

# CT4192

## 70 MHz Differential Probe

# Datasheet

### Overview:

The CT4192 is an active differential probe with a very high input impedance and low input capacitance. With a 70 MHz bandwidth, this probe is great for working on a wide variety of measurements ranging up to  $\pm 700$  V. The addition of an offset adjustment tool will give you the extra confidence that your measurements are accurate. The CT4192 is compatible with oscilloscopes from all major manufacturers.



### Features:

- 70 MHz bandwidth (-3 dB)
- Up to  $\pm 700$  V (DC + AC peak)
- Attenuation 10x/100x
- High accuracy ( $\pm 1\%$ )
- Power indicator LED
- (2) Hook probes
- (4) AA batteries
- Optional power adapter (CT3723)
- Offset adjustment tool
- Protective rubber boot
- Meets IEC 61010-031 CAT II safety standard

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	70 MHz
Rise Time	7.5 ns
Attenuation	10x/100x
Accuracy	±1% *
AC CMRR	-80 dB @ 50 Hz -60 dB @ 20 kHz -46 dB @ 1 MHz -40 dB @ 10 MHz
Maximum Differential Input Voltage (DC + AC peak)	±70 V @ 10x ±700 V @ 100x
Maximum Common-Mode Input Voltage (DC + AC peak)	±70 V @ 10x ±700 V @ 100x
Absolute Max Rated Input Voltage (each side to ground)	1000 Vrms
Input Resistance // Capacitance	4 MΩ // 5.5 pF (each side to ground)
Output Voltage Swing	±7 V (driving 1 MΩ oscilloscope input)
Offset (typical)	±5 mV (adjustable)
Noise (typical)	2 mVrms
Source Impedance	50 Ω
Power Supply	4 AA batteries (included) or CT3723 power adapter (optional)
Power Consumption	80 mA (about 9 VDC)

Mechanical Characteristics	
Weight	400 g (with probe and rubber boot)
Dimensions	170 x 63 x 21 mm
BNC Cable Length	95 cm
Input Leads Length	45 cm each

Environmental Characteristics	
Operating Temp/Humidity	-10°C to 40°C / up to 85% RH
Storage Temp/Humidity	-30°C to 70°C / up to 85% RH
Pollution Degree	Pollution Degree 2
Altitude	Operating: 3,000 m Non-operating: 15,300 m

\* Accuracy of the probe remains at 1% up to 500 V. At 700 V accuracy is 4%.

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](http://caltestelectronics.com)

## Performance Data Plots

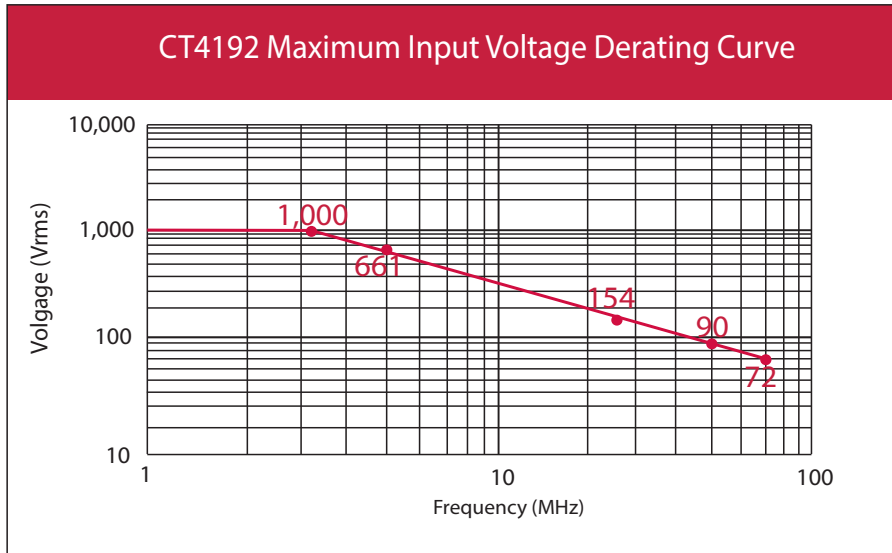


Figure 1 Derating Curve