

# Active Differential Probe Kit, 200 MHz, 10x Small Signal $\pm 20V$

**CT3688A**

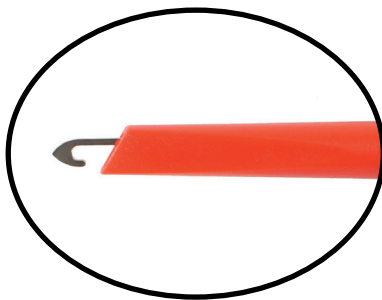
## Features:

- Meets IEC 61010-031 safety standard
- Small compact size
- Up to  $\pm 20 V$  differential
- High accuracy  $\pm 1\%$
- 200 MHz bandwidth (-3dB)
- Excellent CMRR
- Kit comes in foam-lined plastic case and contains:
  - Differential probe
  - (2) Sprung hook probes, 1000 V, CAT III, 20 A (black & red)
  - (2) Alligator clips, 300 V, CAT II (black & red)
  - 9 V Battery
  - USB Power Cable

## Description:

Differential probes allow safe, accurate measurement between two voltage points where neither point is referenced to ground. The CT3688A offers a 200 MHz bandwidth and can test up to  $\pm 60 V$  (DC + AC peak). Compatible with oscilloscopes from all major manufacturers, the probe can be battery operated or powered directly from an oscilloscope using the included USB cable.

## Accessories:



Specifications and appearance subject to change without notice  
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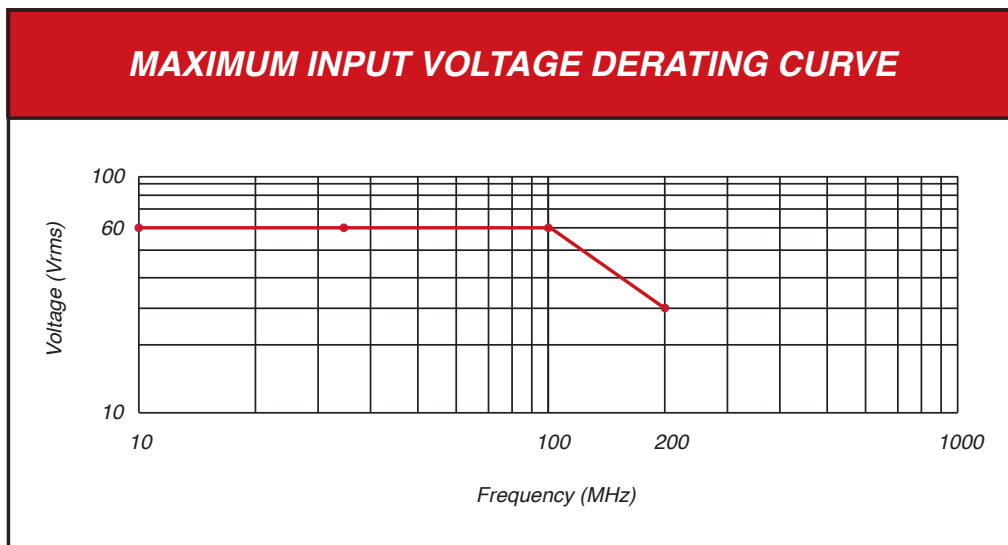
# SPECIFICATIONS

All specifications apply to the unit after a temperature stabilization time of about 20 minutes over an ambient temperature range of 25 °C ± 5 °C.

<b>ELECTRICAL SPECIFICATIONS</b>	
Bandwidth (-3dB)	200 MHz
Rise Time (10%-90%)	1.75 ns
Attenuation Ratio	10x
Accuracy	±1%
CMRR (typical)	-80 dB @ 100 Hz -50 dB @ 10 MHz
Maximum Differential Input Voltage (DC + AC peak)	±20 V
Maximum Common Mode Input Voltage (DC + AC peak)	±60 V
Absolute Maximum Rated Input Voltage (each side to ground)	40 Vrms CAT I
Input Impedance	500 kΩ // 7 pF (each side to ground)
Output Voltage Swing	±2 V (driving 50 Ω oscilloscope input)
Offset (typical)	±2 mV
Noise (typical)	0.3 mVrms
Source Impedance	50 Ω
Power Supply	CT4122 USB Power Cable (included) or 9 V battery (included)

<b>MECHANICAL SPECIFICATIONS</b>		<b>ENVIRONMENTAL SPECIFICATIONS</b>	
Weight	200 g	Operating Temp/Humidity	-10°C to 40°C / Up to 85% RH
Dimensions (L x W x H)	111 mm x 22 mm x 14 mm	Storage Temp/Humidity	-30°C to 70°C / Up to 85% RH
BNC Cable Length	120 cm	Pollution Degree	Pollution Degree 2
Input Leads Length	50 cm	Altitude	Operating: 3,000 m Non-operating: 15,300 m

Specifications are subject to change without notice. To ensure the most current version of this manual, please download the current version from our website: [caltelectronics.com](http://caltelectronics.com)



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## Order Information:

### **CT3688A**

Active Differential Probe Kit, 200 MHz, 10x Small Signal  $\pm 20V$

### **CT4122**

USB Power Cable

### **CT4386**

Insulated Sprung Hook Probes, 1000V, CAT III, 20A, Pair (Black & Red)

### **CT4441**

Insulated Medium Alligator Clips, 300V, CAT II, Pair (Black & Red)

### **CT3723**

9 V DC Power Adapter

## Kit Image:



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