# CT4196

## 60 MHz Differential Probe

# Datasheet

### *Overview:*

The CT4196 differential probe allows safe, accurate measurement between two voltage points where neither point is referenced to ground. Designed for high sensitivity measurements, the probe offers up to 60 MHz bandwidth. Compatible with oscilloscopes from all major manufacturers, the probe is exclusively powered by the included 9 V power adapter.

### *Features:*

- 60 MHz bandwidth (3 dB)
- Up to ±35 V (DC + AC peak)
- Attenuation 1x/5x/10x
- High accuracy (±2%)
- Power indicator LED
- Meets IEC 61010-1 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

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 | 60 MHz / 40 MHz / 35 MHz |
| Rise Time | 6 ns / 9 ns / 10 ns |
| Attenuation | 1x / 5x / 10x |
| Accuracy | ±2% * |
| AC CMRR | 80 dB @ 60 Hz<br>60 dB @ 100 Hz<br>50 dB @ 1 MHz |
| Maximum Differential Input Voltage (DC + ACpeak) | ±3.5 V / ±17.5 V / ±35 V |
| Absolute Maximum Input Voltage (DC + ACpeak) | ±3.5 V / ±17.5 V / ±35 V |
| Maximum Input Voltage Each Input to Ground (DC + ACpeak) | ±3.5 V / ±17 V / ±17 V |
| Input Impedance (Differential) | 1 MΩ // 10 pF |
| Input Impedance (each side to ground) | 0.5 MΩ // 20 pF |
| Output Voltage Swing | ±4 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 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

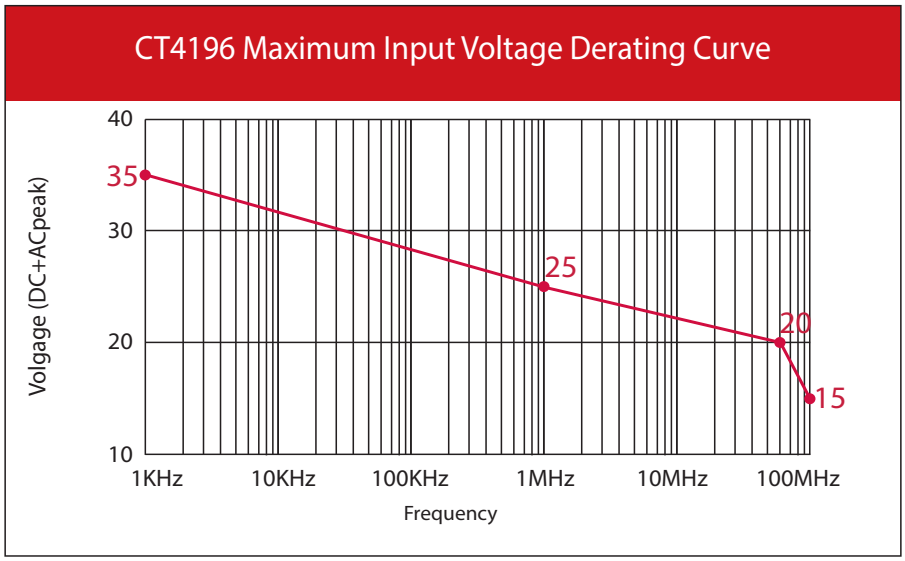


Figure 1 *Derating Curve*

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