

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 ($\pm 2\%$)
- 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.
© Cal Test Electronics 2019.



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 (10x attenuation) 50 MHz (5x attenuation) 15 MHz (1x attenuation) |
| Rise Time | 5.8 ns for 10x 7 ns for 5x 23 ns for 1x |
| Attenuation | 1x, 5x, 10x |
| Accuracy | ±2% * |
| AC CMRR | 80 dB @ 60 Hz 60 dB @ 100 Hz 50 dB @ 1 MHz |
| Maximum Input Voltage (1x) (DC + AC peak) | ±3.5 V |
| Maximum Input Voltage (5x) (DC + AC peak) | ±18 V |
| Maximum Input Voltage (10x) (DC + AC peak) | ±35 V |
| Absolute Maximum Rated Input Voltage (each side to ground) | 600 Vrms |
| Input Impedance (Differential) | 1 MΩ // 2.5 pF |
| Input Impedance (each side to ground) | 0.5 MΩ // 5 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

Performance Data Plots

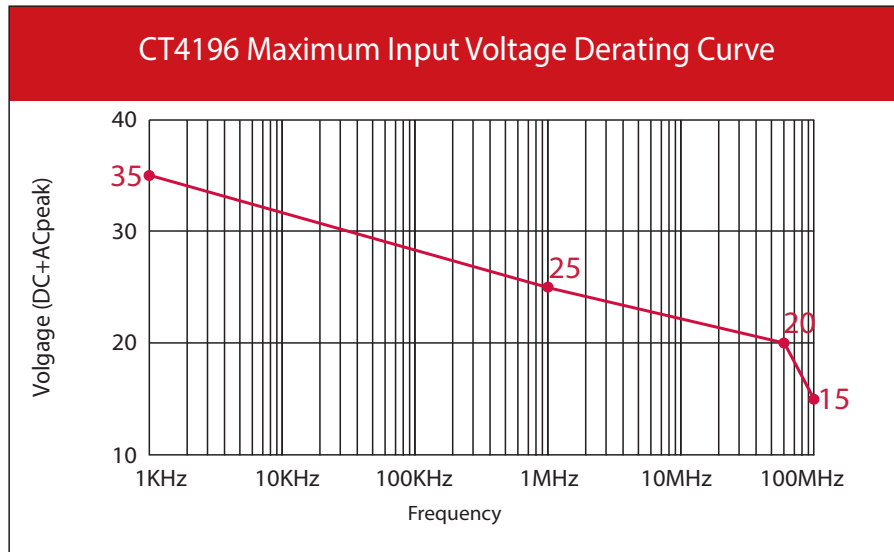


Figure 1 Derating Curve



Technical data subject to change.
© Cal Test Electronics 2019.

Cal Test
ELECTRONICS

1.800.561.8187

www.itm.com

information@itm.com