

CT3688

High Voltage Differential Probe 200 MHz / ± 60 V

Datasheet

Overview:

Differential probes allow safe, accurate measurement between two voltage points where neither point is referenced to ground. The CT3688 offers 200 MHz bandwidth and can test up to ± 60 V (DC + AC peak). Compatible with oscilloscopes from all major manufacturers, the probe is powered by the included 9 VDC adapter.

Features:

- 200 MHz bandwidth (-3 dB)
- Up to ± 60 V (DC + AC peak) common mode
- Attenuation setting of 10x
- High accuracy ($\pm 1\%$)
- High CMRR
- Power indicator LED
- 9 VDC adapter, CT3723 (included)
- USB power lead, CT4122 (optional)
- Battery pack with 4 AA batteries, CT3729 (optional)



Technical data subject to change.

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Electrical Specifications	
	CT3688
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	CT3723 power adapter (included) or 4 AA batteries (optional) CT4122 USB power lead (optional)

Mechanical Characteristics	
Weight	300 g
Dimensions	111 x 22 x 14 mm
BNC Cable Length	125 cm
Input Leads Length	15 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 Nonoperating: 15,300 m

Safety Specifications	
IEC 61010-031 CAT I	

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