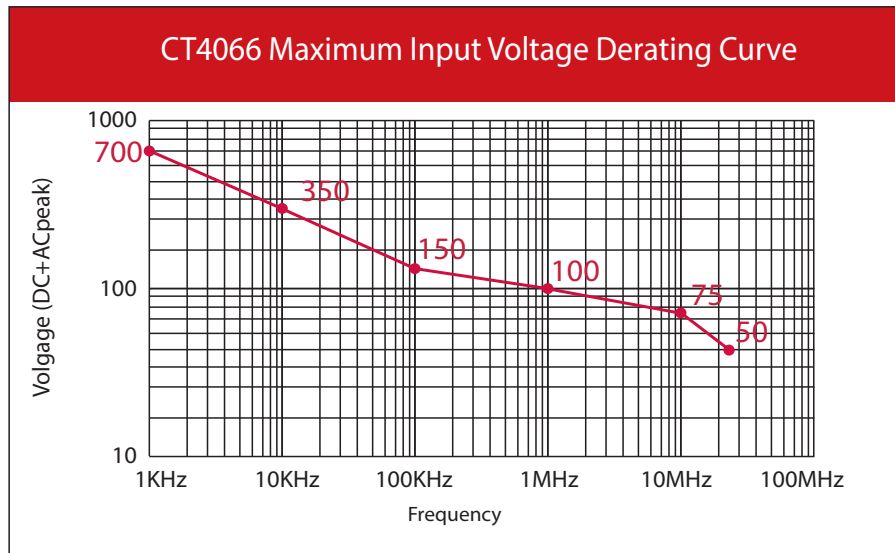


Figure 1 Derating Curve

