

# CT2593-1/CT2593-2

# Datasheet

## High Voltage

## Differential Probe

**25 MHz /  $\pm 1400$  V (CT2593-1)**

**25 MHz /  $\pm 700$  V (CT2593-2)**

### Overview:

Differential probes allow safe, accurate measurement between two voltage points where neither point is referenced to ground. The CT2593 family includes two models: The CT2593-1 and CT2593-2 both offering a 25 MHz bandwidth. Compatible with oscilloscopes from all major manufacturers, the probes can be battery operated, powered by a universal adapter (optional), or powered by USB power lead (optional) if the oscilloscope is so equipped.

### Features:

- 25 MHz bandwidth
- Up to  $\pm 1.4$  kV differential and common mode voltage for the CT2593-1. Up to  $\pm 700$  V for CT2593-2.
- Selectable attenuation settings of 20x/200x (CT2593-1) and 10x/100x (CT2593-2)
- Compatible with most oscilloscopes
- Protective rubber boot
- Powered by 4 AA batteries (included)
- Power adapter, CT3723 (optional)
- USB power lead, CT4122 (optional)



Technical data subject to change.

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Electrical Specifications		
	CT2593-1	CT2593-2
Bandwidth	DC — 25 MHz	
Rise Time (10%-90%)	14 ns	
Attenuation ratio	20x/200x	10x/100x
Accuracy	±2%	
AC CMRR	-80 dB @ 50 Hz -60 dB @ 20 kHz	-86 dB @ 50 Hz -66 dB @ 20 kHz
Maximum Differential Input Voltage (DC + AC peak)	±140 V @ 20x ±1.4 kV @ 200x	±70 V @ 10x ±700 V @ 100x
Maximum Common Mode Input Voltage (DC + AC peak)	±140 V @ 20x ±1.4 kV @ 200x	±70 V @ 10x ±700 V @ 100x
Absolute Maximum Rated Input Voltage (each side to ground)	1000 Vrms CAT II	
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)	0.7 mVrms	
Source Impedance	50 Ω	
Power Supply	4 AA batteries (included) or CT3723 power adapter (optional) CT4122 USB power lead (optional)	

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

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Environmental Characteristics	
Operating Temp/Humidity	-10°C to 40°C / 25% to 85% RH
Storage Temp/Humidity	-30°C to 70°C / 25% to 85% RH
Pollution Degree	Pollution Degree 2
Altitude	Operating: 3,000 m Nonoperating: 15,300 m

Safety Specifications
IEC 61010-031 CAT II

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