

CT2700

40 kV High Voltage DMM Probe

Datasheet

Overview:

The CT2700 High Voltage DMM Probe allows a standard digit multimeter to measure voltages up to 40 kV or 28 kV AC. With a divider ratio of 1,000 to 1, a voltage of 1,000 V will read 1 V on the meter. Output is through 4 mm sheathed banana plugs. Minimum meter input impedance is 10 M Ω .



Features:

- Measures up to: 40 kV (DC + AC peak) or 28 kVrms AC.
- Voltage dividing of 1000:1
- Accuracy: $\pm 1\%$ to 20 kV DC
- Retractable sleeve 4 mm banana plugs
- Meets IEC 61010-1 CAT I



Specifications

All specifications apply to the unit after a temperature stabilization time of 15 minutes over an ambient temperature range of $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$.

Electrical Specifications	
Maximum Input Voltage (CAT I)	40 kV (DC+Peak AC) 28 kVrms AC
Division Ratio	1000:1
Bandwidth	300 Hz (-3 dB)
Temperature Coefficient	≤ 200 ppm/ $^{\circ}\text{C}$
Input Resistance	1000 M Ω
DC Volts Accuracy	$\pm 1\%$ (<20 kV) $\pm 3\%$ (20 kV to 40 kV) $\leq 0.5\%$ (with 10 M Ω input impedance DMM only)
AC Volts Accuracy	5% at 60 Hz (1 to 28 kV)
Maximum Loading Current	≤ 40 μA (at 40 kV DC)
Maximum Loading Power	≤ 1.6 W
Source Impedance	10 M Ω

Mechanical Characteristics	
Dimensions (Length x Diameter)	340 x 80 mm
Cable Length	3.3 ft (1 m)
Weight	0.66 lbs (300 g)

Environmental Characteristics	
Designed for Use in	Pollution Degree 2
Operating Environment	32°F to 122°F (0°C to 50°C)
Storage Temperature	-4°F to 158°F (-20°C to 70°C)
Humidity	$\leq 80\%$ relative humidity at 104°F (40°C)

Safety Specifications	
IEC 61010-031 CAT I	

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.

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