

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 ± 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 ± 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

Performance Data Plots

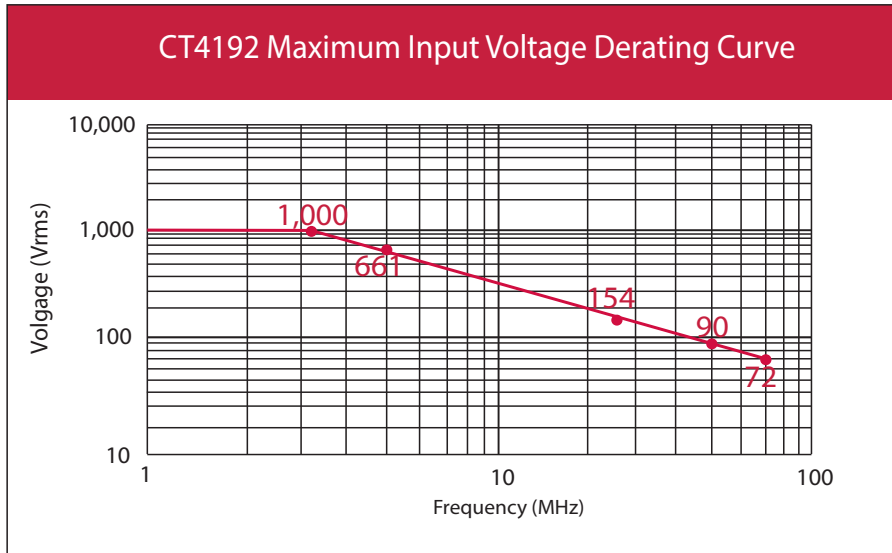


Figure 1 Derating Curve